Georgia Northwestern Technical College

Catalog 2010-2011

Revised January 2011

GNTC

www.gntc.edu

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

Gordon County Campus
1151 Hwy. 53 Spur
Calhoun, Georgia 30701
706-624-1100

Polk County Campus
466 Brock Road
Rockmart, Georgia 30153
770-684-5696

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

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, pro-business 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 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, and Walker Counties. We are accessible, affordable, and aligned with the employers in northwest Georgia.

Sincerely,

Craig McDaniel, Ed.D.
GNTC President

Statement of Non-Discrimination/Equal Opportunity Statement of Compliance

Georgia Northwestern Technical College (GNTC) is a unit of the Technical College System of Georgia (TCSG) 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 and Michael Walters, Walker County Campus, 706-764-3799

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 Web site: http://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)

Table of Contents

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. Georgia Northwestern Technical College (GNTC) has campuses in Floyd, Gordon, Polk, and Walker counties. GNTC has the seven counties of Catoosa, Chattooga, Dade, Floyd, Gordon, Polk, and Walker as its service area. The Floyd County campus was designated as the home campus. The two colleges have individual long, meaningful histories. The following histories of the two technical colleges demonstrate the impact of the colleges and how important training and educational opportunities have been and will continue to be to the citizens of Northwest Georgia.

Coosa Valley Technical College began its history as Coosa Valley Tech on July 1, 1962. The school represented a combined investment by the City of Rome, Floyd County, and state and federal governments in providing postsecondary vocational education and employment opportunities to the citizens of Northwest Georgia. Prior to facilities being constructed for Coosa Valley Tech, vocational education courses were offered in an old fire hall on Shorter Avenue. The school offered academic training for over 800 veterans of World War II and the Korean Conflict. C. Maurice Culberson was the administrator and later became the first director of Coosa Valley Vocational-Technical School. Today, GNTC's Floyd County Campus address, One Maurice Culberson Drive, is dedicated to Mr. Culberson.

Along with the academic training that was offered, the school also offered Practical Nursing. Programs like this were some of the first local, tax-supported programs for out-of-school adults in Rome and Floyd County. The veterans' program was eliminated in 1961, and in 1962 two local bonds provided Coosa Valley Tech with $250,000, which was then matched by the state. The money went directly into purchasing a site and beginning construction on the school.

Coosa Valley Vocational Technical School became a reality in 1962 and was one of only 13 technical or vocational schools scattered throughout Georgia. It was born of a community plea to provide people with the skills and training necessary to succeed in a rapidly changing economy. Numerous requests began flooding in from local business and industry representatives for the school to offer more diverse types of training to meet the demand for local employment opportunities. In 1962, the following programs became operational: Electronic Technology, Automotive Mechanics, Electrical Appliance Servicing, Heating and Air Conditioning, Machine Shop, Business Education, and Practical Nursing. The staff consisted of only 13 full-time and 4 part-time instructors, to provide education for 166 full-time and 48 evening students. Enrollment, however, continued to grow, and as enrollment grew, so did the size of the faculty and facility. In 1969, J. D. Powell was appointed to succeed Maurice Culberson, as director of the school, followed by Charles E. Earle from 1982-1987. Then in 1987 the name changed to Coosa Valley Technical Institute. J.D. Powell became the first president of CVT from 1987-1994, followed by Dr. Ronald Swanson, 1994-1997.

Coosa Valley Tech continued to make a difference in the hearts and lives of the citizens of Northwest Georgia. In 1997, with continued enrollment growth, CVT added its first branch campus in Calhoun, the Gordon County campus. In 1998, the year that Dr. Craig McDaniel became CVTC's new president, the Polk County campus was built. In 2000, the name of the school was changed to Coosa Valley Technical College, as a part of Governor Roy Barnes' Education Reform Package. In 2000, the state approved almost $14 million dollars in designated funds for expansion of all three CVTC campuses. Then in 2000, CVTC made a commitment to increase its prominent role in the community's

economic development efforts by establishing a Business Expansion Center. This facility, located in North Rome, offers businesses of all types the opportunity to start, grow, and ultimately succeed. In just a short amount of time, CVTC became one of the fastest growing technical colleges in the state of Georgia. Through the tremendous growth and expansion of CVTC, there was always one constant as exemplified in President McDaniel's statement as Coosa Valley Technical College celebrated her 40th Anniversary in 2002. "We are a workforce development college, here to help people learn new skills for the workplace and to improve their quality of life."

Coosa Valley Technical College went through many expansions, renovations, and additions throughout the years thanks to the strong support of the members of the General Assembly. In 2002, CVTC acquired more land at its Floyd County Campus, including the Woodlee Center property and the Springwood Center. In 2003, $2.4 million in improvement renovations were completed on the A, B, C, and D wings of the Floyd County Campus. CVTC completed the construction of a 54,000 square foot Health Occupations Education Center and Library in 2004. 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. CVTC's Polk County Campus added a new Economic Development Center in 2004. In 2006, Surgical Technology was added to CVTC's program offerings and CVTC's Business Technology programs moved into the newly renovated Springwood Center.

Following a positive accreditation visit in December 2006, Coosa Valley Technical College became accredited through the Commission on Colleges of the Southern Association of Colleges and Schools (SACS-COC).

CVTC continued to add exciting new programs to meet the needs of the community by adding Environmental Horticulture on the grounds of the Woodlee Center property in 2006, Commercial Truck Driving in 2007 at the Richardson Road Truck Driving Facility in Calhoun, Georgia (Gordon County), and by adding Aviation Maintenance Technology in 2008 at the Aviation Training Center at the Richard B. Russell Regional Airport in Rome, Georgia (Floyd County).

In 2009, CVTC's yearly enrollment averaged 10,000 students with 250 supporting faculty and staff, and CVTC was offering over 100 programs of study in credit, continuing education, adult education, learning support, and general education classes.

From its beginnings as a one building campus off of Highway 27 in Walker County, Georgia, Northwestern Technical College 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.

Like other technical colleges within the Technical College System of Georgia, Northwestern Technical College was founded by an Act of the Georgia General Assembly in 1964. Our goal of offering our businesses trained workers and our neighbors the training to master those professions is the foundation of 45 years of education within the walls of NTC.

When NTC first opened its doors in October of 1966, the college fell under the domain of the Walker County Board of Education. In 1988, NTC left the Walker County Board Of Education system to work within the Technical College System of Georgia; a relationship which is now in its 22nd year.

Now retired and living in Mississippi, NTC's first Director, Dea Pounders, made the mission of the college clear from the very beginning. In the first college catalog in 1966, 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." That statement still holds true in the 21st century as we train today's students for tomorrow's careers.

The first programs at NTC consisted of Appliance Servicing, Auto Mechanics, Business Education, Drafting and Design, Electronic Technology, Heating and Air Conditioning, Machine Shop, Marketing and Management, Radio and Television, and Welding. At the time, these were the programs training NTC students for tomorrow's jobs. Today, there are new programs which are headed into the NTC classrooms to prepare students of all ages for a career opportunity of a lifetime.

In the 1980's, new job demand called for new programs. Among the selections added to the curriculum as we headed into the 80's were Cosmetology, Data Processing, and Practical Nursing. In the 1990's, NTC students saw additions to their educational arsenal such as Computer Programming and Microcomputer Specialist. At the turn of the century, programs such as Surgical Technology, Occupational Therapy Assisting, and Electrical Controls came on board to add to the more than 100 program options currently available at NTC.

In 1988, the Northwestern Technical College Foundation was established to assist the development of Northwestern Technical College as a vital community center and to encourage private contributions to achieve this goal. Through private donations, the NTC Foundation has built and maintains outstanding academic support programs. Among those programs is an annual student scholarship program which gives awards to one deserving student at each of the nine public high schools in the college's four-county service area.

In 2009, NTC's campus spanned nearly seventy acres in Rock Spring, Georgia. The college operated at full capacity on 34 of those acres. The remaining 36 were part of a land purchase made in 2006. Our neighbors in Catoosa, Chattooga, Dade, and Walker County served as the focus of our recruitment efforts at Northwestern Technical College. Students of all ages came from all walks of life to become a college student at NTC.

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. Serving as a Level I Institution, the 70-acre Northwestern Technical College campus enrolls more than 2,300 students quarterly.

At countless student, faculty, and community functions over the years, the goal of Northwestern Technical College was often summed up best by long-time Northwestern Technical College President, Dr. Ray Brooks. "Our admissions director once told me our job at Northwestern is to meet the students where they are and take them where they want to be."

In the year 2000, there was another name change, this time to Northwestern Technical College. This name was intended to show not only the service area of the college, but also the growing academic opportunities available to its students. 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, to over 2,500 students.

Academic Calendar 2010-2011

Summer Quarter 2010 (201101)

Application and Testing Deadline	June 8
Final Registration (new and returning students)	June 15
Payment Deadline for Tuition and Fees	June 22
First Day of Class	July 5
Last Day to Drop a Class /100% Refund	July 7
Last Day to Add a Class	July 11
Mid-term	August 6
Last Day to Withdraw and Receive Grade of "W"	August 6
Returning Student Registration Week (Fall)	August 16-20
Last Day to Drop and Receive Grade of "WP" or "WF"	August 27
Holiday	September 6
Last Day of Class	September 13
Deadline for Graduation Applications for Fall Quarter:	September 14
Final Examination Period	September 15-16

Fall Quarter 2010 (201102)

Application and Testing Deadline	September 7
Final Registration (new and returning students)	September 14
Payment Deadline for Tuition and Fees	September 16
First Day of Class	September 28
Last Day to Drop a Class /100% Refund	September 30
Last Day to Add a Class	October 4
Mid-Term	November 1
Last Day to Withdraw and Receive Grade of "W"	November 1
Returning Student Registration Week (Winter)	November 8-12
Last Day to Drop and Receive Grade of "WP" or "WF"	November 22
Faculty Development Days (No classes)	November 22-23
Holidays	November 25-26
Last Day of Class	December 13
Final Examination Period	December 15-16
School Closed	December 23-29, 2010/January 3, 2011

Winter Quarter 2011 (201103)

Application and Testing Deadline	December 7
Final Registration (new and returning students)	December 14
Payment Deadline for Tuition and Fees	December 16
First Day of Class	January 6
Last Day to Drop a Class /100% Refund	January 10
Last Day to Add a Class	January 12
Graduation	January 13
Holiday	January 17
Mid-Term	February 10
Last Day to Withdraw and Receive Grade of "W"	February 10
Returning Student Registration Week (Spring)	February 14-18
Last Day to Drop and Receive Grade of "WP" or "WF"	March 3
Planning Day for Faculty and Staff (No classes)	March 4
Last Day of Class	March 18
Final Examination Period	March 23-24

Spring Quarter 2011 (201104)

Application and Testing Deadline	March 14
Final Registration (new and returning students)	March 21
Payment Deadline for Tuition and Fees	March 23
First Day of Class	April 4
Last Day to Drop a Class /100% Refund	April 6
Last Day to Add a Class	April 10

Mid-Term	May 6
Last Day to Withdraw and Receive Grade of "W"	May 6
Returning Student Registration Week (Summer)	May 16-27
Last Day to Drop and Receive Grade of "WP" or "WF"	May 27
Holiday	May 30
Last Day of Class	June 13
Final Examination Period	June 15-16
Graduation	June 16

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, Polk, and Walker 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 seven 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 division of the college maintains contact with private industry through its advisory committee. An advisory committee is a group of competent and respected businessmen and women in the profession who are interested in the college's mission to provide high quality education courses, services, and training programs through both distance and traditional delivery methods. Program advisory committees contribute substantially as consultants in the following areas: program admission requirements, program content, program length and objectives, competency tests, instructional materials, equipment, method of evaluation, and level of skills and/or proficiency required for completion, appropriateness of the delivery mode for the program, current industrial needs related to job skills, job placement, and follow-up surveys of college graduates. Advisory committees meet at least twice a year.

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 Academic Affairs Office.

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.

Emergency Closing

The President and the Vice President of Academic Affairs are authorized to take action to close the college if conditions exist that may threaten the health and safety of students and personnel. They are also empowered to delay the beginning of classes and/or release students and personnel before the normal day ends if hazardous conditions exist. Closures or delayed openings will be announced by local radio stations, major area television stations, and posted on the Georgia Northwestern Technical College website. The college does not announce that it is open. It is the responsibility of each person to use best judgment to decide if it is safe to travel.

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.

Office of the Registrar
Georgia Northwestern Technical College
One Maurice Culberson Drive
Rome, GA 30161

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.

Photography Policy
Georgia Northwestern Technical College takes photographs and videos of students in various programs and at events for use in official marketing materials. Examples of official marketing materials include, but are not limited to, newspaper advertising and articles, magazine advertising and articles, college publications, website advertising, and the college's website. Students agree to release and hold harmless Georgia Northwestern Technical College from and against any 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 the Marketing and Public Relations Department 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.

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.

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 Conduct Code, including a statement on student rights and responsibilities, 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 this catalog and in the Student Handbook. 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 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.

Change of Name or Address

Students are responsible for notifying the Office of Student Affairs of any change of name or address. The mailing of notices to the last address on record constitutes official notification.

Conduct

Georgia Northwestern Technical College students have an obligation to assist in making the college an effective place for the transmission of knowledge, the pursuit of truth, the development of self, and the improvement of society. As citizens, students enjoy the freedoms that other citizens enjoy and in turn they are responsible for conducting themselves in accordance with the requirements of the law. Students must adhere to all rules, regulations, and policies of the college and must also adhere to student conduct regulations as published in the Student Handbook provided to all students. Students who violate the student conduct regulations are subject to disciplinary proceedings as prescribed in the Student Handbook and other publications for students.

Academic Misconduct Procedure

Academic misconduct includes but is not limited to each of the following acts when performed in any type of academic or academically-related matter, exercise, or activity: *

Cheating: Using or providing others with unauthorized materials, information, study aids, or computer-related information.

Plagiarism: The presenting of words, data, works, ideas, computer programs, or output of another as one's own work.

Fabrication: Presenting as genuine any invented or falsified citation or material.

Misrepresentation: Falsifying, altering, or misstating the contents of documents or other materials related to academic matters, including schedules, prerequisites, and transcripts.

Students charged with academic misconduct may receive, at the discretion of the faculty member, a penalty of failing the assignment(s), a penalty of a zero for the assignment(s) or a penalty of failure of the class. Students wishing to refute the charges or contest the penalty, or faculty members who wish to impose greater sanctions, such as dismissal from the institution, shall have a hearing by the Vice President for Academic Affairs or designee. The results of the hearing will be administered by the Office of Academic Affairs. A request for a hearing must be presented in writing to the Office of Academic Affairs in the same quarter that the charge of academic dishonesty was made. All Health, Industrial, Public Service and Nursing program students will follow specific rules and regulations set by accreditation agencies, program handbooks, and clinical facilities polices.

Note: In cases where students are charged with misrepresentation by faculty or professional staff, sanctions will be determined by the Office of Academic Affairs and may include dismissal from the institution.

* See student handbook for a more detailed description of academic misconduct.

Computer and Internet Use Policy

Electronic information research skills are now fundamental to preparation of citizens and future employees. Faculty must blend thoughtful use of the Internet throughout the curriculum and provide guidance and instruction to students in its use. Students utilizing Technical College-provided Internet access are responsible for good behavior online just as they are in a classroom or other area of the college.

The following GNTC policy statements are excerpted from the Technical College System of Georgia's (TCSG) Policy on Computer Use and Access to the Internet, which may be found at http://www.dtae.org/dtaepolicy/menu.html. See item II. C. 4, Acceptable Computer and Internet Use. Using a computer without permission is theft of services and is illegal under state and federal laws. Federal law prohibits misuse of computer resources.

The purpose of technical college-provided Internet access is to facilitate communications in support of research and education. To remain eligible as users, students' use must be in support of and consistent with the educational objectives of the department.

Access is a privilege, not a right. Access entails responsibility.

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

The following uses of department or technical college-provided computers, networks and Internet access are not permitted:

a. To create, access or transmit sexually explicit, obscene, or pornographic material;

b. To create, access or transmit material that could be considered discriminatory, offensive, threatening, harassing, intimidating, or attempts to libel or otherwise defame any person;

c. To violate any local, state, or federal statute;

d. To vandalize, damage, or disable the property of another individual or organization;

e. To access another individual's password, materials, information, or files without permission;

f. To violate copyright or otherwise use the intellectual property of another individual or organization in violation of the law, including software piracy;

g. To conduct private or personal for-profit activities. This includes use for private purposes such as business transactions, private advertising of products or services, and any activity meant to foster personal gain;

h. To knowingly endanger the security of any department or technical college computer or network;

i. To willfully interfere with another's authorized computer usage;

j. To connect any computer to any of the department or technical college networks unless it meets technical and security standards set by the department;

k. To create, install, or knowingly distribute a computer virus, "Trojan horse," or other surreptitiously destructive program on any department or technical college computer or network facility, regardless of whether any demonstrable harm results;

l. To modify or reconfigure the software or hardware of any Agency computer or Network without proper authorization;

m. To conduct unauthorized not-for-profit business activities;

n. To conduct any activity or solicitation for political or religious causes;

o. To perform any activity that could cause the loss, corruption of, prevention of rightful access to, or unauthorized distribution of Agency data and information; and

p. To create, access, or participate in online gambling. Occasional access to information or websites of the Georgia Lottery Corporation shall not constitute nor be considered inappropriate use. Users of department and technical college computers and computer systems are subject to the department's policy on the development of Intellectual Property. Any violation of this policy and rules may result in disciplinary action against the employee or student. When and where applicable, law enforcement agencies may be involved.

Penalties for Computer/Internet Misuse
Violations of these policies incur the same types of disciplinary measures as violations of other department or technical college policies or state or federal laws, including criminal prosecution.

GNTC's policy on Use and Access to the Internet is posted on the GNTC website and will be updated as needed.

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;

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

d. any explosive compound/material defined in O.C.G.A. 16-7-81; or,

e. any hoax device, replica of a destructive device or configuration of explosive materials with the appearance of a destructive device, including, but not limited to, fake bombs, packages containing substances with the appearance of chemical explosives or toxic materials.

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.

Drugs and Alcohol - Drug-free Campus Policy

Georgia Northwestern Technical College prohibits the unlawful possession, manufacturing, distribution, dispensation, and use of illicit drugs and alcohol on the institutional premises or at college-sponsored events in accordance with the Alcohol and Drug Free Schools and Communities Act Amendments of 1989 (Public Law 101-226). In compliance with the Federal Drug Free Schools and Communities Act Amendments of 1989, Section 22, the college implements and maintains a drug free program. Sanctions up to and including dismissal, termination of employment, and referral for prosecution will be imposed for the violation of these standards. Students indicted for possession or sale of illegal drugs, alcohol, and/or other altering substances will be suspended from school and forfeit all claim to financial aid.

A description of applicable legal procedures, the associated health risks of alcohol and drug abuse, and GNTC's support of counseling/treatment, programs available to students is provided in the Student Handbook.

Smoking Policy

In the interest of health and to create a tobacco-free environment, Georgia Northwestern Technical College campus is smoke free except for areas designated as smoking areas. The use of tobacco is expressly prohibited in all buildings. All who wish to smoke must smoke only in designated areas and deposit cigarette butts appropriately in conveniently placed receptacles. Continued smoking in non-smoking areas and tossing cigarette butts on campus grounds will result in disciplinary action including dismissal from Georgia Northwestern Technical College.

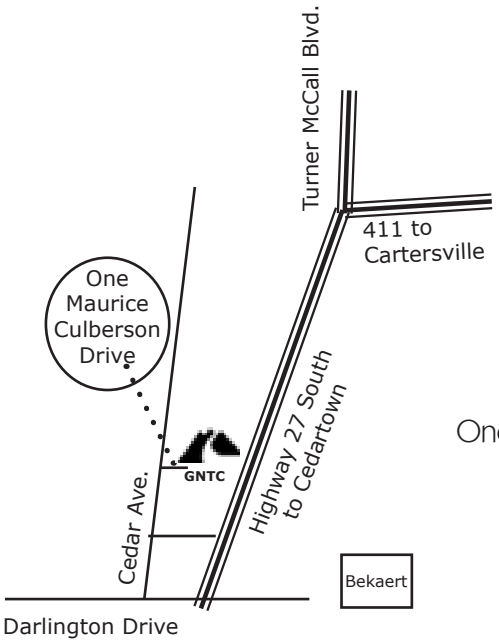
Sexual Harassment Policy
Georgia Northwestern Technical College does not tolerate sexual harassment. Sexual harassment is a form of discrimination and is a violation of state and federal law. Sexual harassment is defined as "unwelcome sexual advances, request for sexual favors, and other verbal or physical conduct of a sexual nature." It is the intent of the State Board of Technical and Adult Education and thus GNTC to provide an academic and work environment free of any type of harassment, including sexual harassment, for all students and employees. Alleged incidents of sexual harassment should be reported to the Title IX Coordinator:

Sonya Richards, Special Populations Coordinator
Floyd County Campus Room A-126B
One Maurice Culberson Drive
Rome, Georgia 30161
706-295-6932

Complete information is available in this Catalog and in the Student Handbook.

Campus Maps

Floyd County Campus Road Map



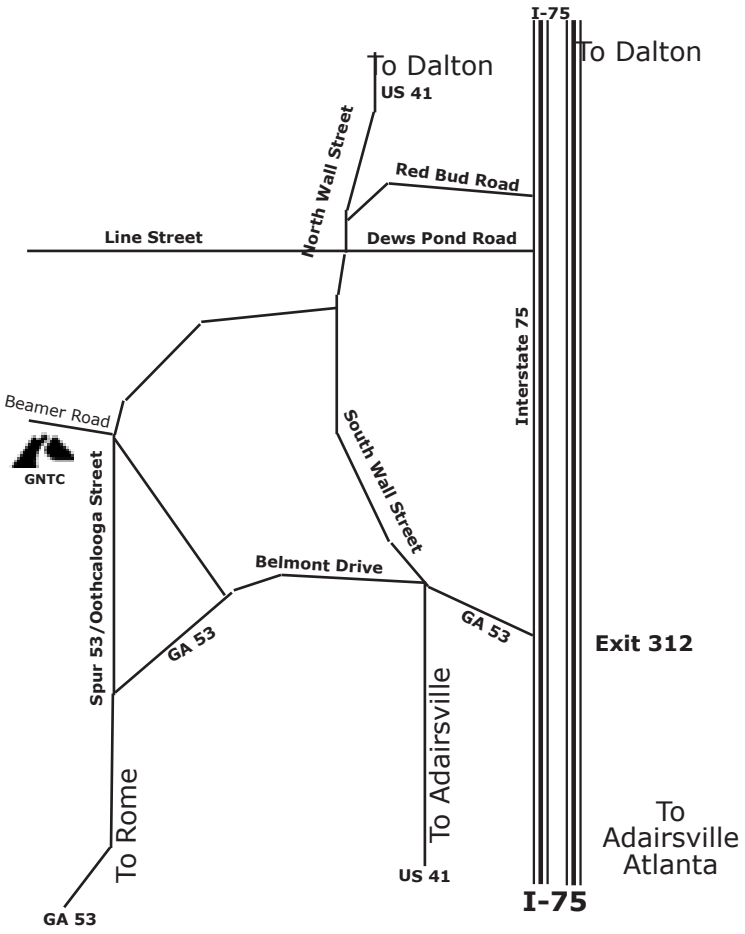
Floyd County Campus
One Maurice Culberson Drive
Rome, Georgia 30161
706-295-6963
1-866-983-4682

Directions to Georgia Northwestern Technical College (Floyd County Campus) from Atlanta:

Take I-75 North to the Rome Exit (Exit 290). At bottom of exit ramp, go left. Go about 1 mile where this road dead ends into another road. Turn left, go about 50 feet, and bear right up the ramp to Hwy. 41 North. Stay on Hwy. 41 North (through approx. 4 traffic lights, and approx. 2 miles) until you see the Rome Exit. That exit takes you onto Hwy. 411 toward Rome. Stay on Hwy. 411 all the way to Rome (about 20 miles). Once in Rome, stay on Hwy. 411 until it splits, where you will bear to the left under the big green overhead sign that says Cedartown/ Gadsden. Go about half a mile and take the Darlington Drive/ Old Lindale Rd. Exit (you'll see a green sign that says "Georgia Northwestern Technical College"). Turn right at the Yield sign at the end of the ramp. The main entrance to the school is the second road on the right (Maurice Culberson Drive).

Gordon County Campus Road Map

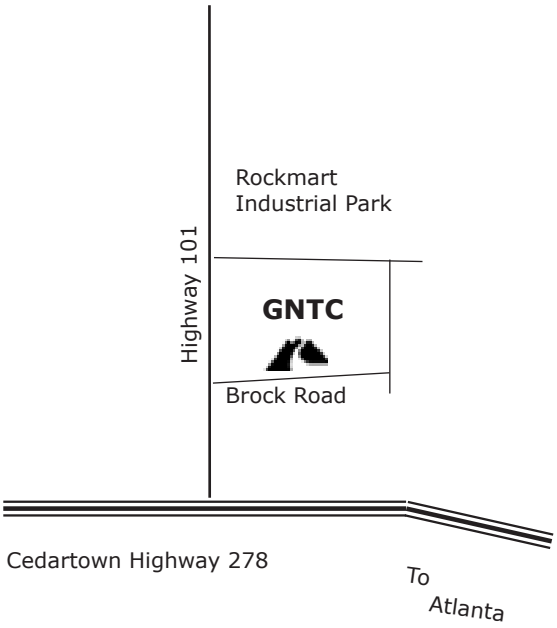
Gordon County Campus
1151 Hwy. 53 Spur, SW
Calhoun, Georgia 30701
706-624-1100
1-866-983-4682



From I-75 North or South, take the Rome/Fairmount Exit (exit 312). Go west on Hwy 53 for approx. 2 miles. You will pass McDonald's, Wendy's, Chick-fil-a, Kroger, etc... Go through the two lights at Wal-Mart and the next one (River Street) over the bridge. After passing the light at River Street, look for the Georgia Northwestern Technical College sign on the right side of the road. Turn right on McDaniel Station Road and follow to the end. Turn right, then immediately turn left on Beamer Road. The entrance to GNTC is on the left.

Polk County Campus Road Map

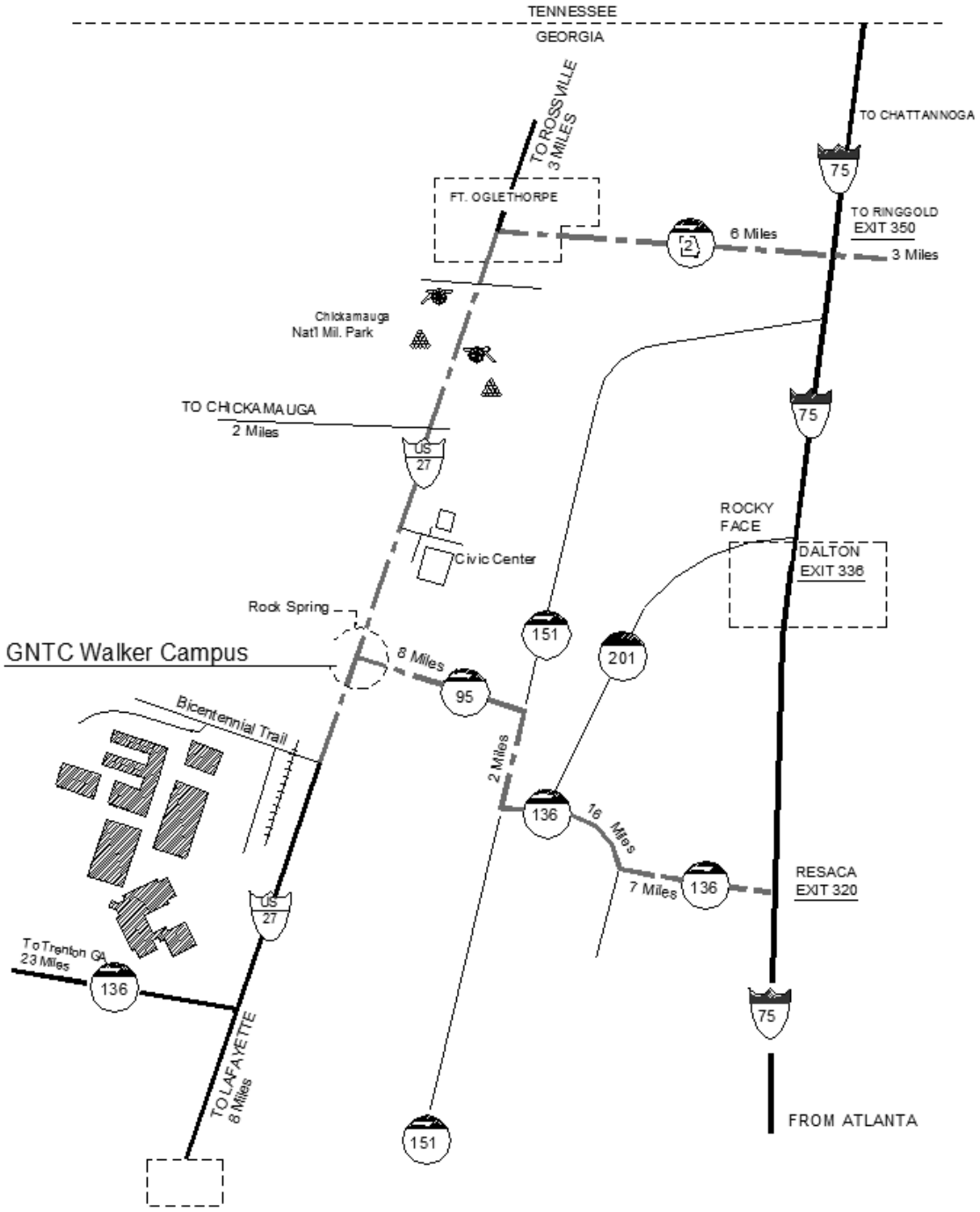
Polk County Campus
466 Brock Road
Rockmart, Georgia 30153
770-684-5696
1-866-983-4682



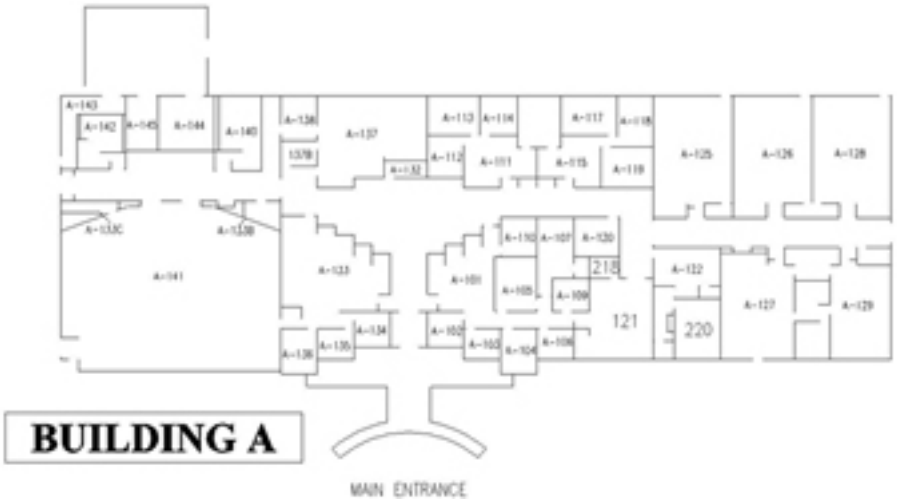
From Rome, Georgia take Highway 101 South to Rockmart. Approximately 5 miles after crossing the Polk County line, Brock Road is on the left. Look for the GNTC Polk County Campus sign on the left of Hwy 101.

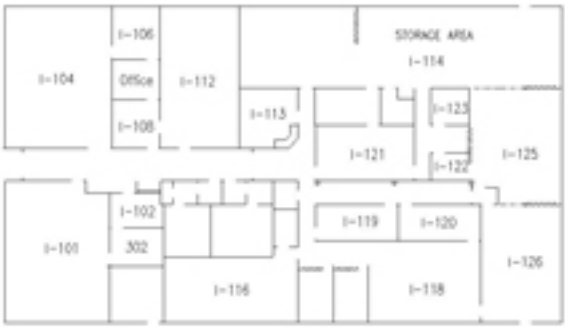
Walker County Campus Road Map

Walker County Campus
265 Bicentennial Trail
Rock Spring, Georgia 30739
706-764-3510
1-866-983-4682



Floyd County Campus

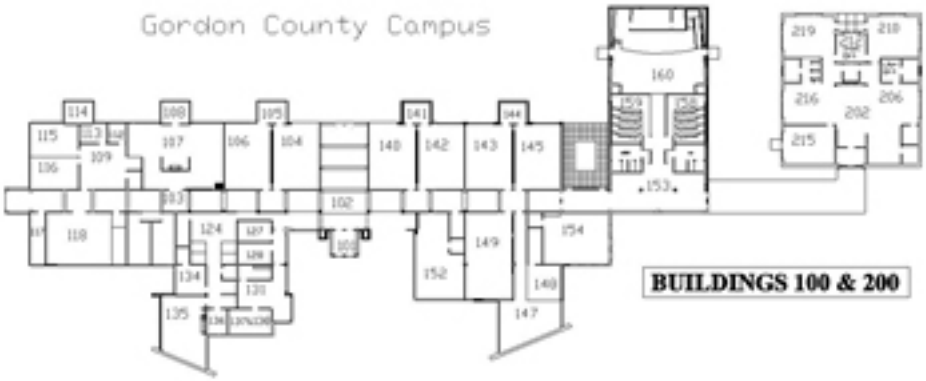


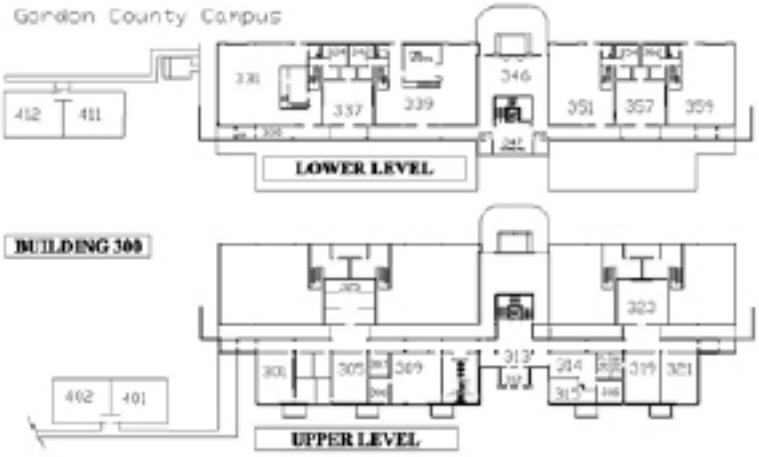


BUILDING I

Building H Ground Floor

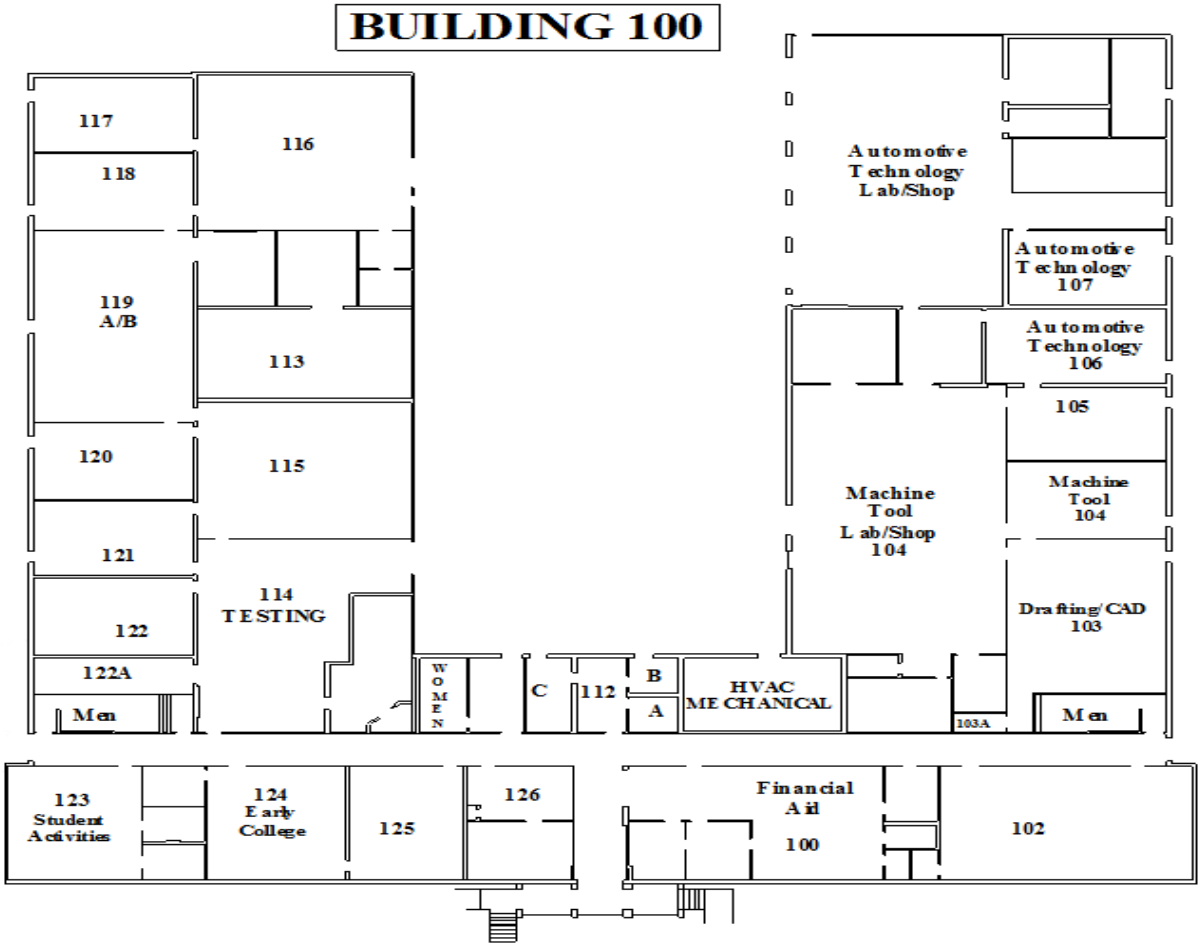
Gordon County Campus

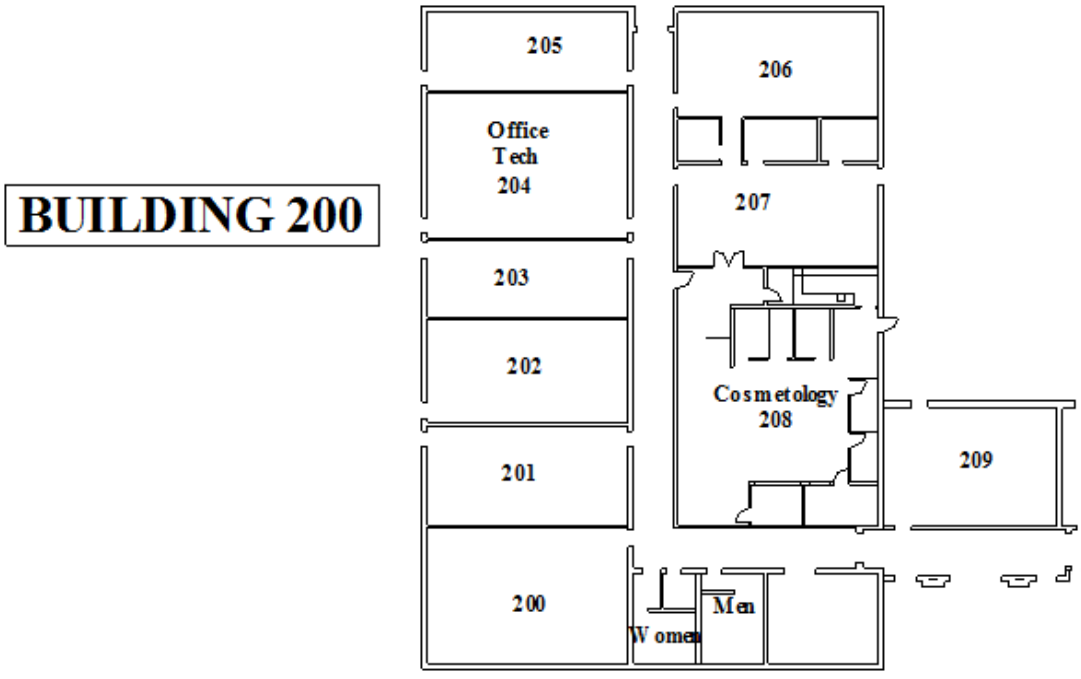




Polk County Campus

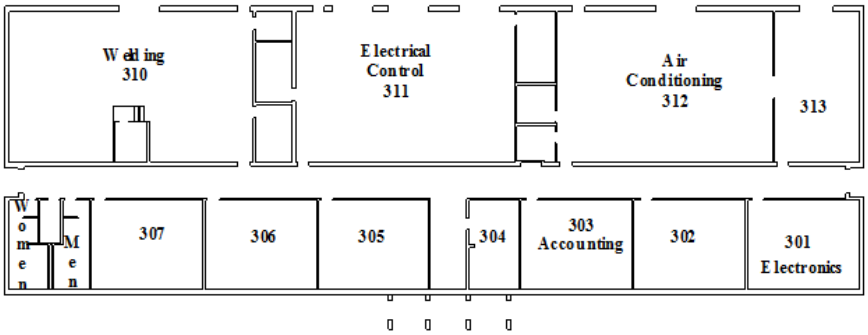
Walker County Campus Buildings



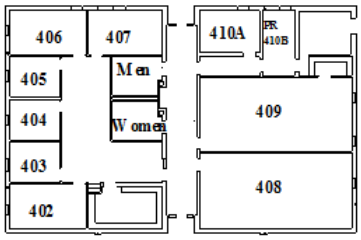


Walker County Campus Buildings

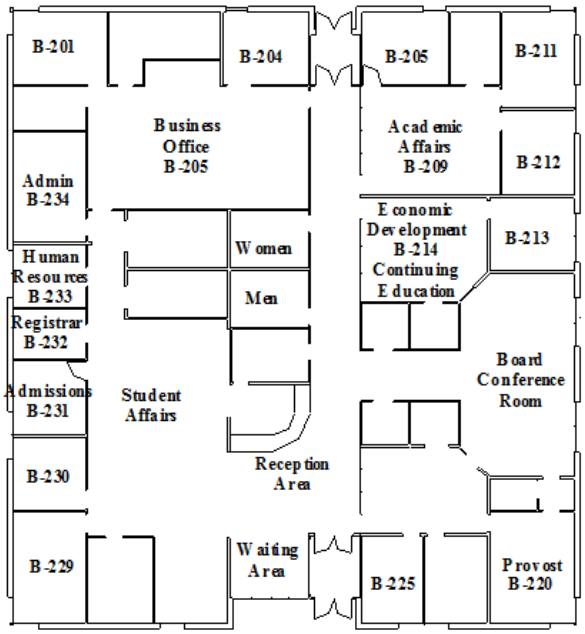
BUILDING 300



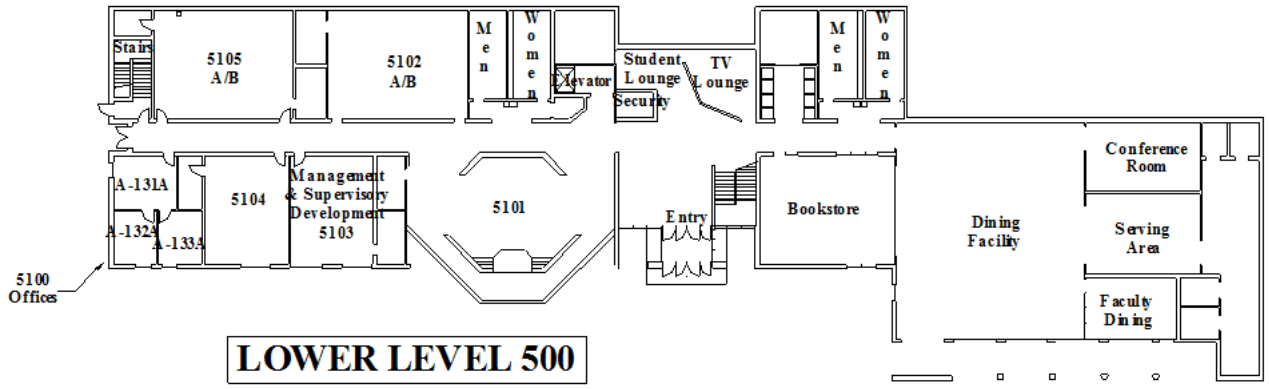
BUILDING 400

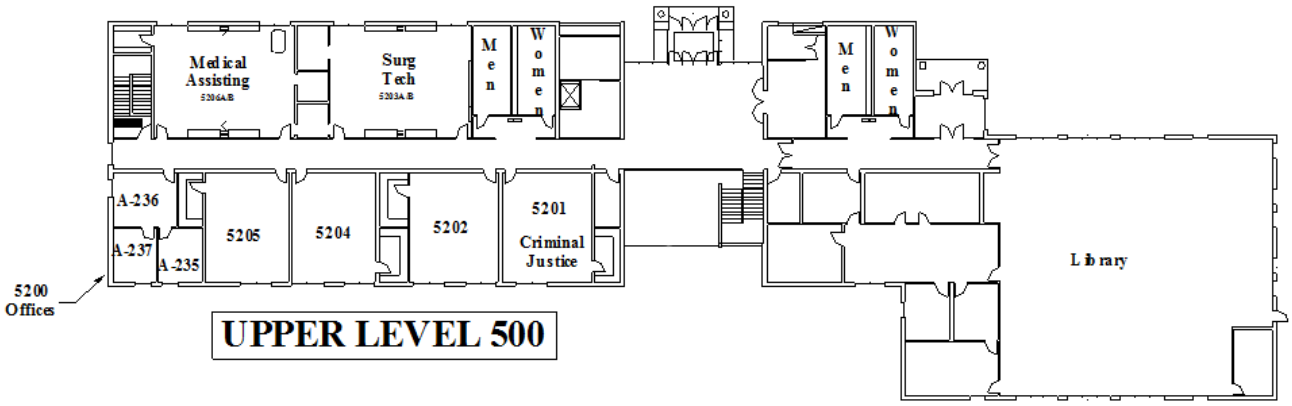


ADMINISTRATION BUILDING

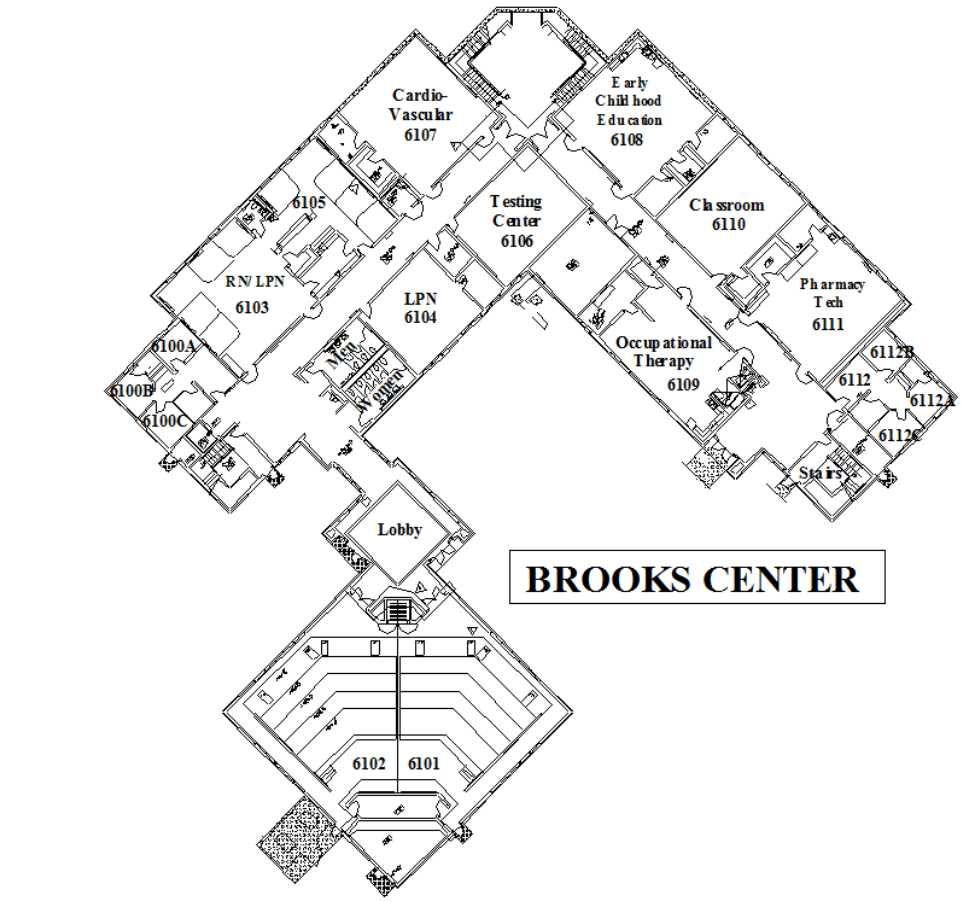


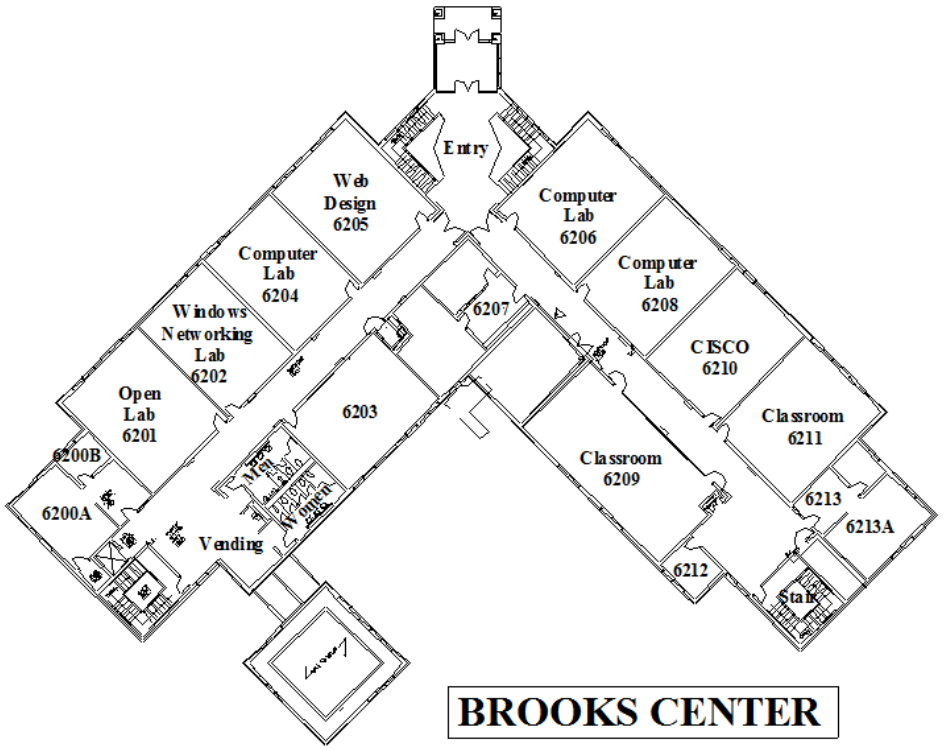
Walker County Campus Buildings





Walker County Campus Buildings





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:
1) 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).
2) 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.

Admission Requirements

General admissions requirements for admission into the degree, diploma, or certificate programs are listed below. Specific admission requirements are listed for each program in the curriculum section of this catalog.

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. Certificates of Attendance or special education diplomas are not recognized for admission purposes. 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 Georgia Northwestern Technical College, the applicant must have been awarded a high school diploma from a secondary school that is accredited by regional accrediting associations that are part of the Commission on Colleges (such as the Southern Association of Colleges and Schools), the Georgia Accrediting Commission, the Georgia Association of Christian Schools, the Association of Christian Schools International, the Georgia Private School Accreditation Council, the Accrediting Commission for Independent Study, the Southern Association of Independent Schools, the Florida Council of Independent Schools and the Distance Education Training Council, or from a public school regulated by a school system and state department of education.

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

- Submit a letter from the local superintendent's office verifying that the parent

or legal guardian notified the superintendent of intent to home school and must also verify 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.
- Annual progress reports or final transcript for the equivalent of the home schooled student's junior and senior years. The final progress report should include the graduation date.

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 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.

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 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. Please note that the 25-hour credit maximum may be waived for the student upon the recommendation of the parent institution. Note: A transient letter is good for one quarter 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 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. A student admitted on probation must earn a GPA of at least 2.0 on a minimum of five quarter hours during the first quarter enrolled to continue to the next quarter.

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.

Out-of-State Applicants
Priority is given to Georgia residents; however, out-of-state applicants are encouraged to apply for admission to Georgia Northwestern Technical College. Every effort is made to accommodate as many students as possible.

Application Deadlines
Get a jump start on continuing your education. Applicants are encouraged to apply as soon as possible to meet the quarterly application deadlines below:
Summer 2009: June 9, 2009
Fall 2009: September 3, 2009
Winter 2010: December 3, 2009
Spring 2010: March 11, 2010

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.

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: Placement test scores indicate a need for skills development in reading, writing, math and/or algebra. Certain specified occupational courses, as long as class pre- and corequisites are satisfied, may be taken along with the Learning Support courses prior to gaining regular admission.

Learning Support: Placement test scores are below a designated level in reading, writing, math or algebra. Students scoring MAT 095, MAT 096, RDG 096, or ENG 096 will complete Learning Support courses before taking any occupational course in their programs. An applicant who scores at the 095 level in English or Reading will be referred to Adult Education for individualized instruction at no charge before being formally admitted to the college. Once the applicant completes a study plan and retests with acceptable scores, he/she will be admitted to the college. See more on Learning Support Studies on the next page. Students with this status are not eligible for federal financial aid (i.e. Pell, SEOG, or Federal Work Study).

Special Status: Applicants not seeking a degree, diploma, or certificate but wishing to enroll in a course for personal, consumer, or occupational purposes may take up to 25 credit hours before declaring a major. Specially admitted students must adhere to the specific prerequisite requirements when selecting courses or receive permission from the Dean of that Division to waive the prerequisite(s). Specially admitted students may enroll in classes only on a space-available basis and are not eligible for financial aid.

Transient Status: An Applicant who has another home institution but desires to complete work at GNTC to transfer back to his/her home institution must submit a Transient Agreement Letter from his/her home institution. See Transient Student Admission Requirements.

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/Verbal 480, Math 440
ACT: English 21, Math 19

***Diploma/Technical Certificates of Credit**
**See exception 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/Verbal 430, Math 400
ACT: Verbal 18, Math 16

*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 scores of Writing Skills, 29; Reading Skills, 29; and Numerical Skills, 29 or COMPASS scores of Writing Skills, 38; Reading Skills, 49; and Numerical Skills, 36.

***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 and who wishes to apply for federal financial aid may demonstrate eligibility for entry to those programs not requiring a diploma/GED 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.

Learning Support Studies
Because the college 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 Program Ready status, the student will be granted either Learning Support status or Provisional status. Students whose test scores place them in Math 095 or any 096 course are assigned Learning Support status. Students whose test scores place them in a course at the 097, 098, or 099 level with no courses below 097 are granted Provisional status. Students placed in English 096 or 097; Reading 096 or 097; or Math 095, 096, or 097 will be required to take College Success 100.

Students with Learning Support status may not take any courses in their programs of study until all courses at the 095 or 096 level are completed. Students with provisional status may take some courses in their programs of study at the suggestion of their advisors. 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. Applicants

without a high school diploma or GED or whose scores place them at the 095 level in English and reading will be referred to Adult Education classes for remediation.

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. The institution does not limit the amount of time it will honor coursework taken at the college. 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 may 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. The student may receive high school Carnegie unit credit as well as postsecondary credit hours from Georgia Northwestern Technical College for the same course. Dual and Joint 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. Contact your High School Counselor or the High School Initiative Coordinator at Georgia Northwestern Technical College for courses that qualify.
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) Complete a Hope Grant application (GSFAPPS) through www.gacollege411.org;
3) Meet all testing requirements for regular admission status in chosen program;
4) Complete a parental agreement form;
Note: Dual Enrolled students are eligible to apply for the HOPE Grant.

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 quarter 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;
4) Complete a parental agreement form.

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.

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 score of 80 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. To be classified as an in-state student for admission purposes, an individual must show that he or she has been a legal resident of Georgia for a period of no less than 12 months immediately preceding the date of registration. Proof of residency can be documented by a voter registration card, an automobile registration, or a house or apartment lease agreement. Out-of-state students may be charged tuition fees twice that charged for Georgia residents. Georgia Northwestern Technical College does not charge out-of-state tuition to students living in Alabama and Tennessee.

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 test and submit official GED test scores indicating that the student has passed the GED 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.

Financial Information

Financial Information

Legal Resident - State of Georgia
To be classified as an in-state student for tuition purposes, an individual must show that he or she has been a legal resident of Georgia for a period of no less than twelve (12) months immediately preceding the date of registration. Further, the state of Georgia requires not only recent physical presence in Georgia, but also the element of intent to remain indefinitely. Out-of-state students who move to Georgia may apply for change of status after 12 months of residency. Documentation to prove intent to remain a Georgia resident must be presented. Proof of intent can be, but not limited to, driver's license, voter registration card, and automobile registration.

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 quarter:

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

Registration Fee: $26. Students taking degree, diploma, or technical certificate course work pay a $26 registration fee each quarter.

Activity and Insurance Fee
Students taking degree, diploma, or technical certificate course work pay an activity ($16) and insurance fee ($4) each quarter which provides them with accident insurance and funds projects of the Student Activities Board. Online students do not pay activity or insurance fees. Any student taking one or more credit classes is covered by student accident insurance.

Instructional and Technology Support Fee: $35
Note: This fee is not covered by HOPE.

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 quarter. 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 $45.00 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 quarter is assessed according to the policies

established for all technical colleges governed by the State Board of Technical and Adult Education. Tuition is based on the number of quarter hours scheduled up to a maximum equal to the cost of 15 quarter hours. Note: Tuition and fees are subject to change without notice.

Credit Hours*	Tuition Georgia Resident**	Tuition Out-of State**	Tuition Foreign Nationals
1	45	90	180
2	90	180	360
3	135	270	540
4	180	360	720
5	225	450	900
6	270	540	1080
7	315	630	1260
8	360	720	1440
9	405	810	1620
10	450	900	1800
11	495	990	1980
12	540	1080	2160
13	585	1170	2340
14	630	1260	2520
15	675	1350	2700

*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 $233 per credit hour for Georgia residents and $466 for out-of-state students, plus additional fees for background check, fingerprinting, POST application, physical, uniforms, and other items (approx. $600).

**Certified Manufacturing and Certified Customer Service tuition is $63.00 per credit hour for Georgia residents and $126 for out-of-state students.

**Commercial Truck Driving tuition is $292 per credit hour for Georgia residents and $584 for out-of-state students, plus fees for drug screening, DOT physical, CDL road test, MVR report, and fuel surcharge (approx. $400).

** Emergency Medical Technician tuition is $77.00 per credit hour for Georgia residents and $154 for out-of-state students.

Additional Expenses above Tuition and Fees

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

Books and Supplies
Bookstores are located on Floyd, Gordon, Polk, and Walker County 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 quarter. 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 quarter.

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.

Replacement Diploma
Replacement diplomas are available from the Registrar's Office.

Graduation
There is no graduation fee. Caps and gowns may be purchased from the bookstore. It is the student's responsibility to submit a completed application for graduation (obtained in the Office of the Registrar or the Georgia Northwestern Technical College website) to the Registrar no later than the end of the quarter prior to the quarter of the student's anticipated graduation.

Transcript Fee
To obtain a transcript, a request must be made in writing to the Office of the Registrar. Transcripts cannot be requested by telephone. A form for submitting a written transcript request is available online at www.gntc.edu. There is not a charge for this service.

Replacement of Student ID
Lost or damaged student identification cards for the current quarter may be replaced at the Library on Floyd, Gordon, and Polk County campuses, and at the Office of Student Affairs on Walker County Campus. There is $5 student ID replacement fee.

Declined Payment of Checks
A check taken in payment of fees which is returned unpaid will cause the assessment of a non-refundable charge of $25. A financial "hold" will be placed on the student's record when a check is returned unpaid and the student will be notified of the hold. Checks may also be subject to a collection fee when a student's check is non-sufficient and a check payment processing service is used.

Indebtedness
It is expected that every student will discharge any indebtedness to the college as quickly as possible. No degree or diploma will be conferred nor any record or transcript issued to a student who has not made satisfactory settlement with the Business Office for all of his or her indebtedness to the college. A student may be prohibited from attending classes or taking final examinations after the due date of any unpaid obligation.

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 quarter. 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 quarter in which the student withdrew from classes.

Payment Processing
Georgia Northwestern Technical College accepts payments via cash, checks, and credit cards. If payment is by check, then please be advised that a check processing service is used and that all checks must have two telephone numbers and the driver's license number of the name on the check before payment can be processed. If this information is not on your check then your payment will not be accepted. This applies when making your payments in person or by mail. Credit cards and checks are also accepted online through Banner Web. Students will be withdrawn from class if the fees are not paid.

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, the Federal Supplemental Educational Opportunity Grant (FSEOG), Academic Competitiveness Grant (ACG) Program, the Georgia LEAP Program, the HOPE Scholarship Program, Federal Work Study, Georgia Northwestern Technical College Foundation Scholarships, and the Workforce Investment Act (WIA). Grants and Scholarships do not have to be repaid unless received erroneously. Refer to 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 summer quarter and the FAFSA applications are available in January, six months prior to the start of the summer quarter. To apply for all aid, a student may complete the FAFSA online at www.fafsa.ed.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 returning students and beginning students must complete the Georgia Northwestern Technical College Certification, Authorization, and Agreement Form. This form can be found on the GNTC website or one can be picked up in the Financial Aid Office . 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, they will receive award notification letters showing the types and amounts of assistance for which they qualify. Financial aid checks will be mailed 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 progresses toward his or her diploma, degree, or certificate. Satisfactory progress has two components, quality and quantity.

Quality (Grade Point Average Requirements)
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 quarter.

A student whose cumulative GPA falls below a 2.0 is placed on financial aid probation for the next quarter. This will allow a student one quarter to increase the GPA to the satisfactory level. If, after one quarter, the GPA remains below 2.0, financial aid eligibility will be lost (placed on financial aid suspension) until bringing the cumulative GPA back to the 2.0 level. Students may receive aid while on probation, but will not receive aid while on suspension.

Quantity (Completion Rate)
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. For example, if a student's program of study is Management & Supervisory Development diploma, which requires 84 credit hours for graduation, he or she is allowed to attempt a maximum of 126 hours and still maintain satisfactory progress. 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 quarter 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 quarter in school would be expected to successfully complete 10 hours for that quarter. If the student took 15 more credit hours the second quarter, he/she would be expected to have completed 20 hours at the end of the second quarter. A student, who, at the end of any quarter, has not successfully completed 66.6% of his cumulative hours attempted, must make up that deficiency the following quarter in addition to the required minimum number of credits for the current quarter. 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 grade scale in catalog) 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 quarter of attendance. After the first quarter, 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 quarter, the student will be placed on probation. The student will continue to receive financial aid while on probation. However, if the student does not meet the qualitative and quantitative standards by the end of the probationary quarter, he/she will be suspended. The student can continue taking courses while on suspension 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. 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.

Appeal Process
Students will be notified of their failure to make satisfactory progress. If the student feels there were circumstances beyond his/her control that kept him/her from maintaining satisfactory progress, he/she may appeal in writing by completing the Satisfactory Progress Appeal form (supporting documentation should be attached). The financial aid director will refer the appeal to the Appeals Committee for review. If the student does not agree with the committee's decision, an appeal can be made to the vice president of student affairs, whose decision is final. Appeal forms are available from the Financial Aid Office or from the college website. Students will be notified of the Committee's decision and/or Vice President's decision within two weeks of submitting the appeal.

Refund Policy
Students withdrawing from a course by the end of the third instructional day of the quarter, and no shows shall receive a 100% refund of applicable tuition (hours below the 15-hour tuition cap) and applicable refundable fees, excluding the application fee. Exceptions may be allowed for customized courses that do not follow the college's standard academic calendar.

HOPE Scholarship and HOPE Grant Programs
The state-funded program is available for most Georgia residents attending the college.

The HOPE Scholarship will pay tuition, $46 of fees and up to $100 on books for all eligible Georgia residents pursuing an associate degree program. To be eligible for the HOPE Scholarship program, a student must to be a HOPE Scholar (1993 or later high school graduate with a 3.0 or better GPA or one who has attempted the 45th, 90th, or 135th hour with a 3.0 or better GPA). Learning Support grades (A, B, C, D, or F) will be used in the HOPE Scholarship GPA calculation.

To continue receiving the HOPE Scholarship, degree students must maintain a 3.0 GPA. Students' GPA will be checked at the 45th, 90th, and 135th quarter hours. GPA for HOPE Scholarship students will also be checked at the end of each spring quarter for all scholars except part time scholars who have not reached the 45th hour. The part time scholar who has not reached the 45th hour will be checked at the end of the third term. Students who do not have a 3.0 GPA at any of these check points will lose the HOPE Scholarship.

The HOPE Grant will pay tuition, $46 of fees and up to $100 on books for all eligible Georgia residents pursuing a diploma or certificate program. There will be a cap on the number of hours that students can receive the HOPE Grant and HOPE Scholarships. The cap for HOPE Grant is 95 quarter hours, and the cap for HOPE Scholarship is 190 quarter hours.

Note: The previous and above information is subject to change, pending state legislation.

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 $609 to $5350 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 .

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 quarter is divided by the total number of calendar days in the quarter. The resulting percentage is multiplied by the student's Title IV (excluding FWS) aid for the quarter. 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 & weekends)

*100% if greater than 60%
100% - percentage (%) earned = percentage (%) unearned
For more information concerning this policy, please see the Financial Aid Office .

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 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 students who receive Federal Pell Grants. There is no guarantee that every eligible student will be able to receive an FSEOG.

Academic Competitiveness Grant (ACG) Program
The Higher Education Reconciliation Act of 2005 (HERA) was signed into Law February 8, 2006. The Act created a new grant program to be awarded to students beginning with the 2006-2007 award year. Some of the eligibility requirements include school certification that the recipients graduated high school after January 1, 2006, for the first year award and January 1, 2005, for the second year award. Other requirements include: Must be Pell-Grant eligible; be enrolled at least half-time; be enrolled in a Pell Grant-eligible certificate, diploma, or associate degree program; graduated from a high school program that was rigorous as defined by the Secretary of Education. Students must maintain a 3.0 GPA to continue to the second year ACG award. An eligible student may receive an ACG of up to $750 for the first academic year and up to $1,300 for the second academic year. For more information on the ACG, please contact the Financial Aid Office.

Georgia's LEAP (Leveraging Educational Assistance Partnership) Grant
The purpose of Georgia's LEAP program is to provide residents of Georgia, who demonstrate substantial financial need, with grant assistance toward the cost of attendance at eligible public and private colleges/universities and technical colleges in Georgia. Funds are limited and awarded on a first-come, first-served basis. Students must be eligible for the Pell Grant. Contact the Financial Aid Office for other eligibility requirements.

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 officer of his/her local or regional Department of Veterans Affairs office to obtain applications. 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 (WIA) is a federal program available to students who qualify based on federal guidelines. This program pays tuition, books, and supplies for full-time students. There is also a travel, meal, and childcare allowance to those qualifying. All students interested in applying for WIA must first apply for the Federal Pell Grant and/or the HOPE Grant. To apply for WIA, contact the WIA Office at Georgia Northwestern Technical College.

Academic Information

Grading System

Each student's progress, conduct, and attitude are continuously appraised. Instructors report irregularity in attendance and progress to the appropriate dean or the vice president of academic affairs so that corrective steps may be taken to assure quality training. At the end of each quarter, 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-quarter) (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 Competency Exam: Upon request and approval, a competency exam may be administered to a student to determine if the student has already gained mastery of the course competencies (See Credit by Exam under Academic Policies). 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 quarter, 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 quarter. An "IP" must be followed by a final grade during the next quarter 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 quarter.

"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.

ProgramCourse Grade Requirements
All program completers, in order to be eligible for a degree or diploma, must have completed all required courses of the prescribed program of study with an average grade of "C" or higher.

Grade Point Average
Quarterly Grade Point Average
Students will be awarded quality points for each diploma 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 quarter courses are then totaled and divided by the total credits for the quarter to obtain the quarterly 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 Division will not affect GPA.

GPA Computation Example
Grades Quality Points X Course Credit Hours = Total Quality Points for Course

A in 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. (2X5 = 10)
Total Quality Points for Quarter = 60 (20+30+10)
Total Quality Points for Quarter ÷ Total Credit Hours for Quarter = Quarter Grade Point Average; therefore, 60 ÷ 20 = 3 (Quarter 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 quarterly 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.

Graduation Grade Point Average
The Graduation GPA is calculated on only those courses required for graduation. When a course is taken more than once, the final grade will be used in calculating the grade point average for graduation. A 2.0 grade point average is needed for graduation.

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 quarter in terms of his or her work ethic: at midterm and at the end of the quarter. 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 college website 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 e-mail.

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.

Satisfactory Academic Progress
A student is considered to be making satisfactory academic progress if he/she maintains a cumulative GPA of 2.0 or higher.

Unsatisfactory Academic Progress
A student is considered to be making unsatisfactory academic progress if he/she has been placed on academic suspension because of his/her cumulative GPA.

Academic Probation and Suspension
Any student who earns a quarterly GPA of less than 2.0 will be placed on academic probation during the next quarter 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 quarter if the quarterly GPA falls below a 2.0 for two consecutive quarters. When a student is suspended, that student is not allowed to enroll in classes for the next term. During the first quarter of enrollment after academic suspension, a student is placed on academic probation. A student is removed from academic probation by earning a quarterly 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 quarter, 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 consecutive calendar days of any quarter. 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. This form can be obtained in the Office of Student Affairs or printed from the Forms tab of the Student page of the GNTC website. 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 25th day of the quarter. Faculty will assign students withdrawing after that date either a WP – withdrew passing or WF – withdrew failing. The last day on which a student may officially withdraw from a class is the 40th day of the quarter. 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 Office of Student Affairs or from the GNTC website. Select the "Forms" tab of the "Student" page on the website, and return the signed, completed form to the Office of Student Affairs. 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 quarter 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 quarter.

President's List
A quarter 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 quarter.

Graduation
Students are eligible to graduate when the following requirements are met:
1) The diploma or associate degree seeking student has earned a high school diploma or a GED;
2) The required number of credit hours in the student's program of study has been satisfactorily completed, and the student has a minimum cumulative GPA of 2.0 in the courses required for graduation;
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 quarter prior to the quarter of the student's anticipated graduation;
4) Program area exit examination has been completed (if required);
5) At least twenty-five percent (25%) of the credit hours required for graduation have been earned at Georgia Northwestern. No more than 75% of the credit hours required for graduation may be earned by transfer of credit, credit by examination, or articulation.
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 catalog which is in effect at the time of re-enrollment. Students may meet graduation requirements at the end of each quarter. Formal graduation exercises are held twice per year, at the end of spring and fall quarters. All graduates are encouraged to participate in the ceremony.

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 (TCSG). Transfer students must complete a minimum of 25% of their required coursework at Georgia Northwestern Technical College before being issued a degree, diploma, or certificate. No more than 75% of the credit hours required for graduation may be earned by transfer of credit, credit by examination, 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 quarter are considered to be full-time students.

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

Maximum Class Load
The maximum number of credit hours that a student may carry in one quarter without special permission from the Office of Academic Affairs is 24.

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. Attendance, therefore, is an important criterion in the work ethic evaluation. Students missing more than 22% of scheduled class meetings may be sent letters emphasizing attendance, completion of course work, course drop policy, and encouragement to contact their instructors as soon as possible to discuss the reasons for absences. By visiting with the instructors or advisors, the student might avoid administrative withdrawal, decreased work ethic evaluation, or failure in the class. Some programs may have a more stringent attendance policy. An instructor will have his/her specific attendance policy in his/her syllabus. It is imperative that students read and follow the syllabus information.

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 major 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 humanities/fine arts, natural sciences/mathematics, and social/behavioral sciences.

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 area and includes from 61 to 120 credit hours in associate degree programs.

Elective courses are available for each degree, diploma, or certificate program and may be included in the requirements for program graduation. Electives are freely chosen by students in order to develop their individual interests and may be selected from non-required courses in the major program, in general education, or from other program areas.

Associate Degree Programs
Each student seeking an associate degree at the college is required to satisfactorily complete at least 25 hours in general education that provide the foundations in English/Humanities/Fine Arts, Social/Behavioral Sciences, and Natural Sciences/ Mathematics. The goal of the general education program is to provide all 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 13 credit hours in general core courses. For the diploma-seeking student, that course of study typically consists of an appropriate course in mathematics, English, psychology, and computer literacy. 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, have good interpersonal skills and be able to use computers to solve problems. The diploma level general education core at the college seeks to achieve this goal.

College Transfer
Courses at the college are not specifically designed to transfer into programs leading to the bachelor's degree. The Georgia Board of Regents' official position on courses taken at the college is as follows:
"Although courses from these institutions are not designed for programs leading to the bachelor's degree, credit will be accepted for courses which are determined by the receiving institution, on a case-by-case basis, to be comparable to lower division courses offered at the receiving institution."

Class Cancellation
The college reserves the right to cancel any class with insufficient enrollment; however, all courses will be given the opportunity to meet minimum enrollment according to the schedule listed in the catalog.

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.

Change of Major
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 for the new major. Students desiring to change their majors should complete a Change of Status form available in the Office of Student Affairs.

Credit by Examination
Upon request 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. 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.

Exemption Tests
Exemption tests are administered quarterly for persons wishing to establish credit by examination in one or more of the following subjects:

AHS 1011 - Introduction to Anatomy and Physiology (Replaces AHS 101)
◇AHS 104 - Introduction to Health Care
(Note: This test has two components, a written test and a skills component.)
AHS 109 - Medical Terminology
BUS 1130 - Document Processing
CIS 106 - Computer Concepts
ENG 1010 - Fundamentals of English I
*MAT 1011 - Business Math
*MAT 1012 - Foundations of Mathematics
*MAT 1013 - Algebraic Concepts
*(Note: Bring a calculator if taking math exams.)
SCT 100 - Introduction to Microcomputers
◇AHS 104 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 check-offs, the second portion of the test. In addition, the tester must present a valid CPR card at the time of testing and proof of employment in a health care field.

Exemption of other courses may be available upon request (see advisor). Any student who feels that he/she has mastery of the competencies required for the class may take an exemption test. 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 following rules apply to those wishing to establish credit by examination (exemption test):
1) A person who wishes to take an exemption 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
- Gordon County Campus: Melinda Sams 706-624-1122
- Polk County Campus: Matt Sunrich 678-757-2043
- Walker County Campus: Susan Martin 706-764-3674

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 cashier's office, at the time of testing. Payment may be by cash, check, or debit/credit card;
7) Exemption tests are given from 9:00 a.m. – 2:00 p.m. as follows:
Floyd Campus each Friday; Gordon Campus each Tuesday; Polk Campus each Wednesday, and Walker Campus each Friday.

Competency Tests
Competency tests are administered quarterly 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.

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, 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:
AHS 1011 - Anatomy and Physiology (Formerly AHS 101)
◇AHS 104 - Introduction to Health Care
AHS 109 - Medical Terminology
AHS 1126 - Health Science Physics (Formerly AHS 156)
AHS 1127 - Health Sciences Chemistry (Formerly AHS 157)
BIO 2113 - Anatomy and Physiology I (Formerly BIO 193)
BIO 2114 - Anatomy and Physiology II (Formerly BIO 194)
CHM 1111 - Chemistry I (Formerly CHM 191)
MAS 112 - Human Diseases
*MAT 1012 - Foundations of Mathematics (Formerly MAT 101)
*MAT 1013 – Algebraic Concepts (Formerly MAT 103)
*MAT 1111 - College Algebra (Formerly MAT 191)

Other courses may be available upon request. (See advisor.)
* (Note: Bring a calculator if taking math exams.)
◇ AHS 104 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 check offs, the second portion of the test. In addition, the tester must present a valid CPR card at the time of testing and proof of employment in a health care field.

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.

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, he or she should obtain a Course Substitution form from the Office of Student Affairs. 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 and returned to the Office of Student Affairs.

Program Transfer
Students have the privilege of transferring from one program to another while enrolled in Georgia Northwestern Technical College, provided they have the necessary qualifications. Students desiring to transfer must consult with the Office of Student Affairs and meet all requirements to make the change. Some programs may have waiting lists and may not be available for immediate entry.

Transcripts
Transcripts are released when a student signs a Student Release form in the Office of the Registrar. Transcripts will be processed within three to five business days after receipt of the signed transcript release form. Transcripts will not be sent unless all financial obligations to the school are met.

Transcript Evaluation
The college accepts transfer credits only 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. Transcripts are generally evaluated within two weeks after receipt.

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 (TCSG) as listed in the TCSG Policy and Procedures 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. To begin an informal grievance or complaint, the student should visit with the supervisor of the area where the incident took place. Typically this person might be the student's advisor, instructor, or dean supervising the program area. An individual is not required to seek informal resolution nor does the seeking of an informal resolution prohibit the individual from filing a formal grievance or complaint. Contacts for filing formal 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. Complaints are further categorized as academic or non-academic. Types of complaints and procedures for seeking resolution are addressed below.

Written Student Complaint – Academic

Any student at Georgia Northwestern Technical College (GNTC) 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 quarter 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 at GNTC.

Once the student has filed a written appeal with the VPAA, he/she should expect to receive a reply within seven (7) business days. An appeal by the faculty member is at the discretion of the president.

The decision of the vice president of academic affairs 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 web page.

Non-Academic Complaint or Appeal

Non-academic complaints are further categorized as (1) equal opportunity, (2) gender/sexual harassment, or (3) other.

Non-Discrimination Statement
Georgia Northwestern Technical College (GNTC) is a unit of the Technical College System of Georgia (TCSG) 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 and Michael Walters, Walker County Campus, 706-764-3799.

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, Georgia 30161
706-295-6517
or
Michael Walters
Walker County Campus Room ADM-209
265 Bicentennial Trail
Rock Spring, GA 30739
706-764-3799

Sexual Harassment Policy
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.

Sexual Harassment Complaints
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 (formerly Georgia Department of Technical and Adult Education). 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). TCSG will contact the complainant and prepare a timeline for resolution of the appeal.

Other Non-Academic Complaint or Appeal
Any person with a complaint or appeal not addressing Equal Opportunity, Sexual Harassment, or Academics:

1. Should forward the complaint and any clarifying information to the appropriate vice president.

2. The appropriate vice president will investigate the complaint to determine its validity. This would include:
   a. A meeting with the student or other individual;
   b. 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;
   c. Meetings or discussion with other appropriate faculty, staff, or students.

3. 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.

4. 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.

Student Affairs

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

Student Success Centers

New students enrolling at Georgia Northwestern Technical College will visit the Student Success Center for assessment, advisement, and registration. A comprehensive array of services are provided in the Student Success Centers. These services include but are not limited to career assessment, financial aid, special services for dislocated workers and displaced homemakers, counseling, and job placement assistance.

Career Exploration

The professional career counseling staff provides personal career counseling, various career interest assessments, computerized career guidance, and program selection. Located in the Student Success Center, the service is free and open to the public. Any adult interested in making a change in career direction should contact the center at the Floyd, Gordon, Polk, or Walker County Campus to make an appointment to receive testing and counseling and take advantage of resources designed to give information and support.

Career Planning

Georgia Northwestern Technical College provides career planning for prospective students who need assistance in choosing a program of study and are not sure how to get started. A personal career planner is available to answer questions about programs of study, admissions, financial aid, registration, classes, and career services. This service is free to the public. Any adult wishing to add value to his or her life through education may contact the Student Success Center at one of the Georgia Northwestern Technical College campuses to make an appointment with a career planner.

Counseling

Georgia Northwestern Technical College provides professional counseling services for students who need assistance with school-related problems.

Tutoring

Tutoring Services are provided on a quarterly basis. 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 College.

Career Services

Career Services is located within the Office of Institutional Effectiveness. Career Services assists students in selecting appropriate employment upon completion of their programs of study. Services are available for all current students and graduates. Students who wish to confer with a career services coordinator are encouraged to make appointments.

Follow-up

Follow-up services are maintained in the Office of Career Services. Follow-up services maintain contact with former students in the employment field. Periodic follow-up surveys are conducted by GNTC to obtain data from former students and student

employers. GNTC urges former students to promptly complete and return follow-up survey forms. Data collected from graduates and their employers assist the college in meeting its training objectives and developing up-to-date curricula for its courses of study.

Services for Special Populations
Georgia Northwestern Technical College is committed to providing technical education to students with special needs through the Special Populations assistance 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.

Students attending Georgia Northwestern Technical College who have special needs should contact the campus ADA Coordinator for counseling and initiation of intervention strategies. The college provides access to the following services: Disadvantaged families (including foster children)/Developmental Services, Disability Services, Gender Equity Services, Single Parent (including pregnant women)/ Displaced Homemaker Services, Financial Aid Services, Fatherhood Program, Community-Based Organization Services, Workforce Investment Act Services, Limited English Proficiency Services, Vocational Rehabilitation Services and Northwest Georgia Career Depot.

Services to Students with Disabilities/ADA
A needs coordinator is available to those students with disabilities who may need individual educational plans, specialized equipment, books, or referral services. Students are responsible for informing the coordinator of his or her needs requirements. See more specific information in the Student Handbook.

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.

Experiential Learning and Professional Certification Credit
At Georgia Northwestern Technical College, instructors may make a recommendation for awarding credit for documented previous training or experience 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.

Student Organizations and Activities
The following activities are available to Georgia Northwestern Technical College students to enhance the college experience. Some activities may not meet on all campuses:

Baptist Campus Ministries (BCM)
The Baptist Campus Ministries is a student-led organization that attempts to meet the spiritual needs of the college community. The Baptist Campus Ministries hosts a weekly non-denominational luncheon on the Walker County Campus. Meetings are held on Thursdays from 12 to 1 pm in the faculty dining room located in the cafeteria. There are also opportunities for students to be involved in regional activities such as mission projects, retreats, and fellowships throughout the quarter. All students are welcome to attend. There are no denominational or religious requirements.

GOAL Program
The Georgia Occupational Award for Leadership (GOAL) is recognition sponsored jointly at the state level by the Technical College System of Georgia and the Business Council of Georgia. At the local level, the program is sponsored by various Georgia Northwestern Technical College business partners. The purpose of the program is to give proper recognition to the dignity and importance of technical education in today's economy.

In the spring, four local winners are selected by a screening committee. Winners are awarded a cash prize. Of the four local winners, one will be selected to represent Georgia Northwestern Technical College in the state contest. Grades, attitude, personal goals, and self-confidence are considered in selecting GOAL winners.

Student Leadership Council (SLC)
The Student Leadership Council is a volunteer organization made up of volunteer representatives from most occupational programs on the campus of Georgia Northwestern Technical College. The organization works on projects throughout the year to benefit the college and its students, and its officers participate in the student conventions held each fall and winter.

Phi Beta Lambda (PBL)
Phi Beta Lambda is an organization for students in the Business or Information Technology Divisions. The local chapter is affiliated with the state Phi Beta Lambda organization and participates in the fall convention and spring state competitions each year.

Community Services

Georgia Fatherhood Program (GFP)
The Georgia Fatherhood Program, in collaboration with the Child Support Enforcement Agency and the Department of Human Resources, strives to motivate non-custodial parents to become active participants, both emotionally and financially, in the lives of their children. The program assists non-custodial parents who are unemployed, at risk of losing their jobs, and/or behind on child support payments by providing a variety of support services, day and evening workshops, and comprehensive training programs. For more information about the GFP, contact the GFP office at 706-802-5630.

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 or high school completion and 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: 706-639-2065 or 423-425-1702.

Special Populations Program
The Special Populations Program provides single parents, displaced homemakers, student in non-traditional programs, and LEP students with 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.

WIA Youth Success Academy
The Youth Success Academy is specifically designed for out of school youth who wish to attain a GED and a technical education. The participants in the program will be involved in: GED 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 Coosa Valley 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.

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 (GED) 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 Adult Learning Center, Trion: (706) 734-3386
Trion Recreation Center, 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 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 fee for GED Testing is $95. 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 graduates each year at graduation ceremonies, along with a number of memorial scholarships and citizenship awards.

Economic Development

Economic Development

Note that some economic development instruction is available in online format combined with on-site instruction.

Quick Start Training

The purpose of Georgia Quick Start, an economic incentive by the state of Georgia, is to enable the industry to develop a trained workforce as quickly as possible for the new or expanded operation. Certified Quick Start trainers provide qualifying industries with a total training package designed to allow the industry to become self-sufficient for its future training needs. Company employees work with Quick Start staff members to develop the training process. Custom-designed and comprehensive training programs are developed based on an analysis of the specific workforce needs of the company. Typical examples of training developed for Quick Start businesses are:

- **Manufacturing and Equipment Operations** includes company orientation, process orientation, job specific equipment operation, blueprint reading, precision measurements, machining, welding, forklift operations, safety and quality training, and automated manufacturing involving CNC and/or PLC applications.
- **Employee Involvement** includes team skills training and focuses on the development of self-directed teams, enhanced communication skills, effective meeting management, consensus decision making, and effective conflict resolution. Since 1967, Georgia's Quick Start program has trained more than 400,000 people for over 3,800 firms.
- **Customized Office Operations** includes company orientation, job specific skills, customer service, managing the difficult customer, computer software applications, telephone, and interpersonal skills.
- **Productivity Enhancement** includes presentations dealing with total, statistical process control, problem solving, and decision making. The Georgia Quick Start program offers many customized training services for new or expanding manufacturing firms.

For additional information, contact:
Pete McDonald, Vice President of Economic Development
Office of Economic Development
Georgia Northwestern Technical College
One Maurice Culberson Drive
Rome, Georgia 30161
Telephone: 706-295-6960
Fax: 706-295-6555
E-mail: pmcdonald@gntc.edu

Business & Industry Training

Jim Powell, Director of Business and Industry Services-Floyd and Polk Counties
Floyd County Campus, Rome, Georgia
706-295-6961
jpowell@gntc.edu

Tim Hart, Director of Business and Industry Services-Gordon and Chattooga Counties
Gordon County Campus, Calhoun, Georgia
706-624-1138
thart@gntc.edu

Al Hutchison, Associate Vice President of Economic Development - Catoosa and Walker Counties
Walker County Campus, Rock Spring, Georgia
706-764-3592
ahutchison@gntc.edu

Georgia Northwestern Technical College offers customized short-term employee training programs, exclusively for business and industry that are designed to enhance the productivity of skilled workers and to improve company operations. These programs include the following:

Work Keys®
Our certified trainers, using materials developed by American College Testing (ACT), help companies improve productivity by documenting and improving workplace skills used in a wide range of jobs.

The Work Keys® system offers two important advantages to business and industry:
1. The ability to compare individual workplace skills to particular job requirements;
2. Instructional support materials that enable individuals to improve their skills by way of computer-based learning and classroom instruction.

These two factors enable Georgia Northwestern Technical College to both measure the qualifications of potential employees and design job-training programs to enhance the job skills of current employees.

The Work Keys® system consists of four integrated components:

Assessments — standardized tests for competency in the following skill areas:
• Applied Mathematics • Applied Technology
• Listening • Locating Information
• Observation • Reading for Information
• Teamwork • Writing

Job Profiling — a computerized procedure to systematically analyze job tasks during which company personnel identify and quantify job skills and levels required for effective performance.

Instructional Support — skill specific instructional packets that supplement or reinforce existing curricula and connect instruction directly to the demands of the workplace.

Reporting — feedback needed to make career choices, plan training programs, screen prospective employees, and support other functions. Standard Work Keys® reports are generated and customized reports are available by request.

Customized Training for Existing Industry
The Office of Economic Development of Georgia Northwestern Technical College offers existing industry a wide range of assistance in training and retraining employees. Companies may choose from any of the following series of topics or request customized training that is designed to meet the special needs of local companies.

• **Safety/Employee Awareness Series** - Courses range from 2 to 40 clock hours in length. Day and evening schedules are available. Instruction is available for the

following topics and can be arranged for others:

Safety, Health, and Environment
Basic First Aid
CPR Heartsaver
Job Safety Analysis
First Responder
Bloodborne Pathogens
Safety in the Workplace
Proper Lifting: Prevention of Back Trauma
Lockout/Tagout (OSHA Standards)
Ergonomics
Hazardous Materials Awareness
Forklift Safety (Operator and Instructor Classes)

• **Total Quality Improvement Series** - Courses range from 4 to 100 clock hours in length. Day and evening schedules are available. Instruction is available for the following topics and can be arranged for others. (For service or manufacturing industries)

World Class Manufacturing - Overview
Statistical Process Control
Demand Flow Technology
5-S Planning and Implementation
Leadership Development in Quality
Organizational Development, Supervisor Development
Problem Solving/Decision Making Implementation
Decision Making/Problem Solving
Office Operations Quality Training
Professional Resume Preparation
Building High Performance Team Skills
Business Letter Writing
Workplace Spanish

• **Multi-Craft Mechanical/Electrical Systems Maintenance Series** – Program offers an assessment of an employee's electrical and mechanical skills to identify the subject areas for training. These courses range from 3 to 140 clock hours in length. Day and evening schedules are available. Online instruction is available for many introductory training courses followed by on-site instructor review. Instruction is available for the following topics and can be arranged for others.

Pre-employment Skills Workshop
Maintenance Skills Assessment Program
Shop Math Series for Maintenance
Precision Measurement Series for Maintenance Personnel
Science Foundations for Maintenance Personnel
General Industrial Maintenance Series
Electrical Fundamentals Series
Mechanical Maintenance Series
Electrical Maintenance Series
Welding Skills Series

Continuing Education

In addition to the regular degree, diploma, and certificate programs, Georgia Northwestern Technical College offers ongoing continuing education short-term classes and programs. These courses are non-credit and are offered in fine arts, professional development, and personal enrichment. Classes are offered online and in the classroom.

Each person who satisfactorily completes a continuing education class receives a certificate. If requested in writing, a record of continuing education courses may be sent to a potential employer. Students enrolled in continuing education classes do not have to take the admission examination and may register for continuing education courses by phone, fax, mail, or walk-in procedures. Internet based continuing education courses are offered in many subject areas. Schedules listing classroom-based courses are published semi-annually and are free upon request. Schedules are also available at www.gntc.edu. Contact continuing education at 706-295-6950 or ejohnston@gntc.edu.

Georgia Northwestern Technical College's continuing education programs focus on technical occupationally-related topics. New courses are added continuously to meet the changing needs of the citizens of Catoosa, Chattooga, Dade, Floyd, Gordon, Polk and Walker counties. Examples of course offerings include:

Computer Software Applications

Introduction to Computers & Windows
Introduction to the Internet
Microsoft Word
Microsoft Excel
Microsoft Access
Microsoft PowerPoint
Adobe Photoshop Elements
Adobe Dreamweaver
AutoCAD – Computer Aided Design
QuickBooks

Professional Skills and Licensure Courses

Legal Assistant Certificate Program
Fork Lift Operator
Fork Lift Instructor Training
Residential Contractor License Exam Review
Continuing Education for Licensed Electricians
Continuing Education for Licensed Plumbers
Continuing Education for Licensed HVAC Technicians
Basic Life Support for Health Care Providers

Industrial Skills

Fork Lift Operator
Fork Lift Instructor Training
OSHA Certification Workshops
Lean Manufacturing

General Courses

Spanish Language
Digital Photography
Customer Service Workshops
Alcohol and Drug Awareness Program
Continuing Education for Cosmetologists
Hunter Safety
Horticulture
Floral Design

Georgia Work Ready Certification

Objective

The objective of the Georgia Work Ready program is to establish a work ready workforce by linking job skills with education to enhance the economic development of all communities and regions in Georgia.

Participants/Partners

Georgia Office of Workforce Development, Georgia State Chamber of Commerce, Technical College System of Georgia (formerly Georgia Department of Technical and Adult Education), employers, educators, citizens, job placement agencies, and community development organizations

Outcomes

Better match of potential employees to jobs, less job turn-over, better employee selection for promotions, more productive employees, and employees that are highly trainable

Work Ready Certificate

Georgia will use the Work Keys® system from ACT to support the Georgia Work Ready program. The Work Keys® system is composed of three components: skills assessments, job profiles and gap education.

Assessments — subject tests in reading comprehension, locating information and applied math. Assessments using the three subject areas are available free of charge at the state's technical colleges for all residents of Georgia. Testing is done at Georgia Northwestern Technical College on Monday through Friday at scheduled times. An individual wishing to take the assessment must be pre-registered at least two business days prior to the test and may register by calling 706-295-6553.

Job Profile — the Work Keys® system uses authorized individuals to define the skill levels needed to satisfactorily perform a given job. A profile is developed based upon input from employees currently performing the job. The profile consists of a task list, a criticality table, and a definition of the skill levels necessary to perform the job in an effective manner. Skill levels range from 1 to 7 on the Work Keys® scale. Job profiles will be provided free by the technical college for private and public organizations hiring a minimum number of employees.

Gap Education — Individuals who take the Work Ready assessments, Reading, Locating Information and Applied Math, and do not achieve the level they desire will be provided access to free Internet-based, computer-aided education or instructor-led classes for a fee at technical colleges. Individuals wanting to improve their skill

levels can gain access to gap education by contacting Georgia's technical colleges.

Certified Work Ready Communities
Georgia counties can seek to become Certified Work Ready Communities of Excellence by encouraging various groups of citizens to achieve the Work Ready Certificate at the Bronze (3), Silver (4), Gold (5), and Platinum level (6). The Work Ready effort will enable counties to have a process to develop a documented workforce pipeline whose skills can be matched to occupation or job profiles and to demonstrate their commitment to improving the local high school graduation rate. The Certified Work Ready Community recognition will require local leaders to make a sustained effort to achieve a minimum high school graduation rate of 70% and a minimum percentage of individuals achieving the Work Ready Certificate in several categories.

Each county will form a team of leaders to sponsor and sustain the Work Ready Community effort and work closely with the Georgia Office of Workforce Development to become a Georgia Certified Work Ready Community of Excellence. For more information contact Pete McDonald at 706-295-6960 or pmcdonald@gntc.edu.

Retraining Tax Credit: Georgia Northwestern Technical College is the unit of the Technical College System of Georgia that approves retraining programs of existing industry seeking state of Georgia income tax credits for the counties of Catoosa, Chattooga, Dade, Floyd, Gordon, Polk, and Walker. Eligible business enterprises may be granted tax credits equal to one half of the direct costs of retraining, up to $500 per full-time employee per approved retraining program. Involved retraining programs are those that provide job skills for employees otherwise unable to function effectively on the job due to skill deficiencies or who would otherwise be displaced because such skill deficiencies would inhibit his or her utilization of new technology. New technology includes implementation of new equipment and/or new operating systems such as workplace re-engineering, total quality management, ISO 9000 standards, and employee involvement programs. Executive, management development, career development, and personal enrichment training are not included.

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 80,000 items. Library materials include books, audio-books, e-books, CD-ROMs, DVDs, videos, 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), GaIN (Georgia Interactive Network for Medical Resources), Netlibrary (e-books), 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. The Walker County Campus also has a Media Distribution System (MDS). The MDS allows instructors access to the library's video and DVD collection from his or her classroom computers and sends information to television monitors throughout the campus.

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. on Friday. The Gordon and Polk county campus libraries are open Monday-Thursday from 7:30 a.m. – 9:00 p.m. When classes are not in session the library is closed. For further information, visit the GNTC libraries or the GNTC library website at http://www.gntc.edu/library.

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 generally related courses. A listing of programs in each instructional division precedes the individual curriculum requirements for programs within the division.

Program completion time will vary based on program choices and previous training. In addition, while all courses offered each quarter are expected to be taught, a course that fails to have a sufficient number of enrollees may be dropped. See individual program descriptions for estimates of time for program completion, entrance dates, entrance requirements, and program availability on campuses. When available, program courses may be completed at any GNTC campus (Floyd, Gordon, Polk, Walker), as well as on-line through Georgia Northwestern Technical College or through GVTC (Georgia Virtual Technical College). 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. Programs that can be obtained entirely on-line will be noted in the catalog

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 prerequisite courses in order to advance to the next course level.

An increasing number of GNTC 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 READI 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 degree nursing (ADN), associate of applied science (AAS) degrees, and also has reciprocal agreements with other colleges for selected associate and bachelor degrees. Students considering this option must communicate with the receiving institution early in the planning process to clarify the transfer of GNTC credits. See your advisor if you're interested in other college opportunities.

General Education
The goal of the general education program is to provide all students with a common, broad-based, well-rounded, collegiate level educational experience that ensures breadth of knowledge and adheres to a coherent rationale.

Each associate degree and diploma program includes a minimum number of quarter hours of core curriculum. Each associate degree requires a minimum of 25 quarter hours of core curriculum, using the following curriculum structure: a minimum of 10 quarter hours of courses in the areas of English/humanities/fine arts, a minimum of 5 quarter hours in the areas of social sciences/behavioral sciences, a minimum of 5 quarter hours in the natural sciences and mathematics, and an additional 5 quarter hours from any of the areas mentioned. General education courses (listed on specific curriculum pages)

are those typically offered by the college. The general education (core) curriculum is identified in the college catalog program listings, either grouped together or with an asterisk (*) by each course.

Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options. For more information about general education (core) requirements, see the General Education and Learning Support Division information in this catalog.

Associate Degree Nursing / Associate of Applied Science
Courses numbered 090-099 are Learning Support courses and do not carry credit towards graduation. Courses numbered 100 and above carry credit towards graduation. General education courses carrying a course number of 1100-2999, i.e., ENG 1101, are taught in associate degree programs.

General Education Division

Dr. Dorenda McConnell, Dean

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 job skills necessary to perform occupational tasks, the general education courses will make up a substantial component of each associate degree and diploma and will provide a foundation in English/humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics.

The goal of the general education program is to provide all students with a common, broad-based, well-rounded, collegiate level educational experience that ensures breadth of knowledge and adheres to a coherent rationale. These foundation courses provide students with the skills necessary to succeed in college-level curriculum and in life. Georgia Northwestern Technical College requires the successful completion of each course in the general education core curriculum. The general education component follows a common structure, developed with a goal of ensuring breadth of knowledge while allowing flexibility.

Associate Degree General Education Requirements
The college requirement for general core curriculum for an associate degree is a minimum of 25 quarter hours** using the curriculum structure below. The three categories that commonly define the general education core are English/humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Each degree category has specific distribution requirements outlined in the table on the next page.

Area I

English/Humanities/Fine Arts	Minimum 10 quarter hours

Courses that address English/humanities/fine arts learning outcomes.

Successful completion of ENG 1101 is required as 5 of minimum 10 quarter hours.

Successful completion of a humanities/fine arts is required as 5 of minimum of 10 quarter hours taken from the following academic fields:

Art	History
Creative Writing	Humanities
English - Literature	Literature and Cultural Studies
Ethnic Studies	Music
Film Studies and Criticism	Theatre

Area II

Social/Behavioral Sciences	Minimum 5 quarter hours

Courses that address learning outcomes in the social sciences/behavioral sciences taken from the following academic fields:

Communications	Political Science
Economics	Psychology
Ethnology	Sociology

Area III

Natural Sciences/Mathematics	Minimum 5 quarter hours

Courses that address learning outcomes in the natural sciences and mathematics.

Successful completion of MAT 1100 or MAT 1101 or MAT 1111 is required as 5 of minimum quarter hours.

Courses may be taken from the following academic fields:

Astronomy	Physics
Biology	Mathematics
Chemistry	Computer Science

***To meet the minimum required 25 quarter hours, the additional 5 quarter hours may be selected from Areas I, II, or III.**

The following tables list general education core 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 College (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 / General Core Courses**			
Area I - English/Humanities/Fine Arts		**Area II - Social/Behavioral Science**	
ART 1101	Art Appreciation	ECO 1101	Principles of Economics
ENG 1101	Composition and Rhetoric	ECO 2105	Principles of Macroeconomics
ENG 1102	Literature and Composition	ECO 2106	Principles of Microeconomics
ENG 2130	American Literature	ENG 1105	Technical Communications
HIS 1111	World History I	POL 1101	American Government
HIS 1112	World History II	PSY 1101	Introduction to Psychology
HIS 2111	U.S. History I	PSY 1150	Industrial/Organizational Psychology
HIS 2112	U.S. History II	PSY 2103	Human Development
HUM 1101	Introduction to Humanities	PSY 2250	Abnormal Psychology
MUS 1101	Music Appreciation	SOC 1101	Introduction to Sociology
		SPC 1101	Public Speaking
Area III - Natural Science/Mathematics			
BIO 1111	Biology I	MAT 1100	Quantitative Skills and Reasoning
BIO 1112	Biology II	MAT 1101	Mathematical Modeling
BIO 2113	Anatomy and Physiology I	MAT 1111	College Algebra
BIO 2114	Anatomy and Physiology II	MAT 1112	College Trigonometry
BIO 2117	Introductory Microbiology	MAT 1113	Precalculus
CHM 1111	Chemistry I	MAT 1127	Introduction to Statistics
CHM 1112	Chemistry II	MAT 1131	Differential Calculus
CHM 1213	Survey of Inorganic Chemistry	PHY 1110	Introductory Physics
CHM 1214	Survey of Organic Chemistry and Biochemistry	PHY 1111	Mechanics
		PHY 1112	Electricity and Magnetism
		PHY 1113	Fluids, Heat, Sound and Light
		PSC 1111	Physical Science

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 Seeking Students General Core and Learning Support Courses			
General Core Diploma Courses		**Learning Support Courses**	
AHS 1010	Introduction to Anatomy and Physiology	ENG 096.200602	English II
AHS 1011	Anatomy and Physiology	ENG 097.200602	English III
AHS 1015	Basic Inorganic Chemistry	ENG 098.200602	English IV
AHS 1126	Health Science Physics	MAT 095	Math I
AHS 1127	Health Sciences Chemistry	MAT 095.200602	Learning Support Mathematics I
EMP 1000	Interpersonal Relations and Professional Development	MAT 096	Math II
ENG 1010	Fundamentals of English I	MAT 096.200602	Learning Support Mathematics II
ENG 1012	Fundamentals of English II	MAT 097	Math III
MAT 1011	Business Mathematics	MAT 097.200602	Learning Support Mathematics III
MAT 1012	Foundations of Mathematics	MAT 098	Pre-Algebra
MAT 1013	Algebraic Concepts	MAT 098.200602	Elementary Algebra
MAT 1015	Geometry and Trigonometry	MAT 099.200602	Intermediate Algebra
MAT 1017	Trigonometry	RDG 096	Reading II
PSY 1010	Basic Psychology	RDG 096.200602	Reading II
		RDG 097	Reading III
		RDG 097.200602	Reading III
		RDG 098	Reading IV
		RDG 098.200602	Reading IV

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 Math 095 or any 096 course are assigned Learning Support status. Students whose test scores place them in a course at the 097, 098, or 099 level with no courses below 097 are granted Provisional status. Students placed in English 096 or 097; Reading 096 or 097; or Math 095, 096, or 097 will be required to take College Success 100.

Students with Learning Support status may not take any courses in their programs of study until all courses at the 095 or 096 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.

Students with questions about Learning Support Studies should contact Student Affairs.

Business Technologies

Dr. Paul Carter, Dean

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, and W-Walker County Campus). GNTC reserves the right to cancel courses due to inadequate enrollment.

Associate of Applied Science Degree Programs

Accounting (AC03) - F, G, W
Business Administrative Technology (BAT3) - W
Computer Support Specialist (CMU3) - F, G, P, W
Health Information Technology (HIT3) - W
Internet Specialist Web Site Design (CIW3) - W
Management/Supervisory Development (MS03) - G, W
Marketing Management (MM03) - F
Networking Specialist (CIN3) - F, G, P, W

Diploma Programs

Accounting (AC02) - F, G, W
Business Administrative Technology (BAT2) - F, G, P, W
Computer Support Specialist (CMU4) - F, G, P, W
Health Information Technology (HIT2) - W
Internet Specialist Web Site Design (CIW4) - W
Management/Supervisory Development (MS02) - G, W
Marketing Management (MM02) - F
Networking Specialist (CIN4) - F, G, P, W

Certificate Programs

Administrative Support Assistant (5DC1) - F, G, P, W
Bookkeeping Specialist (BN01) - F, G,W
Certified Customer Service Specialist (CSA1) - F
CISCO Network Specialist (5BG1) - F, W
CompTIA A+ Certified Technician Preparation (5AT1) - F, G, P, W
Computer Accounting Technician (PZ01) - F
Computer Applications Specialist (CPL1) - W
Computerized Accounting Specialist (5AQ1) - F, G, W
Computer Forensic and Investigation Specialist (CPF1) - W
Data Entry Clerk (5DD1) - F, G, P
Data Management (DU01) - W
Entrepreneurship (5CC1) - F, G
General Office Assistant (5DN1) - F, G, P
Help Desk Specialist (5BM1) - F, G, P, W

Health Information Technology Coding Associate (5EC1) - W
Internet Specialist Web Site Designer (5CO1) - P, W
Internet Specialist Web Site Developer (5CP1) - W
Linux/UNIX System Administrator (UNI1) - F, G, P, W
Management Specialist: Organizational Leadership (OL01) - W
Management Specialist: Team Leader (TLN1) - G, W
Marketing Specialist (5CF1) - F
Medical Coding (DGP1) - F
Medical Language Specialist (5DF1) - F, G, P, W
Medical Office Assistant (5DE1) - F, P, W
Microsoft Advanced Networking (5CL1) - W
Microsoft Excel Application Specialist (5AU1) - W
Microsoft Networking Service Technician (5CM1) - F, G W
Microsoft Office Application Professional (5CG1) - F, G, P, W
Microsoft Office Application Specialist (5AN1) - F, G, P
Network Technician (5BD1) - F, G, P
Office Accounting Specialist (5AY1) - F, G, W
Payroll Accounting Specialist (5AP1) - F, G, W
PC Repair and Network Technician (5AV1) - W
Supervisor/Manager Specialist (5AZ1) - W
Tax Preparation Specialist (5AR1) - F, G
Technical Communications (5DQ1) - F, G, P, W
Technical Management Specialist (5CA1) - G
Visual BASIC Programmer (5BE1) - F, P

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

Associate degrees are typically 1½ to 2 years in length, diploma programs are 1 to 1 ½ years in length and certificate lengths vary from 1 to 4 quarters. Individual program descriptions identify specifics. Most courses are offered day and evening. Students completing courses only in evening will typically take longer to complete a program.

*We are currently not offering this program. Please consult this page in the online GNTC Catalog at www.gntc.edu; this notice will be removed when the program is accepting students.

ACCOUNTING (AC03)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Walker County Campus*

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

Length of Program: Minimum of eight (8) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the Admissions Placement Test (ASSET/COMPASS) or one of the approved entrance tests (SAT, ACT) to be admitted as regular students. Generally, students are not admitted to degree programs on a provisional basis. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Program Final Exit Point: Associate of Applied Science Degree in Accounting. Graduates will be eligible to take the ACAT Comprehensive Certification Exam

General Core Curriculum (30 Credit Hours)*		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
HUM 1101	Introduction to Humanities	5
or		
ENG 1102	Literature and Composition	(5)
SPC 1101	Public Speaking	5
or		
ENG 1105	Technical Communications	(5)
XXX xxxx	Natural Sciences/Mathematics	5
XXX xxxx	Social/Behavioral Sciences	5
XXX xxxx	Associate Degree Level General Core Elective	5

Occupational Curriculum (68 Credit Hours)		
SCT 100	Introduction to Microcomputers	3
ACC 1101	Principles of Accounting I	6
ACC 1102	Principles of Accounting II	6

(Program requirements continued on following page)

ACCOUNTING (CONT.)

Occupational Curriculum (Cont.) (65 Credit Hours)		**Credit Hours**
ACC 1103	Principles of Accounting III	6
ACC 1104	Computerized Accounting	3
ACC 1106	Spreadsheet Applications	3
ACC 1151	Individual Tax Accounting	5
ACC 1152	Payroll Accounting	5
BUS 1100	Introduction to Keyboarding	3
or		
BUS 1130	Document Processing	(6)
ACC xxx	Accounting Electives (See advisor for recommended list) (10 of these hours MUST come from the list below)	10
XXX xxx	Advisor-approved specific occupational-guided electives	15

*General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

Recommended Accounting/Occupational Electives**		
ACC 2105	Database Applications	3
ACC 2150	Cost Accounting	6
ACC 2154	Personal Finance	5
ACC 2155	Legal Environment of Business	5
ACC 2156	Business Tax Accounting	5
ACC 2157	Integrated Accounting Management Systems	6
ACC 2158	Managerial Accounting	6
ACC 2160	Advanced Accounting Spreadsheet Applications	5
ACC 2165	Capstone Review Course of Accounting Principles	6
BUS 1150	Database Applications	3
BUS 1300	Introduction to Business	5
MKT 101	Principles of Management	5
MKT 103	Business Law	5
or		
MSD 102	Employment Law	(5)
MKT 110	Entrepreneurship	8

**Program advisor may recommend other specialization-related courses.

Total Credit Hours: 95 Minimum Quarter Credit Hours Required for Graduation
12/08

BUSINESS ADMINISTRATIVE TECHNOLOGY (BAT3)
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, 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 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.

Length of Program: Minimum of six (6) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 16 years of age
Education: High school diploma or GED is required
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Business Administrative Technology Associate of Applied Science Degree

General Core Curriculum (25 Credit Hours)*		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
ENG 1102	Literature and Composition	5
or		
HUM 1101	Introduction to Humanities	(5)
or		
ART 1101	Art Appreciation	(5)
or		
MUS 1101	Music Appreciation	(5)
SPC 1101	Public Speaking	5
PSY 1101	Introductory Psychology	5
MAT 1111	College Algebra	5

*General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

(Program requirements continued on following page)

BUSINESS ADMINISTRATIVE TECHNOLOGY (CONT.)

Occupational Curriculum (70 Credit Hours)

SCT 100	Introduction to Microcomputers	3
ACC 1101	Principles of Accounting I	6
ACC 1102	Principles of Accounting II	6
BUS 1130	Document Processing	6
BUS 1140	Word Processing	5
BUS 1150	Database Applications	3
BUS 1240	Office Procedures	5
BUS 2210	Applied Office Procedures	5
BUS 1120	Business Document Proofreading & Editing	3
BUS 1170	Electronic Communication Applications	5
BUS 2110	Advanced Word Processing	5
BUS 2120	Spreadsheet Applications	3
BUS 2150	Presentation Applications	3
XXX xxxx	Occupational-Guided Electives (See advisor for recommended list.)	12

Total Credit Hours: 95 Minimum Quarter Credit Hours Required for Graduation
(Curriculum revised effective Fall Quarter 2008)

COMPUTER SUPPORT SPECIALIST (CMU3)
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 - Computer Support Specialist associate degree program is a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing. Program graduates are to be competent in the general areas of humanities or fine arts, social 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 Computer Support Specialist associate of applied science degree and are qualified for employment as computer support specialists.

Length of Program: Minimum of seven (7) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 16 years of age
Education: High school diploma or GED is required
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the Admissions Placement Test (ASSET/COMPASS) or one of the approved entrance tests (SAT or ACT) to be admitted as regular students. Generally, students are not admitted to degree programs on a provisional basis. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Program Final Exit Point: Computer Information Systems – Computer Support Specialist Associate of Applied Science Degree

General Core Curriculum (30 Credit Hours)*		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
HUM 1101	Introduction to Humanities	5
or		
ENG 1102	Literature and Composition	(5)
SPC 1101	Public Speaking	5
or		
ENG 1105	Technical Communications	(5)
MAT 1111	College Algebra	5
or		
MAT 1101	Mathematical Modeling	(5)
XXX xxxx	Social/Behavioral Sciences	5
XXX xxxx	Associate Degree Level General Core Elective	5

*General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

(Program requirements continued on following page)

COMPUTER SUPPORT SPECIALIST (CONT.)

Occupational Curriculum (80 Credit Hours)

CIS 105	Program Design and Development	5
CIS 106	Computer Concepts	5
CIS 122	Microcomputer Installation and Maintenance	7
CIS 127	Comprehensive Word Processing & Presentation Graphics	6
CIS 1140	Networking Fundamentals	6
or		
CIS 2321	Introduction to LAN and WAN	(6)
CIS 2228	Comprehensive Spreadsheet Techniques	6
CIS 2229	Comprehensive Database Techniques	6
CIS xxxx	Language elective approved by advisor**	7
SCT 100	Introduction to Microcomputers	3
CIS xxxx	An operating systems course approved by advisor	6
XXX xxx	Occupational guided electives (from list below)	23

****Completion of one of the following language courses is required**

CIS 113	COBOL I	7
CIS 124	Microsoft Database Programming	7
CIS 157	Introduction to Visual Basic	7
CIS 250	Intro to RPG Programming	7
CIS 252	Intro to Java Programming	7
CIS 255	Introduction to C Programming	7
CIS 282	Introduction to C++ Programming	7
CIS 1121	Visual Basic.Net I	7
CIS 2161	SQL Programming	7
CIS 2511	Introduction to Python Programming	7
CIS 2451	Introduction to PHP Programming	7

Recommended Electives

CIS 101	Keyboarding	3
CIS 155	Microsoft Windows	3
CIS 222	MOS Certification - Excel	3
CIS 224	Advanced PowerPoint	3
CIS 225	Advanced Outlook	3
CIS 286	A+ Preparation	7
CIS 1104	Web Graphics Using Adobe Photoshop	4
CIS 1115	Information Security Fundamentals	5
CIS 1117	Implementing Operation Systems Security	6
CIS 1121	Visual Basic.Net I	7
CIS 1122	Visual Basic.NET II	7
CIS 1131	Helpdesk Concepts	6
CIS 1132	Customer Service Skills for IT Professionals	6
CIS 2570	Advanced Visual Basic Programming	7
CIS 2149	Implementing Microsoft Windows Professional	6
CIS 2150	Implementing Microsoft Windows Server	6
CIS 2153	Implementing Microsoft Windows Networking Infrastructure	6
CIS 2154	Implementing Microsoft Windows Network Directory Services	6
CIS 2201	HTML Fundamentals	3
CIS 2321	Introduction to LAN + WAN	6

Total Credit Hours: 110 Minimum Credit Hours for Graduation
09/08 (Replaces CIM3 eff 200902)

HEALTH INFORMATION TECHNOLOGY (HIT3)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:

• *Walker County Campus*

Program Description: Health Information Technology (HIT) is a "non-clinical" healthcare profession. The Health Information Technician is trained in a variety of information management functions including: organizing, analyzing, processing and evaluating healthcare data; compiling administrative and healthcare statistics; coding diseases, operations, and procedures; protecting patient privacy and providing information security; enhancing the quality of health record documentation; participating in the planning, design selection, implementation and support for information systems; and managing health information in an electronic environment. HIT professionals work in a multitude of settings throughout the healthcare industry. Health Information Technicians can advance by specializing in medical coding, tumor registry, or privacy and security.

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.

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).

Length of Program: Minimum of eight (8) quarters

Entrance Date: Fall and spring quarters

Entrance 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: Health Information Technology Associate of Applied Science Degree. 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 Core Curriculum (35 Credit Hours)*		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
XXXX xxxx	English/Humanities/Fine Arts Elective	5
MAT 1111	College Algebra	5
or		
MAT 1101	Mathematical Modeling	(5)
or		
MAT 1100	Quantitative Skills and Reasoning	(5)
XXX xxxx	Social/Behavioral Sciences	5
XXX xxxx	Associate Degree Level General Core Elective	5

(Program requirements continued on following page)

HEALTH INFORMATION TECHNOLOGY (CONT.)

General Core Curriculum (Cont.)		**Credit Hours**
BIO 2113	Anatomy & Physiology I	5
BIO 2114	Anatomy & Physiology II	5

*Associate Degree Level General Core Elective courses are required. A student should see his/her advisor to discuss options.

Occupational Curriculum (62 Credit Hours)		**Credit Hours**
SCT 100	Introduction to Microcomputers	3
BUS 2300	Medical Terminology	3
or		
AHS 109	Medical Terminology for Health Science	(3)
MAS 112	Human Diseases	5
HIT 2300	Healthcare Management	5
HIT 1100	Introduction to Health Information Technology	3
HIT 1200	Legal Aspects in Healthcare	3
HIT 1250	Health Record Content and Structure	5
HIT 2150	Healthcare Statistics	5
HIT 1150	Computer Applications in Healthcare	3
HIT 2200	Performance Improvement	3
HIT 2450	Health Information Technology Practicum I	3
HIT 2460	Health Information Technology Practicum II	4
HIT 1400	Coding and Classification I: ICD Coding	4
HIT 1410	Coding and Classification II: ICD Coding	3
HIT 2400	Coding and Classification III: CPT/HCPCS Coding	4
HIT 2410	Coding and Classification IV: Revenue Cycle Management	3
HIT 1350	Pharmacotherapy	3

Total Credit Hours: 97 Minimum Credit Hours for Graduation

INTERNET SPECIALIST – WEB SITE DESIGN (CIW3)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:
• *Walker County Campus*

Program Description: The Internet Specialist – Web Site Design program prepares students to work in a variety of positions in the computer field. The program introduces, develops, and reinforces academic, technical, and professional knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes skills in web design and maintenance concepts and techniques. Students will receive training in multimedia software, database software for e-commerce applications, and website design software in addition to the Computer Information Systems essential occupational curriculum.

Length of Program: Minimum of eight (8) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Computer Information Systems - Internet Specialist - Web Site Design Associate of Applied Science Degree

General Core Curriculum (30 Credit Hours)*		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
HUM 1101	Introduction to Humanities	5
or		
ENG 1102	Literature and Composition	(5)
SPC 1101	Public Speaking	5
or		
ENG 1105	Technical Communications	(5)
MAT 1111	College Algebra	5
or		
MAT 1101	Mathematical Modeling	(5)
XXX xxxx	Social/Behavioral Sciences	5
XXX xxxx	Associate Degree Level General Core Elective	5

*General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

(Program requirements continued on following page)

INTERNET SPECIALIST – WEB SITE DESIGN (CONT.)

Occupational Curriculum (72 Credit Hours)		**Credit Hours**
CIS 105	Program Design and Development	5
CIS 106	Computer Concepts	5
SCT 100	Introduction to Microcomputers	3
CIS xxx	An Operating Systems course (approved by advisor)	6
CIS 1140	Networking Fundamentals	6
or		
CIS 2321	Introduction to LAN and WAN	(6)
CIS 2202	XHTML Fundamentals	5
CIS 2211	Website Design Tools	6
CIS 1104	Web Graphics using Adobe Photoshop	4
or		
CIS 1108	Web Graphics using JASC Paint Shop	(4)
CIS 1123	Web Graphics and Animation using Adobe Flash	6
or		
CIS 1124	Web Graphics and Animation using Adobe Illustrator and Adobe Live Motion	(6)
CIS 2102	Advanced Web Graphics and Animation Using Adobe Premier	6
or		
CIS 2104	Advanced Web Graphics and Multimedia Using Adobe Director	(6)
or		
CIS 2105	Advanced Web Graphics and Animation using Adobe Flash	(6)
or		
CIS 2005	Advanced Web Graphics and Animation using Adobe Photoshop	(6)
CIS 2231	Design Methodology	6
CIS 2261	JavaScript Fundamentals	4
CIS 2281	Database Connectivity	6
CIS xxxx	Web Programming Course (from list below)	4

Web Programming Courses		
CIS 1106	Introduction to Web Programming using C#.Net	4
CIS 1107	Introduction to Web Programming using PERL	4
CIS 1109	Introduction to Web Programming using VB.NET	4
CIS 1110	Introduction to Web Programming using PHP	4
CIS 1111	Introduction to Web Programming using Python	4
CIS 1151	CIS Internship	4
CIS 2191	Internet Business Fundamentals	4
CIS 2291	Network Security	6

Total Credit Hours: 102 Minimum Credit Hours for Graduation

02/09

MANAGEMENT/SUPERVISORY DEVELOPMENT (MS03)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:
- *Gordon County Campus*
- *Walker County Campus*

Program Description:
The Management and Supervisory Development associate degree program prepares experienced workers for entry into management or supervisory occupations in a variety of businesses and industries. The Management and Supervisory Development associate degree 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 who are experienced workers are prepared to perform management and supervisory functions such as employee training, labor relations, employee evaluation, and employee counseling and disciplinary action. Graduates of the program receive a Management and Supervisory Development associate of applied science degree.

Length of Program: Minimum of six (6) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the Admissions Placement Test (ASSET/COMPASS) or one of the approved entrance tests (SAT or ACT) to be admitted as regular students. Generally, students are not admitted to degree programs on a provisional basis. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Program Final Exit Point: Management and Supervisory Development Associate of Applied Science Degree

General Core Curriculum (30 Credit Hours)*		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
ENG 1102	Literature and Composition	5
or		
HUM 1101	Introduction to Humanities	(5)
or		
ART 1101	Art Appreciation	(5)
or		
MUS 1101	Music Appreciation	(5)
SPC 1101	Public Speaking	5
PSY 1101	Introduction to Psychology	5
ECO 1101	Principles of Economics	5
MAT 1111	College Algebra	5

*General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

(Program requirements continued onfollowing page)

MANAGEMENT/SUPERVISORY DEVELOPMENT (CONT.)

Occupational Curriculum (77 Credit Hours)		Credit Hours
SCT 100	Introduction to Microcomputers	3
ACC 1101	Principles of Accounting I	6
MSD 100	Principles of Management	5
or		
MKT 101	Principles of Management	(5)
MSD 101	Organizational Behavior	5
MSD 102	Employment Law	5
or		
MKT 103	Business Law	(5)
MSD 103	Leadership	5
MSD 104	Human Resource Management	5
MSD 106	Performance Management	5
MSD 113	Business Ethics	5
MSD 114	Management Communication Technologies	5
MSD 210	Team Project	5
MSD 220	Management and Supervision Occupation Based Instruction I	3
MSD xxx	Management Specialty (see below)	20

Students will pick one management specialty and take their four electives based on the chosen specialty. Total hours to complete the program is 107 credit hours. For elective courses see list below.

General Management

MSD xxx	Elective (See advisor for recommended list)	5
MSD xxx	Elective (See advisor for recommended list)	5
MSD xxx	Elective (See advisor for recommended list)	5
XXX xxx	Elective(s) (See advisor for recommended list)	5

Human Resource Management

MSD 105	Labor Management Relations	5
MSD 107	Employee Training & Development	5
MSD 205	Service Sector Management	5
XXX xxx	Elective(s) (See advisor for recommended list)	5

Operations Management

MSD 107	Employee Training & Development	5
MSD 202	Production/Operations Management`	5
MSD 206	Project Management	5
XXX xxx	Elective(s) (See advisor for recommended list)	5

Service Sector Management

MSD 107	Employee Training & Development	5
MSD 115	Retail Management	5
MSD 205	Service Sector Management	5
XXX xxx	Elective(s) (See advisor for recommended list)	5

Total Credit Hours: 107 Minimum Credit Hours for Graduation

(Program requirements continued on following page)

MANAGEMENT/SUPERVISORY DEVELOPMENT (CONT.)

List of Elective Courses

MSD 105	Labor Management Relations	5
MSD 107	Employee Training & Development	5
MSD 108	Management & Supervisory Seminar	5
MSD 112	Introduction to Business & Economics	5
MSD 116	Business Plan Development	5
MSD 151	Personal Development for Supervisors	5
MSD 157	Total Quality Principles of Management	5
MSD 175	Business Spanish	5
MSD 202	Production/Operations Management	5
MSD 205	Service Sector Management	5
MSD 206	Project Management	5

MANAGEMENT/SUPERVISORY DEVELOPMENT (MS03)
ASSOCIATE OF APPLIED SCIENCE DEGREE, BANKING OPTION

Campus Availability:
• *Walker County Campus*
No longer accepting students

Program Description:
The Banking Option of the Management and Supervisory Development associate of applied science degree is designed specifically for professionals working in the banking industry. It takes advantage of the existing professional development program offered through the American Institute of Banking (AIB) by accepting, for transfer credit, specific college-level AIB courses into the Management and Supervisory Development program towards an associate of applied science degree.

Length of Program: Minimum of six (6) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the Admissions Placement Test (ASSET/COMPASS) or one of the approved entrance tests (SAT or ACT) to be admitted as regular students. Generally, students are not admitted to degree programs on a provisional basis. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Program Final Exit Point: Management and Supervisory Development, Banking Option, Associate of Applied Science Degree

General Core Curriculum (30 Credit Hours)*		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
ENG 1102	Literature and Composition	5
or		
HUM 1101	Introduction to Humanities	(5)
or		
ART 1101	Art Appreciation	(5)
or		
MUS 1101	Music Appreciation	(5)
SPC 1101	Public Speaking	5
PSY 1101	Introduction to Psychology	5
ECO 1101	Principles of Economics	5
MAT 1111	College Algebra	5

*General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

Occupational Curriculum (33 Credit Hours)		
SCT 100	Introduction to Microcomputers	3
MSD 100	Principles of Management	5
or		
MKT 101	Principles of Management	(5

(Program requirements continued on following page)

MANAGEMENT/SUPERVISORY DEVELOPMENT, BANKING (CONT.)

MSD 101	Organizational Behavior	5
MSD 102	Employment Law	5
or		
MKT 103	Business Law	(5)
MSD 103	Leadership	5
MSD 113	Business Ethics	5
MSD 220	Management Occupational Based Instruction	5

Approved AIB Courses for Transfer Credit Hours (30 Credit Hours)

1000	Accounting	5
2310	Economics for Bankers	5
7740	Marketing for Bankers	5
1370	Principles of Banking	5
4310	Supervision	5
1350	Money and Banking	5

Total Credit Hours: 93 Minimum Credit Hours for Graduation

MARKETING MANAGEMENT (MM03)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:
• *Floyd County Campus*

Program Description:
The Marketing Management associate degree program prepares students for employment in a variety of positions in today's marketing and management fields. The program provides learning opportunities 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. Program graduates receive a Marketing Management associate of applied science degree.

Length of Program: Minimum of seven (7) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the Admissions Placement Test (ASSET/COMPASS) or one of the approved entrance tests (SAT or ACT) to be admitted as regular students. Generally, students are not admitted to degree programs on a provisional basis. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Program Final Exit Point: Marketing Management Associate of Applied Science Degree

General Core Curriculum (30 Credit Hours)*		**Credit Hours**
ECO 1101	Principles of Economics	5
ENG 1101	Composition and Rhetoric	5
HUM 1101	Introduction to Humanities	5
MAT 1111	College Algebra	5
PSY 1101	Introduction to Psychology	5
SPC 1101	Public Speaking	5

*General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

Occupational Curriculum (68 Credit Hours)		
SCT 100	Introduction to Microcomputers	3
ACC 1101	Principles of Accounting I	6
MKT 100	Introduction to Marketing	5
MKT 101	Principles of Management	5
or		
MSD 100	Principles of Management	(5)
MKT 103	Business Law	5
or		
MSD 102	Employment Law	(5)
or		
MSD 105	Labor Management Relations	(5)

(Program requirements continued on following page)

MARKETING MANAGEMENT (CONT.)

Occupational Curriculum (Cont.)		Credit Hours
MKT 106	Fundamentals of Selling	5
MKT 108	Advertising	4
MKT 109	Visual Merchandising	4
MKT 110	Entrepreneurship	8
MKT 122	Merchandise Management	5
MKT 130	Marketing Administration OBI I	3
MKT 131	Marketing Administration OBI II	3
XXX xxx	Electives (See advisor for recommended list.)	12

Total Credit Hours: 98 Minimum Credit Hours for Graduation

NETWORKING SPECIALIST (CIN3)
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 an Networking Specialist associate of applied science degree and are qualified for employment as networking specialists.

Length of Program: Minimum of eight (8) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 16 years of age
Education: High school diploma or GED is required
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the Admissions Placement Test (ASSET/COMPASS) or one of the approved entrance tests (SAT or ACT) to be admitted as regular students. Generally, students are not admitted to degree programs on a provisional basis. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Program Final Exit Point: Computer Information Systems-Networking Specialist Associate of Applied Science Degree

General Core Curriculum (30 Credit Hours)*		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
HUM 1101	Introduction to Humanities	5
or		
ENG 1102	Literature and Composition	(5)
SPC 1101	Public Speaking	5
or		
ENG 1105	Technical Communications	(5)
MAT 1111	College Algebra	5
or		
MAT 1101	Mathematical Modeling	(5)
XXX xxxx	Social/Behavioral Sciences	5
XXX xxxx	Associate Degree Level General Core Elective	5

*General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

(Program requirements continued on following page)

NETWORKING SPECIALIST (CONT.)

Occupational Curriculum (72 Credit Hours)		**Credit Hours**
SCT 100	Introduction to Microcomputers	3
CIS 105	Program Design and Development	5
CIS 106	Computer Concepts	5
CIS 1140	Networking Fundamentals	6
or		
CIS 2321	Introduction to LAN and WAN	(6)
CIS 122	Microcomputer Installation and Maintenance	7
CIS xxxx	An operating systems course approved by advisor	6
CIS xxxx	Language elective approved by advisor**	7
CIS xxxx	Networking elective course(s) approved by advisor (See advisor for recommended list)	9
XXX xxxx	Specialty Courses (Must select one group of specialty courses below)	24

Specialty Courses		**Credit Hours**
Cisco Specialist (CIK3)		
CIS 2322	Introduction to WANs and Routing	6
CIS 276	Advanced Routers and Switches	6
CIS 277	WAN Design	6
CIS XXX	Electives (See advisor for approved list)	6
Linux/UNIX Specialist (LIX3)		
CIS 2554	Introduction to Linux/UNIX	6
CIS 2555	Linux/UNIX	6
CIS 2556	Linux/UNIX Advanced Administration	6
CIS 2557	Linux/UNIX Shell Script Programming	6
Microsoft Windows Network Administrator Specialist (WNA3)		
CIS 2149	Implementing Microsoft Windows Professional	6
CIS 2150	Implementing Microsoft Windows Server	6
CIS 2153	Implementing Microsoft Windows Networking Infrastructure	6
CIS xxxx	Microsoft MCSA elective	6

**** Completion of one of the following language courses is required**		
CIS 113	COBOL I	7
CIS 157	Introduction to Visual Basic	7
CIS 250	Intro to RPG Programming	7
CIS 252	Intro to Java Programming	7
CIS 260	Introduction to Fourth Generation Languages	7
CIS 282	Introduction to C++ Programming	7

Total Credit Hours: 102 Minimum Credit Hours for Graduation

ACCOUNTING (AC02)
DIPLOMA

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Walker County Campus*

Program Description:
This Accounting program is a sequence of courses that prepares students for careers in the accounting profession. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of accounting theory and practical application necessary for successful employment using both manual and computerized accounting systems. Program graduates receive an Accounting diploma which qualifies them as accounting technicians.

Length of Program: Minimum of six (6) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Accounting Diploma

General Core Curriculum (18 Credit Hours)		**Credit Hours**
EMP 1000	Interpersonal Relations and Professional Development	3
ENG 1010	Fundamentals of English I	5
ENG 1012	Fundamentals of English II	5
MAT 1011	Business Math	5
Occupational Curriculum (50 Credit Hours)		
ACC 1101	Principles of Accounting I	6
ACC 1102	Principles of Accounting II	6
ACC 1103	Principles of Accounting III	6
ACC 1104	Computerized Accounting	3
ACC 1106	Spreadsheet Applications	3
ACC 1151	Individual Tax Accounting	5
ACC 1152	Payroll Accounting	5
BUS 1100	Introduction to Keyboarding	3
or		
BUS 1130	Document Processing	(6)
SCT 100	Introduction to Microcomputers	3
XXX xxx	Advisor-approved specific occupational-guided electives	10
	(6 of these hours MUST come from the recommended electives)	

(Program requirements continued on following page)

ACCOUNTING (CONT.)

Recommended Occupational Electives*		Credit Hours
ACC 2105	Database Applications	3
ACC 2150	Cost Accounting	6
ACC 2154	Personal Finance	5
ACC 2155	Legal Environment of Business	5
ACC 2156	Business Tax Accounting	5
ACC 2157	Integrated Accounting Management Systems	6
ACC 2158	Managerial Accounting	6
ACC 2160	Advanced Spreadsheets	5
ACC 2165	Capstone Review Course of Accounting Principles	6
BUS 1300	Introduction to Business	5
MKT 101	Principles of Management	5
MKT 103	Business Law	5
or		
MSD 102	Employment Law	(5)
MKT 110	Entrepreneurship	8

***Program advisor may recommend other specialization related courses.**

Total Credit Hours: 68 Minimum Credit Hours for Graduation
12/08

BUSINESS ADMINISTRATIVE TECHNOLOGY (BAT2)
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 work environment. The 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 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.

Length of Program: Minimum of five (5) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Business Administrative Technology Diploma with a specialization in Business Administrative Assistant or Medical Administrative Assistant

General Core Curriculum (18 Credit Hours)*		**Credit Hours**
EMP 1000	Interpersonal Relations and Professional Development	3
ENG 1010	Fundamentals of English I	5
ENG 1012	Fundamentals of English II	5
MAT 1011	Business Math	5
or		
MAT 1012	Foundations of Mathematics	(5)

*General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

Occupational Curriculum (54 Credit Hours)		
ACC 1101	Principles of Accounting I	6
BUS 1130	Document Processing	6
BUS 1140	Word Processing	5
BUS 1120	Business Document Proofreading and Editing	3
SCT 100	Introduction to Microcomputers	3

And completion of one of the following specializations:

(Program requirements continued on following page)

BUSINESS ADMINISTRATIVE TECHNOLOGY (CONT.)

Business Administrative Assistant Specialization (BAA2)		Credit Hours
BUS 1240	Office Procedures	5
BUS 2210	Applied Office Procedures	5
BUS 1170	Electronic Communication Applications	5
BUS 2120	Spreadsheet Applications	3
BUS 2150	Presentation Applications	3
XXX xxx	Specific occupational-guided electives* (See advisor for recommended list)	12

Total Credit Hours: 74 Minimum Credit Hours for Graduation

Medical Administrative Assistant Specialization (MAA2)		
AHS 1011	Anatomy and Physiology	5
or		
BUS 2310	Anatomy and Terminology	(5)
AHS 109	Medical Terminology for Allied Health Sciences	3
or		
BUS 2300	Medical Terminology	(3)
BUS 2340	Medical Administrative Procedures	5
BUS 2370	Medical Office Billing/Coding/Insurance	5
MAS 112	Human Diseases	5
XXX xxx	Specific occupational-guided electives** (See advisor for recommended list)	12

Total Credit Hours: 76 Minimum Credit Hours for Graduation

*Business Administrative Assistant Elective Courses		
BUS 1100	Introduction to Keyboarding	3
BUS 1150	Database Applications	3
BUS 1160	Desktop Publishing	3
BUS 1200	Machine Transcription	3
BUS 1210	Electronic Calculators	3
BUS 1300	Introduction to Business	5
BUS 2110	Advanced Word Processing	5
BUS 2130	Advanced Spreadsheet Applications	5
BUS 2160	Electronic Mail Applications	3
BUS 2240	Business Administrative Assistant Internship I	6
BUS 2250	Business Administrative Assistant Internship II	12

**Medical Administrative Assistant Elective Courses		
BUS 1100	Introduction to Keyboarding	3
BUS 1150	Database Applications	3
BUS 1160	Desktop Publishing	3
BUS 1200	Machine Transcription	3
BUS 1210	Electronic Calculators	3
BUS 2130	Advanced Spreadsheet Applications	5
BUS 2150	Presentation Applications	3
BUS 2160	Electronic Mail Applications	3
BUS 2320	Medical Document Processing/Transcription	5
BUS 2330	Advanced Medical Document Processing	5
BUS 2380	Medical Administrative Assistant Internship I	6
BUS 2390	Medical Administrative Assistant Internship II	12

COMPUTER SUPPORT SPECIALIST (CMU4)
DIPLOMA

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Polk County Campus*
- *Walker County Campus*

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

Length of Program: Minimum of six (6) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Computer Information Systems – Computer Support Specialist Diploma

General Core Curriculum (18 Credit Hours)		**Credit Hours**
EMP 1000	Interpersonal Relations and Professional Development	3
ENG 1010	Fundamentals of English I	5
ENG 1012	Fundamentals of English II	5
MAT 1013	Algebraic Concepts	5
or		
MAT 1011	Business Math	(5)

Occupational Curriculum (72 Credit Hours)		**Credit Hours**
CIS 105	Program Design and Development	5
CIS 106	Computer Concepts	5
CIS 122	Microcomputer Installation and Maintenance	7
CIS 127	Comprehensive Word Processing & Presentation Graphics	6
CIS 1140	Networking Fundamentals	6
CIS 2228	Comprehensive Spreadsheet Techniques	6
CIS 2229	Comprehensive Database Techniques	6
CIS xxxx	An operating system course approved by advisor	6
CIS xxxx	Language elective approved by advisor	7
SCT 100	Introduction to Microcomputers	3
XXX xxx	Occupational guided electives (see list below)	15

(Program requirements continued on following page)

COMPUTER SUPPORT SPECIALIST (CONT.)

****Completion of one of the following language courses is required**

CIS 113	COBOL I	7
CIS 124	Microsoft Database Programming	7
CIS 157	Introduction to Visual Basic	7
CIS 250	Intro to RPG Programming	7
CIS 252	Intro to Java Programming	7
CIS 255	Introduction to C Programming	7
CIS 282	Introduction to C++ Programming	7
CIS 1121	Visual Basic.Net I	7
CIS 2161	SQL Programming	7
CIS 2511	Introduction to Python Programming	7
CIS 2451	Introduction to PHP Programming	7

Recommended Electives

CIS 101	Keyboarding	3
CIS 155	Microsoft Windows	3
CIS 222	MOS Certification - Excel	3
CIS 224	Advanced PowerPoint	3
CIS 225	Advanced Outlook	3
CIS 286	A+ Preparation	7
CIS 1104	Web Graphics Using Adobe Photoshop	4
CIS 1115	Information Security Fundamentals	5
CIS 1117	Implementing Operation Systems Security	6
CIS 1121	Visual Basic.NET I	7
CIS 1122	Visual Basic.NET II	7
CIS 1131	Helpdesk Concepts	6
CIS 1132	Customer Service Skills for IT Professionals	6
CIS 2570	Advanced Visual Basic Programming	7
CIS 2149	Implementing Microsoft Windows Professional	6
CIS 2150	Implementing Microsoft Windows Server	6
CIS 2153	Implementing Microsoft Windows Networking Infrastructure	6
CIS 2154	Implementing Microsoft Windows Network Directory Services	6
CIS 2201	HTML Fundamentals	3
CIS 2321	Introduction to LAN + WAN	6

Total Credit Hours: 90 Minimum Credit Hours for Graduation
09/08 (Replaces CIM4 eff 200902)

HEALTH INFORMATION TECHNOLOGY (HIT2)
DIPLOMA

Campus Availability:

• *Walker County Campus*

Program Description: Health Information Technology (HIT) is a non-clinical healthcare profession. Students are trained in a variety of health information management functions including: organizing, analyzing, processing and evaluating healthcare data; coding diseases, operations, and procedures; protecting patient privacy and providing information security; enhancing the quality of health record documentation; participating in the planning, design selection, implementation and support for information systems; and managing health information in an electronic environment. HIT professionals work in a multitude of settings throughout the healthcare industry.

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.

Length of Program: Minimum of six (6) quarters

Entrance Date: Fall and spring quarters

Entrance Requirements:

Age: Minimum of 18 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: Health Information Technology Diploma

General Core Curriculum (15 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
MAT 1013	Algebraic Concepts	5
PSY 1010	Basic Psychology	5

Occupational Curriculum (59 Credit Hours)		**Credit Hours**
SCT 100	Introduction to Microcomputers	3
AHS 1011	Intro to Anatomy and Physiology	5
BUS 2300	Medical Terminology	3
or		
AHS 109	Medical Terminology	3
HIT 1350	Pharmacotherapy	3
MAS 112	Human Diseases	5
HIT 1100	Introduction to Health Information Technology	3
HIT 1200	Legal Aspects in Healthcare	3
HIT 1250	Health Record Content and Structure	5
HIT 2300	Healthcare Management	5
HIT 2450	Health Information Technology Practicum I	3
HIT 2460	Health Information Technology Practicum II	4
HIT 1150	Computer Applications in Healthcare	3

(Program requirements continued on following page)

HEALTH INFORMATION TECHNOLOGY (CONT.)

HIT 1400	Coding and Classification I: ICD Coding	4
HIT 1410	Coding and Classification II: ICD Coding	3
HIT 2400	Coding and Classification III: CPT/HCPCS Coding	4
HIT 2410	Coding and Classification IV: Revenue Cycle Management	3

Total Credit Hours: 74 Minimum Credit Hours for Graduation

INTERNET SPECIALIST WEB SITE DESIGN (CIW4)
DIPLOMA

Campus Availability:
• *Walker County Campus*

Program Description: The Computer Information Systems - Internet Specialist - Web Site Design program is designed to provide students with an understanding of the concepts, principles, and techniques required in computer information processing.

Length of Program: Minimum six (6) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Computer Information Systems – Internet Specialist Web Site Design Diploma

General Core Curriculum (18 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
ENG 1012	Fundamentals of English II	5
EMP 1000	Interpersonal Relations & Professional Development	3
MAT 1013	Algebraic Concepts	5
or		
MAT 1011	Business Mathematics	(5)

Occupational Curriculum (72 Credit Hours)		**Credit Hours**
CIS 105	Program Design and Development	5
CIS 106	Computer Concepts	5
SCT100	Introduction to Microcomputers	3
CIS xxx	An Operating Systems course approved by advisor	6
CIS 1140	Networking Fundamentals	6
or		
CIS 2321	Introduction to LAN and WAN	(6)
CIS 2202	XHTML Fundamentals	5
CIS 2211	Website Design Tools	6
CIS 1104	Web Graphics using Adobe Photoshop	4
or		
CIS 1108	Web Graphics using JASC Paint Shop	(4)
CIS 1123	Web Graphics and Animation using Adobe Flash	6
or		
CIS 1124	Web Graphics and Animation usg Adobe Illustrator & Live Motion	(6)

(Program requirements continued on following page)

INTERNET SPECIALIST WEB SITE DESIGN (CONT.)

CIS 2102	Advanced Web Graphics and Multimedia: Adobe Premier	6
or		
CIS 2104	Advanced Web Graphics and Multimedia: Macromedia Director	(6)
or		
CIS 2105	Advanced Web Graphics and Animation: Macromedia Flash	(6)
or		
CIS 2005	Advanced Web Graphics Using Adobe Photoshop	(6)
CIS 2231	Design Methodology	6
CIS 2261	JavaScript Fundamentals	4
CIS 2281	Database Connectivity	6

Choose 1 of the courses listed below:

CIS 1106	Introduction to Web Programming using C#.Net	4
CIS 1107	Introduction to Web Programming using PERL	4
CIS 1109	Introduction to Web Programming using VB.NET	4
CIS 1110	Introduction to Web Programming using PHP	4
CIS 1111	Introduction to Web Programming using Python	4
CIS 1151	CIS Internship	4
CIS 2191	Internet Business Fundamentals	4
CIS 2291	Network Security	6

Total Credit Hours: 90 Minimum Credit Hours for Graduation
03/09

MANAGEMENT/SUPERVISORY DEVELOPMENT (MS02)
DIPLOMA

Campus Availability:

- *Gordon County Campus*
- *Walker County Campus*

Program Description:

The mission of the Management and Supervisory Development program is to provide educational opportunities to individuals that will enable them to obtain knowledge, skills and attitudes necessary to succeed in the field of management. The Management and Supervisory Development program prepares experienced workers for entry into management or supervisory occupations in a variety of businesses and industries. The Management and Supervisory Development program provides learning opportunities that introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement.

Length of Program: Minimum of five (5) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 16 years of age
Education: High school diploma or GED is required
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Management/Supervisory Development Diploma

General Core Curriculum (18 Credit Hours)		**Credit Hours**
EMP 1000	Interpersonal Relations and Professional Development	3
ENG 1010	Fundamentals of English I	5
ENG 1012	Fundamentals of English II	5
MAT 1011	Business Math	5
Occupational Curriculum (72 Credit Hours)		
SCT 100	Introduction to Microcomputers	3
MKT 101	Principles of Management	5
MKT 104	Principles of Economics	5
ACC 1101	Principles of Accounting I	6
MSD 101	Organizational Behavior	5
MSD 102	Employment Law	5
or		
MKT 103	Business Law	(5)
MSD 103	Leadership	5
MSD 104	Human Resources Management	5
MSD 106	Performance Management	5
MSD 113	Business Ethics	5
MSD 114	Management Communication Technologies	5
MSD 210	Team Project	5
MSD 220	Management Occupation Based Instruction I	3
XXX xxx	Electives (See advisor for recommended list.)	10

(Program requirements continued on following page)

MANAGEMENT/SUPERVISORY DEVELOPMENT (CONT.)

Recommended Electives		Credit Hours
MSD 105	Labor Management Relations	5
MSD 107	Employee Training and Development	5
MSD 108	Management and Supervisory Seminar	5
MSD 112	Introduction to Business and Economics	5
MSD 116	Business Plan Development	5
MSD 151	Personal Development for Supervisors	5
MSD 157	Total Quality Principles of Management	5
MSD 175	Business Spanish	5
MSD 202	Production/Operations Management	5
MSD 205	Service Sector Management	5
MSD 206	Project Management	5

Total Credit Hours: 90 Minimum Credit Hours for Graduation

MARKETING MANAGEMENT (MM02)
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 with a specialization in marketing administration.

Length of Program: Minimum of five (5) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Marketing Management Diploma

General Core Curriculum (18 Credit Hours)		**Credit Hours**
EMP 1000	Interpersonal Relations and Professional Development	3
ENG 1010	Fundamentals of English I	5
ENG 1012	Fundamentals of English II	5
MAT 1011	Business Math	5
Occupational Curriculum (67 Credit Hours)		
ACC 1101	Principles of Accounting I	6
MKT 100	Introduction to Marketing	5
MKT 101	Principles of Management	5
MKT 103	Business Law	5
or		
MSD 102	Employment Law	(5)
MKT 104	Principles of Economics	5
MKT 106	Fundamentals of Selling	5
MKT 108	Advertising	4
MKT 109	Visual Merchandising	4
MKT 110	Entrepreneurship	8
MKT 122	Buying and Merchandise Management	5
MKT 130	Marketing Administration Occupationally-based Instruction I	3
MKT 131	Marketing Administration Occupationally-based Instruction II	3
SCT 100	Introduction to Microcomputers	3
XXX xxx	Electives (See advisor for recommended list)	6

Total Credit Hours: 85 Minimum Credit Hours for Graduation

NETWORKING SPECIALIST (CIN4)
DIPLOMA

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Polk County Campus*
- *Walker County Campus*

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

Length of Program: Minimum of six (6) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Networking Specialist Diploma

General Core Curriculum (18 Credit Hours)		**Credit Hours**
EMP 1000	Interpersonal Relations and Professional Development	3
ENG 1010	Fundamentals of English I	5
ENG 1012	Fundamentals of English II	5
MAT 1013	Algebraic Concepts	5
or		
MAT 1011	Business Math	(5)

Occupational Curriculum (72 Credit Hours)		**Credit Hours**
SCT 100	Introduction to Microcomputers	3
CIS 105	Program Design and Development	5
CIS 106	Computer Concepts	5
CIS 1140	Networking Fundamentals	6
or		
CIS 2321	Introduction to LAN and WAN	(6)
CIS 122	Microcomputer Installation and Maintenance	7
CIS xxxx	An operating systems course approved by advisor	6
CIS xxxx	Language elective approved by advisor**	7
CIS xxxx	Networking elective course(s) approved by advisor (See advisor for recommended list)	9
XXX xxxx	Specialty Courses (Must select one group of specialty courses below)	24

(Program requirements continued on following page)

NETWORKING SPECIALIST (CONT.)

Specialty Courses		Credit Hours
Cisco Specialist (CIK4)		
CIS 2322	Introduction to WANs and Routing	6
CIS 276	Advanced Routers and Switches	6
CIS 277	WAN Design	6
CIS XXX	Electives (See advisor for approved list)	6
Linux/UNIX Specialist (LIX4)		
CIS 2554	Introduction to Linux/UNIX	6
CIS 2555	Linux/UNIX	6
CIS 2556	Linux/UNIX Advanced Administration	6
CIS 2557	Linux/UNIX Shell Script Programming	6
Microsoft Windows Network Administrator Specialist (WNA4)		
CIS 2149	Implementing Microsoft Windows Professional	6
CIS 2150	Implementing Microsoft Windows Server	6
CIS 2153	Implementing Microsoft Windows Networking Infrastructure	6
CIS xxxx	Microsoft MCSA elective	6
**** Completion of one of the following language courses is required**		
CIS 113	COBOL I	7
CIS 157	Introduction to Visual Basic	7
CIS 250	Intro to RPG Programming	7
CIS 252	Intro to Java Programming	7
CIS 260	Introduction to Fourth Generation Languages	7
CIS 282	Introduction to C++ Programming	7

Total Credit Hours: 90 Minimum Credit Hours for Graduation

ADMINISTRATIVE SUPPORT ASSISTANT (5DC1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Polk County Campus*
- *Walker County Campus*

Program Description:
This program prepares individuals to provide administrative support under the supervision of office managers, executive assistants, and other office personnel. Courses include: Introduction to microcomputers, word processing, office procedures, and accounting.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Administrative Support Assistant Technical Certificate of Credit

Required Courses		Credit Hours
SCT 100	Introduction to Microcomputers	3
BUS 1130	Document Processing	6
BUS 1240	Office Procedures	5
BUS 1140	Word Processing	5
ACC 1101	Principles of Accounting I	6
or		
BUS 2200	Office Accounting	(6)
BUS xxx	BUS electives (See advisor for recommended list)	6

Total Credit Hours: 31 Minimum Credit Hours for Graduation
03/09

BOOKKEEPING SPECIALIST (BN01)
CERTIFICATE

***No longer accepting students into this program**

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Walker County Campus*

Program Description: The Bookkeeping Specialist certificate provides an early exit point for accounting students while maintaining his or her career path to the diploma or associate degree. The skill level provides students the opportunity to gain employment quickly while continuing his or her education on either a full or part-time basis.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Bookkeeping Specialist Technical Certificate of Credit

Required Courses		Credit Hours
ACC 1101	Principles of Accounting I	6
ACC 1102	Principles of Accounting II	6
ACC 1104	Computerized Accounting	3
ACC 1152	Payroll Accounting	4
MAT 1011	Business Math	5
or		
MAT 1012	Foundations of Mathematics	(5)
SCT 100	Introduction to Microcomputers	3

Total Credits Hours: 27 Minimum Credit Hours for Graduation
02/09

CERTIFIED CUSTOMER SERVICE SPECIALIST (CSA1)
CERTIFICATE

Campus Availability:
• *Floyd County Campus*

Program Description:
This certificate program provides training for a skilled customer service contact workforce. Training includes face to face skills, telephone skills, team building, customer service, computers, problem solving, positive work ethic, sales skills, critical thinking, interviewing, dressing for success, and more. Students are trained to perform a wide variety of customer contact positions.

Length of Program: Seven (7) weeks (day classes) / Two (2) quarters (night classes)

Entrance Date: Varies

Entrance Requirements:
Age: Minimum of 16 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: Certified Customer Service Specialist Technical Certificate of Credit

Required Courses		Credit Hours
MKT 161	Service Industry Business Environment	2
MKT 162	Customer Contact Skills	6
MKT 163	Computer Skills for Customer Service	3
MKT 164	Business Skills for the Customer Service Environment	3
MKT 165	Personal Effectiveness in Customer Service	1

Total Credit Hours: 15 Minimum Credit Hours for Graduation

CISCO NETWORK SPECIALIST (5BG1)
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.

Length of Program: Minimum of four (4) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Cisco Network Specialist Technician Technical Certificate of Credit

Required Courses		Credit Hours
CIS 2321	Introduction to LAN and WAN	6
CIS 2322	Introduction WANs and Routing	6
CIS 276	Advanced Routers and Switches	6
CIS 277	WAN Design	6

Total Credit Hours: 24 Minimum Credit Hours for Graduation
02/09

COMPTIA A+ CERTIFIED TECHNICIAN PREPARATION (5AT1) CERTIFICATE

Campus Availability:

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

Program Description:

This certificate program prepares students for entry-level positions in PC repair and installation. This certificate program is composed of 27 credit hours within the Computer Information Systems curriculum.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of each quarter

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.

Program Final Exit Point: CompTIA A+ Certified Technician Preparation Technical Certificate of Credit

Required Courses		Credit Hours
CIS 106	Computer Concepts	5
CIS 122	Microcomputer Installation and Maintenance	7
CIS xxx	An operating systems course	6
CIS xxx	Elective (See advisor for recommended list.)	6
SCT 100	Introduction to Microcomputers	3

Total Credit Hours: 27 Minimum Credit Hours for Graduation

06/08

COMPUTER ACCOUNTING TECHNICIAN (PZ01)
CERTIFICATE

***No longer accepting students into this program**

Campus Availability:
• *Floyd County Campus*

Program Description:
The Computerized Accounting certificate program is a sequence of courses that prepares students for careers in the accounting profession. Areas covered include principles of accounting, operation of computerized accounting systems, database and spreadsheet fundamentals, keyboarding, and word processing. The program emphasizes a combination of accounting theory and practical application necessary for successful employment using computerized accounting systems.

Length of Program: Minimum of four (4) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Computer Accounting Technician Technical Certificate of Credit

Required Courses		Credit Hours
ACC 1101	Principles of Accounting I	6
ACC 1102	Principles of Accounting II	6
ACC 1103	Principles of Accounting III	6
ACC 1104	Computerized Accounting	3
ACC 1106	Accounting Spreadsheet Fundamentals	3
BUS 1130	Document Processing	6
BUS 1210	Electronic Calculators	3
MAT 1011	Business Mathematics	5
SCT 100	Introduction to Microcomputers	3

Total Credit Hours: 41 Minimum Credit Hours for Graduation

COMPUTER APPLICATIONS SPECIALIST (CPL1)
CERTIFICATE

Campus Availability:
• *Walker County Campus*

Program Description: Computer Applications Specialist certificate is a two quarter program of study designed to prepare skillful use of office computers. Students in this program learn to utilize a variety of application software. Graduates of this certificate program have experience and are knowledgeable in the Microsoft Office Suite of products including: Word, Excel, Power Point, in addition to the Windows Operating System.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Computer Applications Specialist Technical Certificate of Credit

Required Courses		**Credit Hours**
SCT 100	Introduction to Microcomputers	3
CIS 155	Microsoft Windows	3
CIS 127	Comprehensive Word Processing and Presentation Graphics	6
CIS 2228	Comprehensive Spreadsheet Techniques	6
Elective		3

Total Credit Hours: 21 Minimum Credit Hours for Graduation
08/09

COMPUTER FORENSIC AND INVESTIGATION SPECIALIST (CPF1) CERTIFICATE

Campus Availability:
• *Walker County Campus*

Program Description:
The Computer Forensic and Investigation program includes occupational and specialized courses designed to provide academic and professional training to student 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.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Computer Forensic and Investigation Specialist Technical Certificate of Credit

Required Courses		Credit Hours
CIS xxx	An operating systems course	6
CIS 106	Computer Concepts	5
CIS 1115	Information Security Fundamentals	5
CIS 1116	Security Policies and Procedures	5
CIS 1120	Computer Forensics and Disaster Recovery	6
CRJ 121	Introduction to Private Security	5
CRJ 123	Computer Security/Corporate Fraud	5
CRJ 162	Methods of Criminal Investigation	5

Total Credit Hours: 42 Minimum Credit Hours for Graduation
03/09

COMPUTERIZED ACCOUNTING SPECIALIST (5AQ1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Walker County Campus*

Program Description:
The Computerized Accounting Specialist certificate of credit provides students with basic skills in computerized accounting. Topics include: principles of accounting, computerized accounting, spreadsheet fundamentals, and basic computers.

Length of Program: Minimum of four (4) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Computerized Accounting Specialist Technical Certificate of Credit

Required Courses		Credit Hours
ACC 1101	Principles of Accounting I	6
ACC 1102	Principles of Accounting II	6
ACC 1104	Computerized Accounting	3
ACC 1106	Accounting Spreadsheets Fundamentals	3
SCT 100	Introduction to Microcomputers	3
XXX xxx	Elective (See advisor for recommended list)	5

Total Credit Hours: 26 Minimum Credit Hours for Graduation

DATA ENTRY CLERK (5DD1)
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.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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.

Program Final Exit Point: Business Data Entry Clerk Technical Certificate of Credit

Required Courses		Credit Hours
BUS 1130	Document Processing	6
BUS 1210	Electronic Calculators	3
MAT 1011	Business Math	5
SCT 100	Introduction to Microcomputers	3
BUS xxx	BUS Elective (See advisor for recommended list)	3

Total Credit Hours: 20 Minimum Credit Hours for Graduation
09/08 (Replaces BDL1 eff 200902)

DATA MANAGEMENT (DU01)
CERTIFICATE

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.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Data Management Technical Certificate of Credit

Required Courses		Credit Hours
SCT 100	Introduction to Microcomputers	3
BUS 1130	Document Processing	6
BUS 1140	Word Processing	7
CIS 155	Microsoft Windows	3
CIS 2228	Comprehensive Spreadsheet Techniques	6
CIS 2229	Comprehensive Database Techniques	6
CIS 222	Microsoft Office Specialist Certification: Excel	3

Total Credit Hours: 34 Minimum Credit Hours for Graduation

ENTREPRENEURSHIP (5CC1)
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.

Length of Program: Minimum of 1 quarter.

Entrance Dates: Beginning of any quarter.

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Entrepreneurship Technical Certificate of Credit

Required Courses		Credit Hours
MKT 101	Principles of Management	5
MKT 103	Business Law	5
or		
MSD 102	Employment Law	(5)
MKT 110	Entrepreneurship	8

Total Credit Hours: 18 Minimum Credit Hours for Graduation
06/08

GENERAL OFFICE ASSISTANT (5DN1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Polk County Campus*

Program Description:
This certificate program prepares students for entry-level positions in business office administration. Courses will cover word processing, keyboarding, and office procedures.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: General Office Assistant Technical Certificate of Credit

Required Courses		Credit Hours
BUS 1130	Document Processing	6
BUS 1140	Word Processing	5
BUS 1240	Office Procedures	5
SCT 100	Introduction to Microcomputers	3
BUS xxx	BUS Elective(s) (See advisor for recommended list)	3

Total Credit Hours: 22 Minimum Credit Hours for Graduation
09/08 (Replaces OS01 eff 200902)

HEALTH INFORMATION TECHNOLOGY CODING ASSOCIATE (5EC1) CERTIFICATE

Campus Availability:

• *Walker County Campus*

Program Description:

The Health Information Coding Associate TCC prepares students to be entry level outpatient / ambulatory medical coders. Medical coding is essentially the process of applying medical codes to diagnostic and procedural clinical documentation completed by healthcare providers that can be electronically processed. This classification of diagnosis and treatments is required for Medicare and insurance reimbursement in hospitals, outpatient and clinics and medical offices. As the basis for reimbursement, correct clinical coding on claims for payment has become crucial as healthcare providers seek to maintain compliance by the use of official coding guidelines and reporting requirements that ensure data integrity. Coded data serves as the primary information source for many health information assessment tools, as well as data required for an electronic health record In addition to use on claims for reimbursement, clinical codes are included within data sets used to evaluate the processes and outcomes of healthcare. Coded data are also used internally by institutions for decision support, quality management activities, case-mix management, planning, marketing and other administrative and research activities. The program offers training in anatomy and physiology, medical terminology, human diseases, pharmacotherapy, ICD-9, ICD-10, and CPT coding, health record content and structure, and revenue cycle management.

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.

Length of Program: Minimum of five (5) quarters

Entrance Date: Fall and spring quarters

Entrance Requirements:

Age: Minimum of 18 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: Health Information Technology Coding Associate Certificate

Required Courses		Credit Hours
ENG 1010	Fundamentals of English I	5
SCT 100	Introduction to Microcomputers	3
AHS 1011	Intro to Anatomy and Physiology	5
BUS 2300	Medical Terminology	3
or		
AHS 109	Medical Terminology	(3)
MAS 112	Human Diseases	5
HIT 1100	Introduction to Health Information Technology	3
HIT 1150	Computer Applications in Healthcare	3

HEALTH INFORMATION TECHNOLOGY CODING ASSOCIATE (CONT.)

HIT 1200	Legal Aspects in Healthcare	3
HIT 1250	Health Record Content and Structure	5
HIT 1350	Pharmacotherapy	3
HIT 1400	Coding and Classification I: ICD Coding	4
HIT 1410	Coding and Classification II: ICD Coding	3
HIT 2400	Coding and Classification III: CPT/HCPCS Coding	4
HIT 2410	Revenue Cycle Management	3
HIT 2500	Professional Seminar	5
or		
BUS XXX	Business Elective	(5)

Total Credit Hours: 57 Minimum Credit Hours for Graduation

HELP DESK SPECIALIST (5BM1)
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.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Help Desk Specialist Technical Certificate of Credit

Required Courses		Credit Hours
CIS xxx	CIS Operating Systems Course	6
CIS 122	Microcomputer Installation and Maintenance	7
CIS 1140	Networking Fundamentals	6
or		
CIS 2321	Introduction to LAN and WAN	(6)
CIS 106	Computer Concepts	5
CIS 1131	Help Desk Concepts	6
SCT 100	Introduction to Microcomputers	3
XXX xxx	Elective(s) (See advisor for recommended list.)	5

Total Credit Hours: 38 Minimum Credit Hours for Graduation
03/09

INTERNET SPECIALIST WEB SITE DESIGNER (5CO1)
CERTIFICATE

Campus Availability:
- *Polk County Campus*
- *Walker County Campus*

Program Description: The Internet Specialist Web Site Designer certificate provides the student with skills to create and maintain web sites. After completion of this certificate, the student will be able to create interactive web sites that contain graphics, vectors, back end programming, and database storage. The purpose of this certificate is to provide training to experienced computer professionals or as additional training to students with previous computer training. Students completing this certificate will be prepared to become Web Site designers.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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.
Other: Advisor Approval Required. Previous skills required include: Computer Concepts, Networking Fundamentals, Operating System Fundamentals, and Programming Design.

Program Final Exit Point: Internet Specialist Web Site Designer Technical Certificate of Credit

Required Courses		**Credit Hours**
CIS 2202	XHTML Fundamentals	5
CIS 2231	Design Methodology	6
CIS 2281	Database Connectivity	6
CIS 2261	JavaScript Fundamentals	4
CIS 2211	Web Site Design Tools	6
Web Graphics Course (Choose one)		
CIS 1104	Web Graphics using Adobe Photoshop	4
CIS 1108	Web Graphics using JASC Paintshop	(4)
Web Graphics and Animation Course (Choose one)		
CIS 1123	Web Graphics and Animation using Adobe Flash	6
CIS 1124	Web Graphics and Animation using Adobe Illustrator and Adobe LiveMotion	(6)

Total Credit Hours: 37 Minimum Credit Hours for Graduation

INTERNET SPECIALIST WEB SITE DEVELOPER (5CP1)
CERTIFICATE

Campus Availability:

• *Walker County Campus*

Program Description: The Internet Specialist Web Site Developer certificate provides skills to develop interactive web sites which include graphics. XHTML, front-end scripting programs, back-end servlet programs, and database connectivity. This certificate prepares the student with the skills to be a Web Site developer. The purpose of this certificate is to provide training opportunities for persons either already employed in the computer industry or for persons already trained in a related computer area who wish to upgrade their skill with advanced courses.

Length of Program: Minimum of four (4) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 16 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.

Special Admission Requirement: Advisor approval needed. Skills required include: Computer Concepts, Networking Fundamentals, Operating System Fundamentals, and Programming Fundamentals.

Program Final Exit Point: Internet Specialist Web Site Developer Technical Certificate of Credit

Required Courses		**Credit Hours**
Occupational Curriculum (27 Credit Hours)		
CIS 2202	XHTML Fundamentals	5
CIS 2231	Design Methodology	6
CIS 2281	Database Connectivity	6
CIS 2261	JavaScript Fundamentals	4
CIS 2211	Web Site Design Tools	6
Web Graphics Course (Choose one – 4 Credit Hours)		
CIS 1104	Web Graphics using Adobe Photoshop	4
CIS 1108	Web Graphics using JASC Paintshop	(4)
Web Graphics & Animation Course (Choose one – 6 Credit Hours)		
CIS 1123	Web Graphics & Animation using Adobe Flash	6
CIS 1124	Web Graphics & Animation using Adobe Illustrator and Adobe LiveMotion	(6)
Advanced Web Graphics and Multimedia Course		
(Choose one – 6 Credit Hours)		
CIS 2005	Advanced Web Graphics and Multimedia usg Adobe Photoshop	6
CIS 2102	Advanced Web Graphics and Multimedia usg Adobe Premiere	(6)

(Program requirements continued on following page)

INTERNET SPECIALIST WEB SITE DEVELOPER (CONT.)

Web Programming Course (Choose one – 4 Credit Hours)		**Credit Hours**
CIS 2104	Advanced Web Graphics and Multimedia usg Adobe Director	(6)
CIS 2105	Advanced Web Graphics and Multimedia usg Adobe Flash	(6)
CIS 1106	Introduction to Web Programming using C#.NET	4
CIS 1107	Introduction to Web Programming using PERL	(4)
CIS 1109	Introduction to Web Programming using VB.NET	(4)
CIS 1110	Introduction to Web Programming using PHP	(4)
CIS 1111	Introduction to Web Programming using Python	(4)

Total Credit Hours: 47 Minimum Credit Hours for Graduation

(Revised curriculum Winter Quarter 2009 – 200903)
(Replaced Webmaster Certification – WEB1)
03/09

LINUX/UNIX SYSTEM ADMINISTRATOR (UNI1)
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.

Length of Program: Minimum of four (4) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Linux/UNIX System Administrator Technical Certificate of Credit

Required Courses		Credit Hours
CIS 2554	Introduction to Linux/UNIX	6
CIS 2555	Linux/UNIX Administration	6
CIS 2556	Linux/UNIX Advanced Administration	6
CIS 2557	Linux/UNIX Shell Script Programming	6

Total Credit Hours: 24 Minimum Credit Hours for Graduation
02/09

MANAGEMENT SPECIALIST: ORGANIZATIONAL LEADERSHIP (OL01) CERTIFICATE

***No longer accepting students into this program**

Campus Availability:
• *Walker County Campus*

Program Description: The Organizational Leadership certificate program is designed for students who are moving into supervisory roles in his or her workplace. It provides students with skills and knowledge in fields such as workplace law, leadership, and the evaluation process.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Management Specialist: Organizational Leadership Technical Certificate of Credit

Required Courses		Credit Hours
MKT 101	Principles of Management	5
MSD 102	Employment Law	5
or		
MKT 103	Business Law	(5)
MSD 103	Leadership	5
MSD 106	Performance Management	5
MSD 107	Employee Training and Development	5
SCT 100	Introduction to Microcomputers	3

Total Credit Hours: 28 Minimum Credit Hours for Graduation
02/09

MANAGEMENT SPECIALIST: TEAM LEADER (TLN1)
CERTIFICATE

***No longer accepting students into this program**

Campus Availability:
- *Gordon County Campus*
- *Walker County Campus*

Program Description: The Team Leader certificate prepares students to assume a first-line supervisory position. The certificate content addresses major issues confronted by the first-line supervisor. This certificate includes 5 hours of elective credit, allowing for significant customization of the curriculum to fit almost any corporate situation.

Length of Program: Minimum of one (1) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Team Leader Technical Certificate of Credit

Required Courses		**Credit Hours**
MSD 101	Organizational Behavior	5
MSD 103	Leadership	5
XXX xxx	Electives (See advisor for recommended list.)	5

Total Credit Hours: 15 Minimum Credit Hours for Graduation
03/09

MARKETING SPECIALIST (5CF1)
CERTIFICATE

Campus Availability:
• *Floyd County Campus*

Program Description:
This program generally prepares individuals to undertake and manage the process of developing consumer audiences and moving products from producers to consumers.

Length of Program: Minimum of two (2) quarters.

Entrance Dates: Beginning of any quarter.

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required
Assessment Results: Applicants must make a minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Marketing Specialist Technical Certificate of Credit

Required Courses		Credit Hours
MKT 100	Introduction to Marketing	5
MKT 106	Fundamentals of Selling	5
MKT 108	Advertising	4
XXX xxx	Elective (See advisor for recommended list.)	5

Total Credit Hours: 19 Minimum Credit Hours for Graduation
06/08

MEDICAL CODING (DGP1)
CERTIFICATE

Campus Availability:
• *Floyd County Campus*

Program Description:
This certificate program provides entry-level training in medical records coding skills that can be utilized in multiple types of health care facilities. The Medical Coding certificate provides entry-level training in the medical coding protocols of ICD-9 and CPT-4. Other areas of study included in this certificate include anatomy and terminology and human diseases. This certificate offers a unique opportunity to persons currently employed by medical care providers or those wishing to become employed in the medical field.

Length of Program: Minimum of five (5) quarters

Entrance Date: Varies

Entrance Requirements:
Age: Minimum of 16 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: Medical Coding Technical Certificate of Credit

Required Courses		**Credit Hours**
AHS 1011	Anatomy and Physiology	5
or		
BUS 2310	Anatomy and Terminology	(5)
AHS 109	Medical Terminology for Allied Health Sciences	3
or		
BUS 2300	Medical Terminology	(3)
MAS 112	Human Diseases	5
BUS 1130	Document Processing	6
ENG 1010	Fundamentals of English I	5
MAS 151	ICD-9-CM Coding I	3
MAS 152	ICD-9 Coding II	3
MAS 153	Physicians' Procedural Coding	3

Total Credit Hours: 33 Minimum Credit Hours for Graduation

MEDICAL LANGUAGE SPECIALIST (5DF1)
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.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Medical Language Specialist Technical Certificate of Credit

Required Courses		Credit Hours
AHS 109	Medical Terminology for Allied Health Sciences	3
or		
BUS 2300	Medical Terminology	(3)
AHS 1011	Anatomy and Physiology	5
or		
BUS 2310	Anatomy and Terminology	(5)
BUS 1130	Document Processing	6
BUS 2320	Medical Document Processing/Transcription	5
BUS 2330	Advanced Medical Document Processing	5
ENG 1010	Fundamentals of English I	5
MAS 112	Human Diseases	5
SCT 100	Introduction to Microcomputers	3
BUS xxx	Specific occupational-guided electives (See advisor for recommended list)	6

Total Credit Hours: 43 Minimum Credit Hours for Graduation
09/08 (Replaces LT01 eff 200902)

MEDICAL OFFICE ASSISTANT (5DE1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Polk County Campus*
- *Walker County Campus*

Program Description:
The Medical 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.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Medical Office Assistant Technical Certificate of Credit

Required Courses		Credit Hours
AHS 109	Medical Terminology for Allied Health Sciences	3
or		
BUS 2300	Medical Terminology	(3)
BUS 1130	Document Processing	6
BUS 2340	Medical Administrative Procedures	5
ENG 1010	Fundamentals of English I	5
SCT 100	Introduction to Microcomputers	3
XXX xxx	Specific occupational-guided electives (See advisor for list)	6

***Total Credit Hours: 28 Minimum Credit Hours for Graduation**
09/08 (Replaces LR01 eff 200902)

MICROSOFT ADVANCED NETWORKING (5CL1)
CERTIFICATE

Campus Availability:
• *Walker County Campus*

Program Description: The Microsoft Advanced Networking certificate program provides education in advanced networking techniques. These techniques provide students with the knowledge to become a Microsoft Network Administrator. This certificate provides a sequence of courses designed to provide students with an understanding of the concepts, principles, and techniques needed to sit for advanced Microsoft networking certification exam. In addition, hands-on labs provide students with real world lab simulations. Program graduates receive a certificate entitled Computer Information Systems - Microsoft Advanced Networking. ***Note: Prerequisites are required prior to the courses listed in this technical certificate of credit.***

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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.
Other: Advisor approval. Training or advanced experience in the following skills required: Networking Fundamentals, Implementing Microsoft Operating Systems, and Implementing Microsoft Infrastructure.

Program Final Exit Point: Microsoft Advanced Networking Technical Certificate of Credit

Required Courses		Credit Hours
CIS 2154	Implementing Microsoft Windows Networking Directory Svcs.	6
XXX xxxx	Guided Electives (See advisor for recommended list)	11-13

Guided Electives (Select two)

CIS 2156	Designing a Secure Windows Network	6
CIS 2158	Designing a Windows Network Infrastructure	6
CIS 2161	Structured Query Language (SQL)	7
CIS 2162	Administering Microsoft SQL Server	6
CIS 2163	Designing and Implementing Databases with MS SQL Server	6

Total Credit Hours: 17 Minimum Credit Hours for Graduation
Revised curriculum winter quarter 2009

MICROSOFT EXCEL APPLICATION SPECIALIST (5AU1)
CERTIFICATE

Campus Availability:
• *Walker County Campus*

Program Description: The program prepares students with an in-depth knowledge of Microsoft Excel and to work in an office using Microsoft Excel.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 16 years of age

Education: No high school diploma or GED is required to enter program but must have documentation of high school diploma or GED to graduate and receive the diploma (or technical certificate of credit). See the Success Center for information on earning your high school diploma or GED.

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: Microsoft Excel Application Specialist Technical Certificate of Credit

Required Courses		**Credit Hours**
SCT 100	Introduction to Microcomputers	3
CIS 222	Microsoft Office Specialist Certification – Excel	3
CIS 2228	Comprehensive Spreadsheets Techniques	6
CIS xxxx	Elective (See advisor for recommended list.)	3

Total Credit Hours: 15 Minimum Credit Hours for Graduation

MICROSOFT NETWORKING SERVICE TECHNICIAN (5CM1) CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Walker County Campus*

Program Description:
The Microsoft MCSA 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 Professional (MCP) networking exam. Hands-on labs provide students with real world simulations.

Length of Program: Minimum of four (4) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Microsoft Networking Service Technician Technical Certificate of Credit

Required Courses		Credit Hours
CIS 2149	Implementing Microsoft Windows Professional	6
CIS 2150	Implementing Microsoft Windows Server	6
CIS 2153	Windows Networking Infrastructure	6
CIS xxxx	Networking elective (See advisor for recommended list.)	6

Total Credit Hours: 24 Minimum Credit Hours for Graduation
09/08 (Replaces WIN1 eff 200902)

MICROSOFT OFFICE APPLICATION PROFESSIONAL (5CG1)
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 word processing, spreadsheet, database, and presentation applications in an office environment. It is designed to provide hands-on instruction for developing foundation skills for office assistant careers.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 16 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: Microsoft Office Application Professional Technical Certificate of Credit

Required Courses		Credit Hours
BUS 1140	Word Processing	5
BUS 1150	Database Applications	3
BUS 2120	Spreadsheet Applications	3
BUS 2150	Presentation Applications	3
SCT 100	Introduction to Microcomputers	3
BUS xxx	BUS elective(s) (See advisor for recommended list)	5

Total Credit Hours: 22 Minimum Credit Hours for Graduation
09/08 (Replaces UL01 and PCW1 eff 200902)

MICROSOFT OFFICE APPLICATION SPECIALIST (5AN1) CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Polk 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.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Microsoft Office Application Specialist Technical Certificate of Credit

Required Courses		Credit Hours
SCT 100	Introduction to Microcomputers	3
CIS 127	Comprehensive Word Processing & Presentation Graphics	6
CIS 2228	Comprehensive Spreadsheet Techniques	6
CIS 2229	Comprehensive Database Techniques	6
CIS 224	Microsoft Office Specialist Certification-PowerPoint	3
CIS 225	Microsoft Office Specialist Certification-Outlook	3

Total Credit Hours: 27 Minimum Credit Hours for Graduation
06/08

NETWORK TECHNICIAN (5BD1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Polk County Campus*

Program Description:
The Network Technician certificate provides basic training in computer information systems networking. Students are introduced to the basic concepts of network administration. Upon graduation, students will be able to maintain networks using Windows networking software.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Network Technician Technical Certificate of Credit

Required Courses		**Credit Hours**
SCT 100	Introduction to Computers	3
CIS xxx	An operating systems course	6
CIS 106	Computer Concepts	5
CIS 1140	Network Fundamentals	6
or		
CIS 2321	Introduction to LAN and WAN`	(6)

Total Credit Hours: 20 Minimum Credit Hours for Graduation
06/08

OFFICE ACCOUNTING SPECIALIST (5AY1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Walker County Campus*

Program Description:
The Office Accounting Specialist certificate of credit provides entry-level office accounting skills. Topics include: principles of accounting, computerized accounting, and basic computer skills.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Office Accounting Specialist Technical Certificate of Credit

Required Courses		Credit Hours
ACC 1101	Principles of Accounting I	6
ACC 1102	Principles of Accounting II	6
ACC 1104	Computerized Accounting	3
SCT 100	Introduction to Microcomputers	3

Total Credit Hours: 18 Minimum Credit Hours for Graduation

PAYROLL ACCOUNTING SPECIALIST (5AP1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Walker County Campus*

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

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Payroll Accounting Specialist Technical Certificate of Credit

Required Courses		Credit Hours
ACC 1101	Principles of Accounting I	6
ACC 1102	Principles of Accounting II	6
ACC 1104	Computerized Accounting	3
ACC 1152	Payroll Accounting	5
SCT 100	Introduction to Microcomputers	3

Total Credit Hours: 23 Minimum Credit Hours for Graduation

PC REPAIR AND NETWORK TECHNICIAN (5AV1)
CERTIFICATE

Campus Availability:
• *Walker County Campus*

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

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: PC Repair and Network Technician Technical Certificate of Credit

Required Courses		Credit Hours
SCT 100	Introduction to Microcomputers	3
CIS xxx	An operating systems course	6
CIS 106	Computer Concepts	5
CIS 122	Microcomputers Installation and Maintenance	7
CIS 1140	Networking Fundamentals	6
or		
CIS 2321	Introduction to LAN & WAN	(6)

Total Credit Hours: 27 Minimum Credit Hours for Graduation
02/09

SUPERVISOR/MANAGER SPECIALIST (5AZ1)
CERTIFICATE

Campus Availability:
• *Walker County Campus*

Program Description:
The purpose of the Supervisor/Manager Specialist certificate program is to train experienced workers to effectively perform management and supervisory functions such as employee recruiting, selecting and hiring, employee performance monitoring and evaluation, and employee related motivation and problem solving. The Supervisor/Manager Specialist certificate program provides individuals with training to attain skills needed to qualify for employment in a management and supervisory function.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Supervisor/Management Specialist Technical Certificate of Credit

Required Courses		Credit Hours
MSD 100	Principles of Management	5
or		
MKT 101	Principles of Management	(5)
MSD 102	Employment Law	5
or		
MKT 103	Business Law	(5)
or		
MSD 105	Labor Management Relations	(5)
MSD 103	Leadership	5
MSD 104	Human Resource Management	5

Total Credit Hours: 20 Minimum Credit Hours for Graduation
10/08 (Replaces SD01 eff 200902)

TAX PREPARATION SPECIALIST (5AR1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*

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

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Tax Preparation Specialist Technical Certificate of Credit

Required Courses		Credit Hours
ACC 1101	Principles of Accounting I	6
ACC 1151	Individual Tax Accounting	5
ACC 2156	Business Tax Accounting	5
SCT 100	Introduction to Microcomputers	3
XXX xxx	Elective (See advisor for recommended list)	3

Total Credit Hours: 22 Minimum Credit Hours for Graduation
10/08

TECHNICAL COMMUNICATIONS (5DQ1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Polk County Campus*
- *Walker County Campus*

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

Length of Program: Varies based on occupational track selected. See advisor for assistance.

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Technical Communications Technical Certificate of Credit

Required Courses		Credit Hours
ENG 1101	Composition and Rhetoric	5
MAT xxx	Mathematics (MAT 1101, MAT 1111, MAT 1113, or MAT 1127)	5
XXX xxx	*Social Sciences* (PSY 1101, PSY 2103, ECO 1101, SOC 1101, POL 1101, HIST 1111, HIST 1112, HIST 2111, OR HIST 2112)	5-10
XXX xxx	*Humanities* (HUM 1101, MUS 1101, ART 1101, ENG 1102, ENG 2130)	5-10
XXX xxx	**General Education core electives** (Specified by college and listed in catalog)	10-20
XXX xxx	**Occupational/Technical Courses** (Choose one occupational track from list below.)	10-20
SCT 100	Introduction to Microcomputers	3

Not to exceed 15 total credit hours from the social sciences and humanities categories.

Not to exceed 30 total credit hours from the general education core and occupational/technical courses categories.

Total Credit Hours: 48 Minimum Credit Hours for Graduation
(Based on occupational track selected)

(Program requirements continued on following page)

TECHNICAL COMMUNICATIONS, (CONT.)

****General Core Electives****

ART 1101	Art Appreciation	5
BIO 2113	Anatomy and Physiology I	5
BIO 2114	Anatomy and Physiology II	5
BIO 2117	Medical Microbiology	5
ECO 1101	Principles of Economics	5
ENG 1102	Literature and Composition	5
ENG 1105	Technical Communications	5
ENG 2130	American Literature	5
HIS 1111	World History I	5
HIS 1112	World History II	5
HIS 2111	U.S. History I	5
HIS 2112	U.S. History II	5
HUM 1101	Introduction to Humanities	5
MAT 1101	Mathematical Modeling	5
MAT 1111	College Algebra	5
MAT 1113	Precalculus	5
MAT 1127	Introduction to Statistics	5
MUS 1101	Music Appreciation	5
PHY 1110	Introductory Physics	5
POL 1101	American Government	5
PSY 1101	Introductory Psychology	5
PSY 2103	Human Development	5
PSY 2250	Abnormal Psychology	5
SOC 1101	Introduction to Sociology	5
SPC 1101	Public Speaking	5

****OCCUPATIONAL TRACKS****

Allied Health

AHS 1011	Anatomy and Physiology	5
or		
BUS 2310	Anatomy and Terminology	(5)
AHS 103	Nutrition and Diet Therapy I	2
AHS 104	Introduction to Health Care	3
BUS 2300	Medical Terminology	3
BUS 2310	Anatomy and Medical Terminology for the Medical Admin. Asst.	5

Total Credit Hours: 18

Business and Information Technology

Accounting

ACC 1101	Principles of Accounting I	6
ACC 1102	Principles of Accounting II	6
ACC 1104	Computerized Accounting	3
ACC 1152	Payroll Accounting	5

Total Credit Hours: 20

(Program requirements continued on following page)

TECHNICAL COMMUNICATIONS, (CONT.)

Business Administrative Technology (BAT)

BUS 1140	Word Processing	5
BUS 1150	Database Applications	3
BUS 2120	Spreadsheet Applications	3
BUS 2150	Presentation Applications	3
BUS 2110	Advanced Word Processing	5
or		
BUS 1160	Desktop Publishing	(3)

Total Credit Hours: 17 or 19

Computer Information Systems (CIS)

CIS xxx	An operating systems course	6
CIS 106	Computer Concepts	5
CIS 2321	Intro to LAN and WAN	6
or		
CIS 1140	Networking Fundamentals	(6)
CIS xxx	CIS Elective	3

Total Credit Hours: 20

Health Information Technology

HIT 1100	Introduction to Health Information Technology	3
HIT 1250	Health Record Content and Structure	5
HIT 2150	Healthcare Statistics	5
HIT 1150	Computer Applications in Healthcare	3
HIT xxxx	HIT Elective	4

Total Credit Hours: 16

Management and Supervisory Development

MSD 100	Principles of Management	5
or		
MKT 101	Principles of Management	(5)
MSD 102	Employment Law	5
or		
MKT 103	Business Law	(5)
MSD 104	Human Resource Management	5
MSD 112	Introduction to Business and Economics	5
or		
MIT 104	Principles of Economics	(5)

Total Credit Hours: 20

Marketing Managementt

MKT 101	Principles of Management	5
MKT 106	Fundamentals of Selling	5
MKT 108	Advertising	4
MKT XXX	Marketing Elective	6

Total Credit Hours: 20

(Program requirements continued on following page)

TECHNICAL COMMUNICATIONS, (CONT.)

Public Services

Criminal Justice

CRJ 101	Introduction to Criminal Justice Technology	5
CRJ 103	Corrections	5
CRJ 105	Criminal Procedure	5
CRJ 162	Methods of Criminal Investigation	5

Total Credit Hours: 20

Culinary Arts

CUL 100	Professionalism in Culinary Arts	3
CUL 110	Food Services Sanitation and Safety	3
CUL 112	Principles of Cooking	6
CUL 116	Food Services Purchasing and Control	3
CUL 121	Baking Principles I	5

Total Credit Hours: 20

Early Childhood Care and Education

ECE 1010	Introduction to Early Childhood Care and Education	5
ECE 1030	Human Growth and Development I	5
ECE 1050	Health, Safety, and Nutrition	5
ECE xxxx	Elective (See advisor for recommended list)	5

Total Credit Hours: 20

Fire Science

FSC 101	Introduction to Fire Science	5
FSC 110	Fire Administration-Supervision and Leadership	5
FSC 121	Firefighting Strategy and Tactics	5
FSC 161	Fire Service Safety and Loss Control	5

Total Credit Hours: 20

Social Work Assistant

SWG 100	Introduction to Social Services	5
SWG 101	Introduction to Social Work	5
SWG 102	Human Behavior and the Social Environment	5
SWG 103	Social Work Methods and Procedures	5

Total Credit Hours: 20

Industrial Technology

Air Conditioning Technology

ACT 100	Refrigeration Fundamentals	4
ACT 101	Principles and Practices of Refrigeration	7
ACT 102	Refrigeration Systems Components	7

Total Credit Hours: 18

(Program requirements continued on following page)

TECHNICAL COMMUNICATIONS, (CONT.)

Automotive Technology

AUT 120	Introduction to Automotive Technology	3
AUT 122	Electrical and Electronic Systems	6
AUT 124	Battery, Starting, and Charging Systems	4
AUT 142	Climate Control Systems	6

Total Credit Hours: 19

Aviation Maintenance Technology

AMT 100	Aviation Mathematics	3
AMT 101	Aircraft Maintenance Regulations	3
AMT 102	Aircraft Applied Sciences	13

Total Credit Hours: 19

Drafting

DDF 107	CAD Fundamentals	6
DDF 111	Intermediate CAD	6
DDF 112	3-D Drawing and Modeling	6

Total Credit Hours: 18

Electrical Control Systems

IFC 101	Direct Current Circuits I	4
ELC 108	Direct Current Circuits II	4
IFC 102	Alternating Current I	4
ELC 110	Alternating Current II	4
IFC 103	Solid State Devices I	4

Total Credit Hours: 20

Instrumentation and Controls

IFC 100	Industrial Safety Procedures	2
IFC 101	Direct Current Circuits I	4
IFC 102	Alternating Current I	4
IFC 103	Solid State Devices I	4
IDS 103	Industrial Wiring	6

Total Credit Hours: 20

Machine Tool

MCH 101	Introduction to Machine Tool	6
MCH 102	Blueprint Reading I	5
MCH 107	Characteristics of Metal/Heat Treatment I	4
MCH 114	Blueprint Reading II	5

Total Credit Hours: 20

Welding

WLD 100	Introduction to Welding Technology	6
WLD 101	Oxyfuel Cutting	4
WLD 103	Blueprint Reading I	3
WLD 108	Blueprint Reading II	3

Total Credit Hours: 16

TECHNICAL MANAGEMENT SPECIALIST (5CA1)
CERTIFICATE

Campus Availability:
• *Gordon County Campus*

Program Description: This certificate is designed to allow integration of management knowledge and other areas of technical training.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Technical Management Specialist Technical Certificate of Credit

Required Courses		Credit Hours
MSD 100	Principles of Management	5
or		
MKT 101	Principles of Management	(5)
MSD 102	Employment Law	5
or		
MKT 103	Business Law	(5)
or		
MSD 105	Labor Management Relations	(5)
MSD 104	Human Resource Management	5
SCT 100	Introduction to Microcomputers	3
MSD xxx	Elective (See advisor for recommended list)	5
XXX xxx	Electives from technical area (to be approved by advisor)	17

Total Credit Hours: 40 Minimum Credit Hours for Graduation
03/09

VISUAL BASIC PROGRAMMER (5BE1)
CERTIFICATE

No Longer Accepting Students into this Program

Campus Availability:
- *Floyd County Campus*
- *Polk County Campus*

Program Description:
The Visual BASIC Programmer certificate program provides training and practice in the rapidly growing field of windows programming and the use of Visual BASIC as a programming language. Students applying to the program should be working as a programmer. This program is not for those students seeking an entry-level position as a programmer. Courses include general computer concepts, program design and instruction, and practice using Visual BASIC.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Visual Basic Programmer Technical Certificate of Credit

Required Courses		**Credit Hours**
CIS 105	Program Design and Development or Advisor Approval	5
CIS xxxx	Language elective approved by advisor	7
CIS 2570	Advanced Visual BASIC Programming	7
CIS 2229	Advanced Database Techniques	6
or		
CIS xxx	CIS Elective (See advisor for recommended list)	(3+)

Total Credit Hours: 22 Minimum Credit Hours for Graduation
06/08

Health Technologies

Frank Pharr, Dean

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 (CVN3) - W
Diagnostic Medical Sonography (SNN3) - F
Echocardiography (ECH3) - F
Health (AHN3) - F, G, P
Neuromuscular Therapist (NMT3) - F
Occupational Therapy Assistant (OY03) - W
Pharmacy Technology (PH03) - W
Radiation Therapy Technology (RDN3) - F
Radiologic Technology (RT03) - F
Respiratory Care Technology (RE03) - F
Vascular Technology (VSN3) - F

Diploma Programs

Dental Assisting (DA02) - P
Diagnostic Medical Sonography (SNN4) - F
Echocardiography (ECH4) - F
Neuromuscular Therapist (NMT2) - F
Pharmacy Technology (PH02) - W
Radiation Therapy Technology (RDN4) - F
Radiologic Technology (RT04) - F
Vascular Technology (VSN4) - F

Certificate Programs

Health Care Assistant (5CJ1) - F, G, P, W
Health Care Science (HHS1) - F, G, P, W
Mammography (MZN1) - F
Pharmacy Assistant (PH01) - W
Phlebotomy (PYP1) - W

**We are currently not offering this program. Please consult this page in the online GNTC Catalog at www.gntc.edu; this notice will be removed when the program is accepting students.*

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.

Upon completion of programs in the Health Technologies Division, students will have many employment opportunities.

Enrollment Procedures and Information for Health Technologies
Georgia Northwestern Technical College

I. Admission Procedures

A. Submit an application to GNTC and $15 application fee. This is a non-returnable, one time fee. You may submit the application and credit card information by downloading the application in PDF format from GNTC's website: http://www.gntc.edu, printing it, completing it, and mailing it to:

Floyd County Campus:
Admissions Office
Georgia Northwestern Technical College
One Maurice Culberson Drive
Rome, GA 30161

Walker County Campus:
Admissions Office
Georgia Northwestern Technical College
P.O. Box 569
265 Bicentennial Trail
Rock Spring, GA 30739

B. Submit an official High School Transcript, or official GED completion record, and all transcripts from any colleges or technical schools attended for credit.

C. Complete COMPASS/ASSET Admission Testing. Applicants who have not taken an entrance assessment within the last five (5) years will be required to do so. Acceptable SAT or ACT scores may be substituted if taken within the last five (5) years. Note: Any applicant who has successfully completed, with a "C" grade or better, transferable English and math courses from an accredited institution, may be exempt from taking the entrance examination. These courses must be the equivalent to the entry-level English and math courses required in the applicant's chosen program of study.

D. 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 quarter of completing courses, he/she will complete a form in the Office of Student Services requesting a review of course work at the end of that quarter. This form will be available to students during

the third week of the quarter. An announcement will be made to students regarding this process.

E. 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 quarter before the quarter 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 qualified 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 quarters 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 quarter 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: Cardiovascular Technology (CV03), Occupational Therapy Assistant (OY03), Pharmacy Technology (PH03 & PH03), and Pharmacy Assistant (PH01).

F. Upon completion of all items (A-E) 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.

G. 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 (During pre-occupational curriculum only)
b. Health Technology - Pre-occupational
c. Occupational

A. Learning Support Admissions: 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 eligible for Learning Support admissions. Learning Support courses are offered to enable students to meet recommended standards. Instruction is offered in the fundamentals of reading, math, and English, thus improving the student's chance of success upon enrolling into a regular program of study. Students in this category can take any pre-occupational curriculum not directly related to the area of the student's developmental studies. Upon successful completion of the Learning Support program including reassessment as required by school policy, a student is eligible for acceptance to the Health Technology - Pre-occupational designation.

An admission placement test is used to determine whether a student is recommended to take Learning Support course(s). Based upon test results, the student may be recommended to take classes in one, two, or all of these areas. If an applicant scores below the recommended level for entry into Learning Support courses, referral will be made to the Adult Education program.

B. Health Technology - Pre-occupational: All students taking pre-occupational curriculum in preparation for admission into a Health Technology program are enrolled in either Health Care Assistant (5CJ1), Health Care Science (HHS1), or Health associate degree (AHN3). This qualifies the student to receive financial aid while taking the required courses for admission into the Health Technology 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 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 in a biological or physical sciences degree field, 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 with approval by the Office of Student Affairs. 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 Microcomputers	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 quarterly 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 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 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 is required for all Health Technology programs.

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 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

Associate Degree
COMPASS:
Reading Skills 80, Numerical Skills 40, Writing Skills 63, Algebra 42
SAT: Critical Reading/Verbal 480, Math 440
ACT: English 21, Math 19

Diploma/Certificate
COMPASS:
Reading Skills 74, Numerical Skills 36, Writing Skills 38, Algebra 33
SAT: Critical Reading/Verbal 430, Math 400
ACT: English 18, Math 16

V. Criminal Background Results

Each student in Health Technology must have a criminal background check done 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 program-specific 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 Technology
The Respiratory Care Technology 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 Course Requirements
Health Technologies
Associate of Applied Science Degree and Diploma Programs

Classes taken during a student's pre-occupational period provide a foundation of knowledge built upon during the occupational program courses. Except where noted, all of the courses must be taken before a student enters the program of choice for which they qualify. The charts below indicate the pre-occupational courses for each program and when they may be taken.

Associate of Applied Science Degree (A.A.S.) Programs

Associate Degree (A.A.S.) Programs	CVN3 Cardiovascular Technology	SNN3 Diagnostic Medical Sonography	ECH3 Echocardiography	AHN3 Health	NMT3 Neuromuscular Therapist
ALL courses in this section must be completed before a student can be placed in GNTC's program pool.	*ENG 1101 *ENG 1102 or *HUM 1101 *MAT 1101 or *MAT 1111 *SPC 1101 or *ENG 1105 *SOC 1101 *PSY 1101 *BIO 2113 *BIO 2114 AHS 102 AHS 109 or BUS 2310 SCT 100 The following courses may be taken within the program curriculum *PHY 1110 Or AHS 1126	*ENG 1101 *HUM 1101 *MAT 1111 *PSY 1101 *SPC 1101 *BIO 2113 *BIO 2114 *PHY 1110 or AHS 1126 AHS 104 AHS 109 SCT 100	*ENG 1101 *HUM 1101 *MAT 1111 *PSY 1101 *SPC 1101 *BIO 2113 *BIO 2114 *CHM 1111 or AHS 1127 *PHY 1110 or AHS 1126 AHS 104 AHS 109 SCT 100	*ENG 1101 *HUM 1101 *MAT 1111 *PSY 1101 *SPC 1101 And one of these: *BIO 2113 *BIO 2114 *CHM 1111 or AHS 1127 *PHY 1110 or AHS 1126	*ENG 1101 *HUM 1101 *MAT 1111 *PSY 1101 *SPC 1101 BIO 2113 BIO 2114 AHS 104 AHS 109 SCT 100

Degree Programs (cont.)

OY03 Occupational Therapy Assistant	PHO3 Pharmacy Technology	RDN3 Radiation Therapy	RT03 Radiologic Technology	RE03 Respiratory Care Technology	VSN3 Vascular Technology
*ENG 1101 ENG 1102 or *HUM 1101 *MAT 1111 or *MAT 1101 *PSY 1101 PSY 2250 *SPC 1101 *SOC 1101 *BIO 2113 *BIO 2114 *BIO 2117 AHS 109 or BUS 2310 SCT 100	*MAT 1111 This program does not participate in Competitive Admissions at this time and other courses may be taken as directed by program faculty.	*ENG 1101 *HUM 1101 *MAT 1111 *PSY 1101 *SPC 1101 *BIO 2113 *BIO 2114 AHS 104 AHS 109 SCT 100 RDN students who are not RRT must complete these courses prior to entering occupational II courses: RAD 101 RAD 117 RAD 118 RAD 120 RAD 123	*ENG 1101 *HUM 1101 *MAT 1111 *PSY 1101 *SPC 1101 *BIO 2113 *BIO 2114 AHS 104	*ENG 1101 *HUM 1101 *MAT 1111 *PSY 1101 *SPC 1101 *BIO 2113 *BIO 2114 *BIO 2117 *CHM 1111 or AHS 1127 *PHY 1110 or AHS 1126 SCT 100	*ENG 1101 *HUM 1101 *MAT 1111 *PSY 1101 *SPC 1101 *CHM 1111 or AHS 1127 *PHY 1110 or AHS 1126 *BIO 2113 *BIO 2114 AHS 104 AHS 109 SCT 100

Diploma Programs

Diploma Programs	DA02 Dental Assisting	SNN4 Diagnostic Medical Sonography	ECH4 Echocardiography	NMT2 Neuromuscular Therapist	PH02 Pharmacy Technology
ALL courses in this section must be completed before a student can be placed in GNTC's program pool.	*ENG 1010 *MAT 1012 *PSY 1010 AHS 1011 AHS 104 AHS 109	*ENG 1010 *MAT 1013 *PSY 1010 or EMP 1000 *PHY 1110 or AHS 1126 AHS 1011 AHS 104 AHS 109 SCT 100	*ENG 1010 *MAT 1013 *PSY 1010 or EMP 1000 *CHM 1111 or AHS 1127 *PHY 1110 or AHS 1126 AHS 1011 AHS 104 AHS 109 SCT 100	*ENG 1010 *MAT 1012 or *MAT 1011 *PSY 1010 AHS 1011 AHS 104 AHS 109 SCT 100	*MAT 1013 This program does not participate in Competitive Admissions at this time and other courses may be taken as directed by program faculty.
	RDN4 Radiation Therapy	RT04 Radiologic Technology	VSN4 Vascular Technology		
	*ENG 1010 *MAT 1013 *PSY 1010 AHS 1011 AHS 104 AHS 109 SCT 100	*ENG 1010 *MAT 1013 AHS 1011 AHS 104 AHS 152 EMP 1000	*ENG 1010 *MAT 1013 *PSY 1010 or EMP 1000 *CHM 1111 or AHS 1127 *PHY 1110 or AHS 1126 AHS 1011 AHS 104 AHS 109 SCT 100		

*** Indicates General Core Curriculum**

Pre-Occupational Course Requirements Chart Legend

A.A.S. Degree Programs	Diploma Programs
SNN3 Diagnostic Medical Sonography	DA02 Dental Assisting
ECH3 Echocardiography	SNN4 Diagnostic Medical Sonography
CV03 Cardiovascular Technology	ECH4 Echocardiography
NMT3 Neuromuscular Therapist	NMT2 Neuromuscular Therapist
OY03 Occupational Therapy Assistant	PH02 Pharmacy Technology
PH03 Pharmacy Technology	RDN4 Radiation Therapy
RT03 Radiologic Technology	VSN4 Vascular Technology
RDN3 Radiation Therapy	
RE03 Respiratory Care Technology	
VSN3 Vascular Technology	

CARDIOVASCULAR TECHNOLOGY (CVN3)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:
• *Walker County Campus*

Students are no longer being accepted into the Noninvasive and Vascular Specializations

Program Description:
The Cardiovascular Technology degree program prepares students to work with physicians to evaluate, diagnose, and treat heart patients. The first year consists of cardiovascular core classes, and the second year is spent in the student technologist's specialized classes. The degree has been designed to provide an individual the entry level skills required for success in a cardiovascular catheterization lab.
Length of Program: Minimum of nine (9) quarters

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

Entrance Requirements:
Age: 17 years old for entrance into Health Technology for pre-occupational curriculum
18 years old for entrance into Health Technology programs
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.
Program Final Exit Point: Cardiovascular Technology Associate of Applied Science Degree

Program Final Exit Point: Cardiovascular Technology Associate of Applied Science Degree

Pre-Occupational Curriculum (30 Credit Hours)		**Credit Hours**
*ENG 1101	Composition and Rhetoric	5
ENG 1102	Literature and Composition	5
or		
*HUM 1101	Introduction to Humanities	(5)
*MAT 1101	Mathematical Modeling	5
or		
MAT 1111	College Algebra	(5)
*SPC 1101	Public Speaking	5
or		
ENG 1105	Technical Communications	(5)
*SOC 1101	Introduction to Sociology	5
*PSY 1101	Introductory Psychology	5
CVT 101	Pharmaceutical Basics	3
AHS 109	Medical Terminology for Allied Health Sciences	3
or		
BUS 2310	Anatomy and Terminology for the Medical Admin. Assistant	(5)

(Program requirements continued on following page)

CARDIOVASCULAR TECHNOLOGY, (CONT.)

Pre-Occupational Curriculum (Cont.)

BIO 2113	Anatomy and Physiology I	5
BIO 2114	Anatomy and Physiology II	5
SCT 100	Introduction to Microcomputers	3

Occupational Curriculum (50 Credit Hours)

CVT 102	Medical Physics	3
CVT 103	Electrophysiology and Cardiac Anatomy	4
CVT 104	Electrophysiology II	2
CVT 107	Cardiovascular I	3
CVT 108	Cardiovascular Advanced Hemodynamics	3
CVT 109	Cardiovascular Pathophysiology	3
CVT 110	Noninvasive Cardiovascular Fundamentals	4
CVT 111	Invasive Cardiovascular Fundamentals	4
SCT 100	Introduction to Microcomputers	3
PHY 1110	Introductory Physics	5
or		
AHS 1126	Health Science Physics	(5)

Invasive Specialization (51 Credit Hours)

CVT 120	Cardiac Catheterization I	4
CVT 121	Cardiac Catheterization II	9
CVT 122	Cardiac Catheterization III	9
CVT 123	Cardiac Catheterization Clinical IV	12
CVT 124	Cardiac Cath Clinical I	5
CVT 125	Cardiac Cath Clinical II	3
CVT 126	Cardiac Cath Clinical III	3
DIS 150	Directed Independent Study	2
XXX xxx	Electives (See advisor for recommended list.)	4

Total Credit Hours: 131 Minimum Credit Hours for Graduation

DIAGNOSTIC MEDICAL SONOGRAPHY (SNN3)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:

• *Floyd County Campus*

Program Description:

The Diagnostic Medical Sonography associate of applied science degree (A.A.S.) program of study is consistent with the purpose of Georgia Northwestern Technical College. 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.

Program graduates are expected to be able to perform entry level abdominal, OB/GYN, pediatric, small parts, and neonatal ultrasound procedures with the use of two- dimensional B-Mode imaging, color flow Doppler, and spectral Doppler. Program graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, natural sciences or mathematics, and computer literacy. Program graduates receive a Diagnostic Medical Sonography Associate Degree, are eligible to sit for the American Registry of Diagnostic Medical Sonographers (ARDMS) registry examinations in Ultrasound Physics and Instrumentation (UPI), Abdomen (AB), Obstetrics/Gynecology (OB/GYN) and are employable as entry-level Diagnostic Medical Sonographers.

Length of Program: Minimum of nine (9) quarters

Entrance Dates: Beginning of any quarter for prerequisite courses, fall quarter 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: High school diploma or GED is required.

Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the Admissions Placement Test (ASSET) or on one of the approved entrance tests (ACT or SAT) to be admitted as regular students. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Program Final Exit Point: Diagnostic Medical Sonography Associate of Applied Science Degree. Graduates will be eligible to apply to sit for the national certification examination offered by the American Registry for Diagnostic Medical Sonographers (ARDMS) in Abdomen and/or OB/Gyn to qualify for certification as a diagnostic medical sonographer.

Pre-Occupational Curriculum (49 Credit Hours)		**Credit Hours**
*ENG 1101	Composition and Rhetoric	5
*HUM 1101	Introduction to Humanities	5
*MAT 1111	College Algebra	5
*PSY 1101	Introduction to Psychology	5
(Program requirements continued on following page)		
*SPC 1101	Public Speaking	5

BIO 2113	Anatomy and Physiology I	5
BIO 2114	Anatomy and Physiology II	5
PHY 1110	Introductory Physics	5
or		
AHS 1126	Health Science Physics	(5)
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3
SCT 100	Introduction to Microcomputers	3

Occupational Curriculum (90 Credit Hours)		**Credit Hours**
DMS 131	Foundations of Sonography	5
DMS 132	Sonographic Appearance of Normal Anatomy	4
DMS 133	Cross Sectional Anatomy	4
DMS 134	Pelvic Sonography & Pathology	2
DMS 135	Abdominal Sonography & Pathology	5
DMS 136	Sonographic Physics I	3
DMS 137	Clinical Sonography I	8
DMS 201	Normal Obstetric Sonography	3
DMS 202	Sonographic Physics II	2
DMS 203	High Resolution Imaging	2
DMS 204	Clinical Sonography II	8
DMS 205	Interventional Sonography	1
DMS 206	Pediatric Sonography	2
DMS 207	Abnormal Obstetric Sonography	3
DMS 208	Introduction to Vascular Sonography	2
DMS 209	Clinical Sonography III	8
DMS 210	Comprehensive Physics Review	2
DMS 211	Clinical Sonography IV	11
DMS 212	Comprehensive Abdomen Registry Review	2
DMS 213	Comprehensive OB/GYN Registry Review	2
DMS 214	Clinical Sonography V	11

Total Credit Hours: 139 Minimum Credit Hours for Graduation

ECHOCARDIOGRAPHY (ECH3)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:

• *Floyd County Campus*

Program Description:

The Echocardiography associate of applied science 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 Echocardiographers. Echocardiography is an allied health profession specifically concerning the diagnosis and treatment of patients with cardiac diseases. The profession requires critical thinking skills, judgment, and the ability to provide appropriate health care services. An echocardiographer 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 can be made. Echocardiographers use high frequency sound waves to produce dynamic visual pictures of the heart and related vasculature. 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 heart, journal and case reviews, and a comprehensive registry review.

Program graduates are expected to be able to perform appropriate cardiac procedures including, but not limited to, two dimensional B-Mode imaging, color flow Doppler, and spectral Doppler, M-Mode, electrocardiography, and exercise stress testing. Program graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, natural sciences or mathematics, and computer literacy. Program graduates receive an Echocardiography associate of applied science degree. They are eligible to sit for the national certification examinations administered by Cardiovascular Credentialing International (CCI) and/or the American Registry of Diagnostic Medical Sonographers (ARDMS) registry in cardiology and are employable as entry-level echocardiographers.

Length of Program: Minimum of eight (8) quarters

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

Entrance Requirements:

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

Education: High school diploma or GED is required.

Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Echocardiography Associate of Applied Science Degree Upon completion of the Echocardiography program, the student is eligible to apply to sit for national exam certification offered by the American Registry for Diagnostic Medical Sonographers (ARDMS) in Adult Echocardiography to become a Registered Diagnostic Cardiac Sonographer (RDCS).

(Program requirements continued on following page)

ECHOCARDIOGRAPHY, (CONT.)

Pre-Occupational Curriculum (54 Credit Hours)		**Credit Hours**
*ENG 1101	Composition and Rhetoric	5
*HUM 1101	Introduction to Humanities	5
*MAT 1111	College Algebra	5
*PSY 1101	Introduction to Psychology	5
*SPC 1101	Public Speaking	5
BIO 2113	Anatomy and Physiology I	5
BIO 2114	Anatomy and Physiology II	5
*CHM 1111	Chemistry I	5
or		
AHS 1127	Health Sciences Chemistry	(5)
*PHY 1110	Introductory Physics	5
or		
AHS 1126	Health Science Physics	(5)
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3
SCT 100	Introduction to Microcomputers	3

Occupational Curriculum (86 Credit Hours)		**Credit Hours**
CVT 103	Electrophysiology and Cardiac Anatomy	4
CVT 104	Electrophysiology II	2
CVT 108	Cardiovascular Advanced Hemodynamics	3
CVT 109	Cardiovascular Pathophysiology	3
CVT 111	Invasive Cardiovascular Fundamentals	4
DMS 136	Sonographic Physics I	3
DMS 202	Sonographic Physics II	2
DMS 210	Comprehensive Physics Registry Review	2
ECH 110	Introduction to Echocardiography	4
ECH 131	Echocardiography I	6
ECH 133	Echocardiography II	6
ECH 136	Echocardiography Clinical I	8
ECH 137	Echocardiography Clinical II	8
ECH 155	Professional Development	1
ECH 230	Essentials of Vascular Sonography (Non-invasive)	2
ECH 231	Echocardiography III	6
ECH 236	Echocardiography Clinical III	8
ECH 237	Echocardiography Clinical IV	12
ECH 240	Comprehensive Registry Review	2

Total Credit Hours: 140 Minimum Credit Hours for Graduation

***Indicates General Core Curriculum**

09/08

HEALTH (AHN3)
ASSOCIATE OF APPLIED SCIENCE DEGREE

No Longer Accepting New Students

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Polk County Campus*

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

Program Description:
The associate of applied science in Health program of study is consistent with the purpose of Georgia Northwestern Technical College. The program provides academic foundations in communications, mathematics, and human relations, as well as technical fundamentals. Program graduates are trained in the underlying fundamentals of health care delivery and are well prepared for employment and subsequent upward mobility.

Length of Program: Minimum of four quarters

Entrance Date: Varies

Entrance Requirements:
Age: 17 years old for entrance into Health Technology pre-occupational curriculum
18 years old for entrance into Health Technology programs
Education: High school diploma or GED is required. Graduation from an accredited diploma program at a Technical College System of Georgia institution or its equivalent is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the GNTC Admissions Placement Test (ASSET/COMPASS) or on one of the approved entrance tests (ACT or SAT) to be admitted as regular students. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.
Program Final Exit Point: Health Associate of Applied Science Degree. The degree in health program is a technical program that provides knowledge and skills to qualify participants as health care professionals. Upon completion of the A.A.S. degree in Health, program graduates will be prepared for employment in the health care field chosen by the graduate and better prepared for advancement in that field.

Required Courses

General Education		**Credit Hours**
*ENG 1101	Composition and Rhetoric	5
*HUM 1101	Introduction to Humanities	5
*MAT 1111	College Algebra	5
*PSY 1101	Introduction to Psychology	5
*SPC 1101	Public Speaking	5
Sub-Total Hours		**25**

***Indicates General Core Curriculum**

Students completing the general core track may select 5 credit hours from the courses listed below:

(Program requirements continued on following page)

HEALTH (CONT.)

BIO 2113	Anatomy and Physiology I	5
*BIO 2114	Anatomy and Physiology II	5
*BIO 2117	Introductory Microbiology	5
*CHM 1111	Chemistry I	5
or		
(AHS 1127	Health Sciences Chemistry)	(5)
*PHY 1110	Introductory Physics	5
or		
(AHS 1126	Health Science Physics)	(5)
Sub-Total Hours		**5**
Cumulative Hrs.		**30**
Occupational Hours from Diploma (must include SCT 100)		**60**
Total Hours in Specialty		**90**

Sonography Track		**Credit Hours**
From General Education		25
AHS 109	Medical Terminology for Allied Health Sciences	3
*BIO 2113	Anatomy and Physiology I	5
*BIO 2114	Anatomy and Physiology II	5
*BIO 2117	Introductory Microbiology	5
*CHM 1111	Chemistry I	5
AHS 1126	Health Science Physics	5
or		
(*PHY 1110	Introductory Physics)	(5)
Sub-Total Hrs.		**28**
Cumulative Hrs.		**53**
Occupational Hours from Diploma (must include SCT 100)		**60**
Total Hours in Specialty		**113**

Radiologic Technology Track		**Credit Hours**
From General Education		25
AHS 104	Introduction to Health Care	3
*BIO 2113	Anatomy and Physiology I	5
*BIO 2114	Anatomy and Physiology II	5
AHS 1126	Health Science Physics	5
or		
(*PHY 1110	Introductory Physics)	(5)
Sub-Total Hrs.		**18**
Cumulative Hrs.		**43**
Occupational Hours from Diploma (must include SCT 100)		**60**
Total Hours in Specialty		**103**

Respiratory Care Track		**Credit Hours**
From General Education		25
*BIO 2113	Anatomy and Physiology I	5
*BIO 2114	Anatomy and Physiology II	5
*BIO 2117	Introductory Microbiology	5
*CHM 1111	Chemistry I	5
*PHY 1110	Introductory Physics	5
or		
AHS 1126	Health Science Physics	5
Sub-Total Hrs.		**25**
Cumulative Hrs.		**50**
Occupational Hours from Diploma (must include SCT 100)		**60**
Total Hours in Specialty		**110**

NEUROMUSCULAR THERAPIST (NMT3)
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, deep tissue massage, myofascial release, postural analysis, identification of diseases and conditions, medical documentation, therapeutic stretching, and client care. Program graduates receive an associate of applied science degree (A.A.S.) in Neuromuscular Therapy, which qualifies them to take the national certification examination and apply for licensure in Georgia.

Length of Program: Minimum of seven (7) quarters (including pre-occupational curriculum)

Entrance Dates: Beginning of any quarter for pre-occupational curriculum. Spring quarter 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: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the GNTC Admissions Placement Test (ASSET/COMPASS) or on one of the approved entrance tests (ACT or SAT) to be admitted as regular students. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Program Final Exit Point: Neuromuscular Therapy Associate of Applied Science Degree. Graduates are eligible to sit for the national certification with NCBTMB and apply for Georgia licensure.

Pre-Occupational Curriculum (44 Credit Hours)		Credit Hours
*ENG 1101	Composition and Rhetoric	5
*HUM 1101	Introduction to Humanities	5
*MAT 1111	College Algebra	5
*PSY 1101	Introduction to Psychology	5
*SPC 1101	Public Speaking	5
BIO 2113	Anatomy and Physiology I	5
BIO 2114	Anatomy and Physiology II	5
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3
SCT 100	Introduction to Microcomputers	3

General education courses (listed on specific curriculum pages) are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.
(Program requirements continued on following page)

NEUROMUSCULAR THERAPIST (CONT.)

Occupational Curriculum (59 Hours)		Credit Hours
NTT 100	Musculoskeletal Anatomy and Physiology	5
NTT 101	Neural Science and Pathology	5
NTT 102	Pathology	3
NTT 103	Neuromuscular Therapy Fundamentals	5
NTT 105	Technique and Theory I	6
NTT 106	Clinic I	5
NTT 107	Law and Ethics	1
NTT 108	Technique and Theory II	6
NTT 109	Adjunctive Modalities	3
NTT 110	Progressive Modalities	3
NTT 111	Licensure Review	3
NTT 112	Clinic II	5
NTT 114	Musculoskeletal Anatomy and Pathology	3
NTT 116	Wellness Essentials I	2
NTT 118	Wellness Essentials II	2
NTT 123	Professional Leadership	2

Total Credit Hours: 103 Minimum Credit Hours for Graduation

***Indicates General Core Curriculum**
08/08

OCCUPATIONAL THERAPY ASSISTANT (OY03)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:

• *Walker County Campus*

Program Description:

The Occupational Therapy Assistant program prepares students to implement treatment procedures and plans to clients with limitations in occupational performance under the supervision of an occupational therapist, per American Occupational Therapy Association (AOTA) 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.

Program Final Exit Point: Occupational Therapy 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. 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).

Length of Program: Minimum of ten (10) quarters (including pre-occupational curriculum)

Entrance Dates: Beginning of any quarter for pre-occupational curriculum. Fall quarter 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: High School transcript or GED official notice of completion is required.

Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the GNTC Admissions Placement Test (COMPASS) or on one of the approved entrance tests (ACT or SAT) to be admitted as regular students. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Occupational Therapy Assistant Program-Specific Admission Requirements

1) Achieve program ready status as demonstrated by placement scores; 2) Achieve satisfactory scores on the Health Occupation Aptitude Test (HOAT);

3) Documentation of 30 to 40 hours of volunteer work in at least two different clinical sites and settings with an OTR or COTA supervision. A positive recommendation must be received from the supervising OTR or COTA;
4) Submit a student application for the OTA program;
5) Supply a brief two question autobiography including a description of why the student is interested in occupational therapy;
6) Student files must be complete with the above requirements by December 31 of the year prior to desired acceptance;
7) Students will be selected when the above requirements have been completed on a "first-come, first-serve" and space available policy;
8) Schedule an OTA Orientation with the designated college official upon completion of the above requirements.

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
1) OTA students must maintain a cumulative GPA of 2.0 to remain in the program;
2) OTA students must maintain a "C" (70 or higher) grade in each course including fieldwork in order to progress to the next quarter 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 quarter 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-Occupational Curriculum Credit Hours 51-53**		**Credit Hours**
*ENG 1101	Composition and Rhetoric I	5
ENG 1102	Composition and Rhetoric II	5
or		
*HUM 1101	Introduction of Humanities	(5)
*SPC 1101	Fundamentals of Speech	5
*PSY 1101	Introductory Psychology	5

PSY 2250	Abnormal Psychology	5
SOC 1101	Introduction to Sociology	5
BIO 2113	Anatomy and Physiology I	5
BIO 2114	Anatomy and Physiology II	5

(Program requirements continued on following page)

OCCUPATIONAL THERAPY ASSISTANT (CONT.)

Pre-Occupational Curriculum (Cont.)

*MAT 1111	College Algebra	5
or		
MAT 1101	Mathematical Modeling	(5)
AHS 109	Medical Terminology	(3)
or		
BUS 2310	Anatomy and Terminology	5
SCT 100	Introduction to Microcomputers	3

**General education courses (listed on specific curriculum pages) are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

Occupational Curriculum Credit Hours 84		**Credit Hours**
OTA 101	Introduction to Occupational Therapy	3
OTA 102	Growth and Development	5
OTA 103	Developmental Tasks	3
OTA 104	Conditions in Occupational Therapy	5
OTA 105	Analysis of Human Movement	6
OTA 201	Psychosocial Dysfunction	7
OTA 202	Psychosocial Dysfunction Treatment Methods	3
OTA 204	Pediatric Issues	5
OTA 206	Physical Dysfunction	7
OTA 207	Physical Dysfunction Treatment Methods	3
OTA 209	Geriatric Issues	5
OTA 212	Occupational Therapy Trends and Issues	3
OTA 213	Therapeutic Adaptations	5
OTA 221	Level II Fieldwork - A	12
OTA 222	Level II Fieldwork - B	12

Total Credit Hours: 135 Minimum Credit Hours for Graduation
03/09

***Indicates General Core Curriculum**

PHARMACY TECHNOLOGY (PH03)
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.

Length of Program: Minimum of six (6) quarters

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; 3) achievement of program ready or provisional scores on the placement test; and 4) completion of general admission.

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: Pharmacy Technology Associate of Applied Science Degree

General Core Curriculum (35 Credit Hours)**		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
XXX xxxx	Area I English/Humanities/Fine Arts*	5
XXX xxxx	Area II Social/Behavioral Science*	5
MAT 1111	College Algebra	5
or		
MAT 1101	Mathmatical Modeling	5
or		
MAT 1100	Quantitative Skills and Reasoning	5
BIO 2113	Anatomy and Physiology I	5
BIO 2114	Anatomy and Physiology II	5
XXX xxx	General Education Area I, II, III*	5

* See page 89 and 90 for clarification on Area I, II, and III approved courses.

(Program requirements continued on following page)

PHARMACY TECHNOLOGY (CONT.)

Occupational Curriculum (59 Credit Hours)		Credit Hours
AHS 1015	Basic Inorganic Chemistry	4
AHS 104	Introduction to Healthcare	3
AHS 109	Medical Terminology for Allied Health Sciences	3
PHR 1000	Pharmaceutical Calculations	5
PHR 1010	Pharmacy Technology Fundamentals	5
PHR 1020	Principles of Dispensing Medications	6
PHR 1030	Principles of Sterile Medication Preparation	6
PHR 1040	Pharmacology	5
PHR 1050	Pharmacy Technology Practicum	7
PHR 2060	Advanced Pharmacy Technology Principles	5
PHR 2070	Advanced Pharmacy Technology Practicum	7
SCT 100	Introduction to Microcomputers	3

Total Credit Hours: 94 Minimum Credit Hours for Graduation

RADIATION THERAPY (RDN3)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:

• *Floyd County Campus*

Program Description:

Radiation Therapy is a sequence of courses that prepares a student for careers in the field of Radiation Therapy. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates will be competent in the general areas of humanities, fine arts, social and behavioral sciences, math, and natural sciences. Program graduates are prepared in the underlying fundamentals of radiation therapy and are well prepared for employment and subsequent upward mobility.

Length of Program: Minimum of eight (8) quarters (including pre-occupational curriculum)

Entrance Dates: Beginning of any quarter for pre-occupational curriculum. Spring quarter 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: High school diploma or GED is required.

Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the GNTC Admissions Placement Test (ASSET/COMPASS) or on one of the approved entrance tests (ACT or SAT) to be admitted as regular students. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students. Applicants who are not Registered Radiologic Technologists must take Occupational Curriculum I.

Program Final Exit Point: Radiation Therapy Associate of Applied Science Degree. Program graduates are eligible to apply to sit for a national certification exam administered by the American Registry of Radiologic Technologists that enables them to achieve status as registered radiation therapy technologists.

Pre-Occupational Curriculum (44 Credit Hours)**		**Credit Hours**
*ENG 1101	Composition and Rhetoric	5
*HUM 1101	Introduction to Humanities	5
*MAT 1111	College Algebra	5
*SPC 1101	Public Speaking	5
*PSY 1101	Introduction to Psychology	5
*BIO 2113	Anatomy and Physiology I	5
*BIO 2114	Anatomy and Physiology II	5
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3
SCT 100	Introduction to Microcomputers	3

**General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

(Program requirements continued on following page)

RADIATION THERAPY (CONT.)

Occupational Curriculum I (22 Credit Hours)		**Credit Hours**
(Must be taken if not a Registered Radiologic Technologist)		
RAD 101	Introduction to Radiology	5
RAD 123	Radiologic Science	5
RAD 120	Principles of Radiation Biology and Protection	5
RAD 117	Radiographic Imaging Equipment	4
RAD 118	Radiographic Special Procedures	3

Occupational Curriculum II (81 Credit Hours)		**Credit Hours**
RDN 150	Simulator Applications	5
RDN 152	Introduction to Radiation Therapy	5
RDN 154	Radiation Therapy Physics	5
RDN 156	Radiation Therapy Cross-Sectional Anatomy	5
RDN 158	Oncology I	5
RDN 160	Pathology	3
RDN 161	Introduction to Clinical	2
RDN 162	Radiation Therapy Clinical I	7
RDN 164	Quality Management	5
RDN 166	Treatment Planning	5
RDN 168	Oncology II	5
RDN 172	Radiation Therapy Clinical II	7
RDN 174	Research Methods	5
RDN 176	Advanced Radiation Techniques	5
RDN 182	Radiation Therapy Clinical III	7
RDN 186	Concept Integration and Review	5

Total Credit Hours: 147 Minimum Credit Hours for Graduation

(125 if student is already an RRT)

***Indicates General Core Curriculum**

RADIOLOGIC TECHNOLOGY (RT03)
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.

Length of Program: Minimum of eight (8) quarters

Entrance Dates: Beginning of any quarter for pre-occupational curriculum. Summer quarter 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: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Radiologic Technology Associate of Applied Science Degree. Graduates are eligible to apply to sit for the national certification exam to become a registered radiologic rechnologist by the American Registry of Radiologic Technologists.

Pre-Occupational Curriculum (41 Credit Hours)**		**Credit Hours**
*ENG 1101	Composition and Rhetoric	5
*HUM 1101	Introduction to Humanities	5
*MAT 1111	College Algebra	5
*PSY 1101	Introduction to Psychology	5
*SPC 1101	Public Speaking	5
BIO 2113	Anatomy and Physiology I	5
BIO 2114	Anatomy and Physiology II	5
AHS 104	Introduction to Health Care	3
SCT 100	Introduction to Microcomputers	3

**General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

Occupational Curriculum (97 Credit Hours)		
RAD 101	Introduction to Radiology	5
RAD 107	Principles of Radiographic Exposure I	4
RAD 123	Radiologic Science	5

(Program requirements continued on following page)

RADIOLOGIC TECHNOLOGY (CONT.)

Occupational Curriculum (cont.)		**Credit Hours**
RAD 132	Clinical Radiography I	5
RAD 133	Clinical Radiology II	7
RAD 103	Body, Trunk and Upper Extremity Procedures	3
RAD 106	Lower Extremity and Spine Procedure	3
RAD 109	Contrast Procedures	3
RAD 113	Cranium Procedures	2
RAD 116	Principles of Radiographic Procedures II	3
RAD 117	Radiologic Imaging Equipment	4
RAD 119	Radiologic Pathology and Medical Terminology	3
RAD 120	Principles of Radiation Biology and Protection	5
RAD 126	Radiologic Technology Review	4
RAD 134	Clinical Radiography III	7
RAD 135	Clinical Radiography IV	7
RAD 136	Clinical Radiography V	7
RAD 137	Clinical Radiography VI	10
RAD 138	Clinical Radiography VII	10

Total Credit Hours: 138 Minimum Credit Hours for Graduation

*** Indicates General Core Curriculum**

RESPIRATORY CARE TECHNOLOGY (RE03)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:
• *Floyd County Campus*

Program Description:
The Respiratory Care Technology program is a sequence of courses that prepares students for careers in the field of respiratory 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 pulmonary and cardiac medications, medical gases, humidity/aerosol therapy, positive pressure breathing, 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.

Length of Program: Minimum of eight (8) quarters

Entrance Dates: Beginning of any quarter for pre-occupational curriculum. Spring quarter 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: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Respiratory Care Technology Associate of Applied Science Degree. Graduates of the Respiratory Care Technology program are eligible to apply to sit for national entry and advanced level certification exams to become a registered respiratory therapist.

Pre-Occupational Curriculum (53 Credit Hours)**		**Credit Hours**
*ENG 1101	Composition and Rhetoric	5
*HUM 1101	Introduction to Humanities	5
*MAT 1111	College Algebra	5
*CHM 1111	Chemistry I	5
or		
AHS 1127	Health Sciences Chemistry	(5)
*PSY 1101	Introduction to Psychology	5
*SPC 1101	Public Speaking	5
BIO 2113	Anatomy and Physiology I	5
BIO 2114	Anatomy and Physiology II	5
BIO 2117	Introductory Microbiology	5
AHS 1126	Health Science Physics	5
or		
(*PHY 1110	Introductory Physics)	(5)
SCT 100	Introduction to Microcomputers	3

(Program requirements continued on following page)

RESPIRATORY CARE (CONT.)

**General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

Occupational Curriculum (75 Credit Hours)

RTT 193	Cardiopulmonary Anatomy and Physiology	10
RTT 111	Pharmacology	5
RTT 112	Introduction to Respiratory Therapy	5
RTT 113	Respiratory Therapy Lab I	5
RTT 209	Clinical Practice I	2
RTT 210	Clinical Practice II	2
RTT 211	Pulmonary Disease	5
RTT 212	Critical Respiratory Care	5
RTT 213	Mechanical Ventilation Equipment and Airway Care	5
RTT 214	Advanced Critical Care Monitoring	2
RTT 215	Pulmonary Function Testing	1
RTT 216	Pediatric and Neonatal Respiratory Care	3
RTT 217	Advanced Respiratory Care Seminar	5
RTT 218	Clinical Practice III	2
RTT 219	Clinical Practice IV	2
RTT 220	Clinical Practice V	5
RTT 222	Clinical Practice VI	10
RTT 227	Rehabilitation and Home Care	1

Total Credit Hours: 128 Minimum Credit Hours for Graduation

***Indicates General Core Curriculum**

VASCULAR TECHNOLOGY (VSN3)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:

• *Floyd County Campus*

Program Description:

The Vascular Technololgy 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 sonographer. Vascular ultrasound is 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 sonographer performs examinations at the request of, 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 sonographers 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.

Program graduates are expected to be able to perform appropriate vascular and arterial procedures including, but not limited to, Duplex ultrasound, color flow Doppler, and spectral Doppler, venous thrombosis examinations, intracranial and extracranial procedures, arterial physiologic testing of the extremities. Program graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, natural sciences or mathematics, computer literacy. Program graduates receive a vascular technology associate of applied science degree and are eligible to sit for national certification examinations, thus enabling him/her to achieve professional employment in the field with the professional title of Registered Vascular Technologist (RVT).

Length of Program: Minimum of eight (8) quarters

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

Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Vascular Technology Associate of Applied Science Degree. Graduates of the Vascular Technology program are eligible to apply to sit for the national certification exam offered by the American Registry in Diagnostic Medical Sonography (ARDMS) in Vascular Technology to become a certified vascular technologist (RVT).

Pre-Occupational Curriculum (54 Credit Hours)**	**Credit Hours**
*ENG 1101 Composition and Rhetoric	5

(Program requirements continued on following page)

VASCULAR TECHNOLOGY (CONT.)

*HUM 1101	Introduction to Humanities	5
*MAT 1111	College Algebra	5
*PSY 1101	Introduction to Psychology	5
*SPC 1101	Public Speaking	5
BIO 2113	Anatomy and Physiology I	5
BIO 2114	Anatomy and Physiology II	5
*CHM 1111	Chemistry I	5
AHS 1126	Health Science Physics	5
or		
*PHY 1110	Introductory Physics	(5)
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3
SCT 100	Introduction to Microcomputers	3

**General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

***Indicates General Core Curriculum**

Occupational Curriculum (85 Credit Hours)		**Credit Hours**
CVT 103	Electrophysiology and Cardiac Anatomy	4
VAS 110	Vascular Fundamentals	4
or		
CVT 110	Non-invasive Cardiovascular Fundamentals	(4)
CVT 111	Invasive Cardiovascular Fundamentals	4
DMS 136	Sonographic Physics I	3
DMS 202	Sonographic Physics II	2
CVT 104	Electrophysiology II	2
VAS 136	Basic Extremity Testing	5
DMS 133	Cross Sectional Anatomy	4
VAS 141	Basic Cerebrovascular and Extremity Venous Extremity	4
VAS 215	Vascular Physical Principles and Instrumentation Reg. Review	2
VAS 143	Vascular Clinical I	8
VAS 202	Advanced Cerebrovascular	3
VAS 203	Arterial Duplex	3
VAS 144	Vascular Clinical II	8
VAS 230	Essentials of Vascular Sonography (non-invasive)	2
VAS 242	Abdominal Vascular	4
VAS 205	Interventional and Therapeutic	3
VAS 245	Vascular Clinical III	8
VAS 220	Comprehensive Vascular Technology Registry Review	2
VAS 246	Vascular Clinical IV	10

Total Credit Hours: 139 Minimum Credit Hours for Graduation
09/08

DENTAL ASSISTING (DA02)
DIPLOMA

Campus Availability:

• *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.

Length of Program: Minimum of six (6) quarters (including pre-occupational curriculum)

Entrance Dates: Beginning of any quarter for pre-occupational curriculum. Winter quarter 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: High school diploma or GED is required.

Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the GNTC Admissions Placement Test (ASSET/COMPASS) or on one of the approved entrance tests (ACT or SAT) to be admitted as regular students. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Program Final Exit Point: Dental Assisting Diploma

Program graduates are eligible to apply to sit for the Dental Assisting National Board.

Pre-Occupational Curriculum (26 Credit Hours)		**Credit Hours**
*ENG 1010	Fundamentals of English I	5
*MAT 1012	Foundations of Mathematics	5
*PSY 1010	Basic Psychology	5
AHS 1011	Anatomy and Physiology	5
AHS 104	Introduction to Health Care	3
SCT 100	Introduction to Microcomputers	3
Occupational Curriculum (67 Hours)		**Credit Hours**
DEN 1020	Head and Neck Anatomy	2
DEN 1030	Preventive Dentistry	3
DEN 1050	Microbiology and Infection Control	3
DEN 1060	Oral Anatomy	5
DEN 1070	Oral Pathology and Therapeutics	3
DEN 1090	Dental Assisting National Board Preparation	2
DEN 1340	Dental Assisting I	6
DEN 1350	Dental Assisting II	6
DEN 1360	Dental Assisting III	4
DEN 1370	Dental Assisting-Expanded Functions	4
DEN 1380	Scopes of Professional Practices	1
DEN 1390	Dental Radiology	5
DEN 1400	Dental Practice Management	4
DEN 1460	Dental Practicum I	2
DEN 1470	Dental Practicum II	2
DEN 1480	Dental Practicum III	8

Total Credit Hours: 86 Minimum Credit Hours for Graduation
***Indicates General Core Curriculum**

DIAGNOSTIC MEDICAL SONOGRAPHY (SNN4)
DIPLOMA

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 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.

Program graduates are expected to be able to perform entry level abdominal, OB/GYN, pediatric, small parts, and neonatal ultrasound procedures with the use of two- dimensional B-Mode imaging, color flow Doppler, and spectral Doppler. Program graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, natural sciences or mathematics, and computer literacy. Program graduates receive a Diagnostic Medical Sonography Diploma, are eligible to sit for the American Registry of Diagnostic Medical Sonographers (ARDMS) registry examinations in Ultrasound Physics and Instrumentation (UPI), Abdomen (AB), Obstetrics/Gynecology (OB/GYN) and are employable as entry-level Diagnostic Medical Sonographers.

Length of Program: Minimum of eight (8) quarters

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

Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Diagnostic Medical Sonography Diploma

Graduates of the Diagnostic Medical Sonography Program are eligible to apply to sit for the national certification examination offered by the American Registry for Diagnostic Medical Sonographers (ARDMS) in Abdomen and/or Ob/Gyn to qualify for certification as Diagnostic Medical Sonographers (RDMS).

Pre-Occupational Curriculum (32 Credit Hours)		**Credit Hours**
*ENG 1010	Fundamentals of English I	5
*MAT 1013	Algebraic Concepts	5
EMP 1000	Interpersonal Relations and Professional Development	3
(Program requirements continued on following page)		
AHS 1011	Anatomy and Physiology	5

AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3
AHS 1126	Health Science Physics	5
or		
*PHY 1110	Introductory Physics	(5)
SCT 100	Introduction to Microcomputers	3

Occupational Curriculum (90 Credit Hours)		**Credit Hours**
DMS 131	Foundations of Sonography	5
DMS 132	Sonographic Appearance of Normal Anatomy	4
DMS 133	Cross Sectional Anatomy	4
DMS 134	Pelvic Sonography & Pathology	2
DMS 135	Abdominal Sonography & Pathology	5
DMS 136	Sonographic Physics I	3
DMS 137	Clinical Sonography I	8
DMS 201	Normal Obstetric Sonography	3
DMS 202	Sonographic Physics II	2
DMS 203	High Resolution Imaging	2
DMS 204	Clinical Sonography II	8
DMS 205	Interventional Sonography	1
DMS 206	Pediatric Sonography	2
DMS 207	Abnormal Obstetric Sonography	3
DMS 208	Introduction to Vascular Sonography	2
DMS 209	Clinical Sonography III	8
DMS 210	Comprehensive Physics Review	2
DMS 211	Clinical Sonography IV	11
DMS 212	Comprehensive Abdomen Registry Review	2
DMS 213	Comprehensive OB/GYN Registry Review	2
DMS 214	Clinical Sonography V	11

Total Credit Hours: 122 Minimum Credit Hours for Graduation

***Indicates General Core Curriculum**

ECHOCARDIOGRAPHY (ECH4)
DIPLOMA

Campus Availability:

• *Floyd County Campus*

Program Description:

The Echocardiography diploma 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 echocardiographers. Echocardiography is an allied health profession specifically concerning the diagnosis and treatment of patients with cardiac diseases. The profession requires critical thinking skills, judgment, and the ability to provide appropriate health care services. An echocardiographer 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 can be made. Echocardiographers use high frequency sound waves to produce dynamic visual pictures of the heart and related vasculature. 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 heart; journal and case reviews; and a comprehensive registry review.

Program graduates are expected to be able to perform appropriate cardiac procedures including, but not limited to, two dimensional B-Mode imaging, color flow Doppler, and spectral Doppler, M-Mode, electrocardiography, and exercise stress testing. Program graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, natural sciences or mathematics, and computer literacy. Program graduates receive a diploma in Echocardiography. They are eligible to sit for the national certification examinations administered by Cardiovascular Credentialing International (CCI) and/or the American Registry of Diagnostic Medical Sonographers (ARDMS) registry in Cardiology and are employable as entry-level echocardiographers.

Length of Program: Minimum of five (5) quarters

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

Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Echocardiography Diploma

Upon completion of the Echocardiography program, the student is eligible to apply to sit for national exam certification offered by the American Registry for Diagnostic Medical Sonographers (ARDMS) in Adult Echocardiography to become a Registered Diagnostic Cardiac Sonographer (RDCS).

(Program requirements continued on following page)

ECHOCARDIOGRAPHY (CONT.)

Pre-Occupational Curriculum (42 Credit Hours)		**Credit Hours**
*ENG 1010	Fundamentals of English I	5
*MAT 1013	Algebraic Concepts	5
*EMP 1000	Interpersonal Relations and Professional Development	3
or		
*PSY 1010	Basic Psychology	(5)
*CHM 1111	Chemistry I	5
or		
AHS 1127	Health Sciences Chemistry	(5)
SCT 100	Introduction to Microcomputers	3
AHS 1011	Anatomy and Physiology	5
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3
AHS 1126	Health Science Physics	5
or		
*PHY 1110	Introductory Physics	(5)

Occupational Curriculum (86 Credit Hours)		**Credit Hours**
CVT 103	Electrophysiology and Cardiac Anatomy	4
CVT 104	Electrophysiology II	2
CVT 108	Cardiovascular Advanced Hemodynamics	3
CVT 109	Cardiovascular Pathophysiology	3
CVT 111	Invasive Cardiovascular Fundamentals	4
DMS 136	Sonographic Physics I	3
DMS 202	Sonographic Physics II	2
DMS 210	Comprehensive Physics Registry Review	2
ECH 110	Introduction to Echocardiography	4
ECH 131	Echocardiography I	6
ECH 133	Echocardiography II	6
ECH 136	Echocardiography Clinical I	8
ECH 137	Echocardiography Clinical II	8
ECH 155	Professional Development	1
ECH 230	Essentials of Vascular Sonography (Non-invasive)	2
ECH 231	Echocardiography III (Pediatric)	6
ECH 236	Echocardiography Clinical III	8
ECH 237	Echocardiography Clinical IV	12
ECH 240	Comprehensive Registry Review	2

Total Credit Hours: 128 Minimum Credit Hours for Graduation

***Indicates General Core Curriculum**

09/08

NEUROMUSCULAR THERAPIST (NMT2)
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, musculo-skeletal 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.

Length of Program: Minimum of six (6) quarters (including pre-occupational curriculum)

Entrance Dates: Beginning of any quarter for pre-occupational curriculum. Spring quarter 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: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the GNTC Admissions Placement Test (ASSET/COMPASS) or on one of the approved entrance tests (ACT or SAT) to be admitted as regular students. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Program Final Exit Point: Neuromuscular Therapist Diploma
Program graduates are eligible to sit the National Certification Examination.

Pre-Occupational Curriculum (29 Credit Hours)		**Credit Hours**
*ENG 1010	Fundamentals of English I	5
*MAT 1012	Foundations of Mathematics	5
or		
*MAT 1011	Business Mathematics	(5)
*PSY 1010	Basic Psychology	5
AHS 1011	Anatomy and Physiology	5
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3
SCT 100	Introduction to Microcomputers	3

(Program requirements continued on following page)

NEUROMUSCULAR THERAPIST (CONT.)

Occupational Curriculum (59 Credit Hours)		Credit Hours
NTT 100	Musculoskeletal Anatomy and Physiology	5
NTT 101	Neural Science and Pathology	5
NTT 102	Pathology	3
NTT 103	Neuromuscular Therapy Fundamentals	5
NTT 105	Technique and Theory I	6
NTT 106	Clinic I	5
NTT 107	Law and Ethics	1
NTT 108	Technique and Theory II	6
NTT 109	Adjunctive Modalities	3
NTT 110	Progressive Modalities	3
NTT 111	Licensure Review	3
NTT 112	Clinic II	5
NTT 114	Musculoskeletal Anatomy and Pathology	3
NTT 116	Wellness I	2
NTT 118	Wellness II	2
NTT 123	Professional Leadership	2

Total Credit Hours: 88 Minimum Credit Hours for Graduation

***Indicates General Core Curriculum**

08/08

PHARMACY TECHNOLOGY (PH02)
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.

Length of Program: Minimum of six (6) quarters

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; 3) achievement of program ready or provisional scores on the placement test; and 4) completion of general admission.

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: Pharmacy Technology Diploma

General Core Curriculum (15 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
MAT 1012	Foundations of Mathematics	5
PSY 1010	Basic Psychology	5

Occupational Curriculum (64 Credit Hours)		**Credit Hours**
SCT 100	Introduction to Microcomputers	3
AHS 1011	Anatomy and Physiology	5
AHS 1015	Basic Inorganic Chemistry	4
AHS 104	Introduction to Healthcare	3
AHS 109	Medical Terminology for Allied Health Sciences	3
PHR 1000	Pharmaceutical Calculations	5
PHR 1010	Pharmacy Technology Fundamental	5
PHR 1020	Principles of Dispensing Medications	6
PHR 1030	Principles of Sterile Medication Preparation	6
PHR 1040	Pharmacology	5
PHR 1050	Pharmacy Technology Practicum	7
PHR 2060	Advanced Pharmacy Technology Principles	5
PHR 2070	Advanced Pharmacy Technology Practicum	7

Total Credit Hours: 79 Minimum Credit Hours for Graduation

RADIATION THERAPY (RDN4)
DIPLOMA

Campus Availability:
• *Floyd County Campus*

Program Description:
Radiation Therapy is a sequence of courses that prepares a student for careers in the field of Radiation Therapy. Learning opportunities develop academic and professional knowledge and skills required for job acquisition, retention, and advancement. Program graduates will be competent in the general areas of humanities, fine arts, social and behavioral sciences, math, and natural sciences. Program graduates are prepared in the underlying fundamentals of radiation therapy and are well prepared for employment and subsequent upward mobility.

Length of Program: Minimum of 6 quarters

Entrance Dates: Beginning of any quarter for pre-occupational curriculum. Fall quarter 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: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the GNTC Admissions Placement Test (ASSET/COMPASS) or on one of the approved entrance tests (ACT or SAT) to be admitted as regular students. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students. Applicants must be a registered radiologic technologist and document post-secondary education in human anatomy and physiology, physics, mathematics, medical terminology, statistics and computer application, and oral and written communications.

Program Final Exit Point: Radiation Therapy Diploma
Program graduates are eligible to apply to sit for a national certification exam administered by the American Registry of Radiologic Technologists that enables them to achieve status as registered radiation therapy technologists.

Pre-Occupational Curriculum (29 Credit Hours)		**Credit Hours**
*ENG 1010	Fundamentals of English I	5
*MAT 1013	Algebraic Concepts	5
*PSY 1010	Basic Psychology	5
AHS 1011	Anatomy and Physiology	5
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3
SCT 100	Introduction to Microcomputers	3

Occupational Curriculum (81 Credit Hours)		**Credit Hours**
RDN 150	Simulator Applications	5
RDN 152	Introduction to Radiation Oncology	5
RDN 154	Radiation Therapy Physics	5
RDN 156	Radiation Therapy Cross-Sectional Anatomy	5
RDN 158	Oncology I	5

(Program requirements continued on following page)

RADIATION THERAPY (CONT.)

Occupational Curriculum (Cont.)		Credit Hours
RDN 160	Pathology	3
RDN 161	Introduction to Clinical	2
RDN 162	Radiation Therapy Clinical I	7
RDN 164	Quality Management	5
RDN 166	Treatment Planning	5
RDN 168	Oncology II	5
RDN 172	Radiation Therapy Clinical II	7
RDN 174	Research Methods	5
RDN 176	Advanced Radiation Techniques	5
RDN 182	Radiation Therapy Clinical III	7
RDN 186	Concept Integration and Review	5

Total Credit Hours: 110 Minimum Credit Hours for Graduation

*** Indicates General Core Curriculum**

RADIOLOGIC TECHNOLOGY (RT04)
DIPLOMA

Campus Availability:
• *Floyd County Campus*

Program Description:
The Radiologic Technology 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 Radiologic Technology diploma, have the qualifications of a radiographer, and are eligible to sit for a national certification examination for radiographers.

Length of Program: Minimum of eight (8) quarters

Entrance Dates: Beginning of any quarter for pre-occupational curriculum. Summer quarter 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: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Radiologic Technology Diploma

Graduates are eligible to apply to sit for the national certification exam to become a registered radiologic technologist by the American Registry of Radiologic Technologists.

Pre-Occupational Curriculum (29 Credit Hours)		**Credit Hours**
*ENG 1010	Fundamentals of English I	5
*MAT 1013	Algebraic Concepts	5
EMP 1000	Interpersonal Relations and Professional Development	3
AHS 1011	Anatomy and Physiology	5
AHS 104	Introduction to Health Care	3
AHS 152	Advanced Anatomy and Physiology	5
SCT 100	Introduction to Microcomputers	3

Occupational Curriculum (97 Credit Hours)		**Credit Hours**
RAD 101	Introduction to Radiology	5
RAD 103	Body, Trunk and Upper Extremity Procedures	3
RAD 106	Lower Extremity and Spine Procedure	3
RAD 107	Principles of Radiographic Exposure I	4
RAD 109	Contrast Procedures	3
RAD 113	Cranium Procedures	2
RAD 116	Principles of Radiographic Procedures II	3
RAD 117	Radiologic Imaging Equipment	4
RAD 119	Radiologic Pathology and Medical Terminology	3
RAD 120	Principles of Radiation Biology and Protection	5
RAD 123	Radiologic Science	5

(Program requirements continued on following page)

RADIOLOGIC TECHNOLOGY (CONT.)

Occupational Curriculum (Cont.)		**Credit Hours**
RAD 126	Radiologic Technology Review	4
RAD 132	Clinical Radiography I	5
RAD 133	Clinical Radiology II	7
RAD 134	Clinical Radiography III	7
RAD 135	Clinical Radiography IV	7
RAD 136	Clinical Radiography V	7
RAD 137	Clinical Radiography VI	10
RAD 138	Clinical Radiography VII	10

Total Credit Hours: 126 Minimum Credit Hours for Graduation

*** Indicates General Core Curriculum**
10/08

VASCULAR TECHNOLOGY (VSN4)
DIPLOMA

Campus Availability:
• *Floyd County Campus*

Program Description:
The Vascular diploma 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 sonographer. Vascular Ultrasound is 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 sonographer 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 sonographers 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.

Program graduates are expected to be able to perform appropriate vascular and arterial procedures including, but not limited to, Duplex ultrasound, color flow Doppler, and spectral Doppler, venous thrombosis examinations, intracranial and extracranial procedures, arterial physiologic testing of the extremities. Program graduates are to be competent in the general areas of humanities or fine arts, social or behavioral sciences, natural sciences or mathematics, computer literacy. Program graduates receive a diploma in Vascular Ultrasound. They are eligible to sit for national certification examinations thus enabling him/her to achieve professional employment in the field with the professional title of registered vascular technologist (RVT).

Length of Program: Minimum of six (6) quarters

Entrance Dates: Beginning of any quarter for pre-occupational curriculum. Fall quarter 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.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.
Program Final Exit Point: Vascular Technology Diploma
Program graduates are eligible to apply to sit for the national certification exam offered by the American Registry in Diagnostic Medical Sonography (ARDMS) in Vascular Technology to become a registered vascular technologist (RVT).

(Program requirements continued on following page)

VASCULAR TECHNOLOGY (CONT.)

Pre-Occupational Curriculum (37 Credit Hours)		**Credit Hours**
*ENG 1010	Fundamentals of English I	5
*MAT 1013	Algebraic Concepts	5
EMP 1000	Interpersonal Relations and Professional Development	3
or		
PSY 1010	Basic Psychology	(5)
*PHY 1110	Introductory Physics	5
or		
AHS 1126	Health Science Physics	(5)
*CHM 1111	Chemistry I	5
or		
AHS 1127	Health Sciences Chemistry	(5)
AHS 1011	Anatomy and Physiology	5
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3
SCT 100	Introduction to Microcomputers	3

Occupational Curriculum (86 Credit Hours)		**Credit Hours**
CVT 103	Electrophysiology and Cardiac Anatomy	4
VAS 110	Vascular Fundamentals	4
or		
CVT 110	Non-invasive Cardiovascular Fundamentals	(4)
CVT 111	Invasive Cardiovascular Fundamentals	4
DMS 136	Sonographic Physics I	3
DMS 202	Sonographic Physics II	2
CVT 104	Electrophysiology II	2
VAS 136	Basic Extremity Testing	5
DMS 133	Cross Sectional Anatomy	4
VAS 141	Basic Cerebrovascular and Extremity Venous	4
VAS 215	Vascular Physical Principles and Instrumentation Reg. Review	2
VAS 143	Vascular Clinical I	8
VAS 202	Advanced Cerebrovascular	3
VAS 203	Arterial Duplex	3
VAS 144	Vascular Clinical II	8
VAS 230	Essentials of Vascular Sonography (non-invasive)	2
VAS 242	Abdominal Vascular	4
VAS 205	Therapeutic and Interventional	3
VAS 245	Vascular Clinical III	8
VAS 220	Comprehensive Vascular Technology Registry Review	2
VAS 246	Vascular Clinical IV	10

Total Credit Hours: 122 Minimum Credit Hours for Graduation
*** Indicates General Core Curriculum**
09/08

HEALTH CARE ASSISTANT (5CJ1)
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 Assistant program of study is consistent with the purpose of Georgia Northwestern Technical College. The program provides academic foundations in communications, mathematics, and human relations, as well as technical fundamentals. Program graduates are trained in the underlying fundamentals of Health Care delivery and are well prepared for employment and subsequent upward mobility.

Length of Program: Minimum of four (4) quarters

Entrance Date: Varies

Entrance Requirements:
Age: 17 years old for entrance into Health Technology pre-occupational curriculum
18 years old for entrance into Health Technology programs
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and math on the GNTC Admissions Placement Test (ASSET) or on one of the approved entrance tests (ACT or SAT) to be admitted as regular students. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Program Final Exit Point: Health Care Assistant Technical Certificate of Credit

Upon completion of the Health Care Technician 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 (15 credit hours)

Required Courses		Credit Hours
*ENG 1010	Fundamentals of English I	5
*MAT 1012	Foundations of Mathematics	5
or		
MAT 1013	Algebraic Concepts	5
PSY 1010	Basic Psychology	5

***Indicates General Core Curriculum**

(Program requirements continued on following page)

HEALTH CARE ASSISTANT (CONT.)

General Occupational Curriculum (14 credit hours)

Required Courses		Credit Hours
SCT 100	Introduction to Microcomputers	3
AHS 1011	Anatomy and Physiology	5
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3

And completion of 15-30 credit hours in one of the following specializations:

Certified Nursing Assistant Specialty (44 total credit hours in specialty)

CNA 100	Patient Care Fundamentals	8
AHS 103	Nutrition and Diet Therapy	2
XXX xxx	Occupationally Related Elective (See advisor for recommended list)	5

Total Credit Hours in Occupational Curriculum: 15

Phlebotomy Specialty (46 total credit hours in specialty)

PHL 103	Introduction to Venipuncture	4
PHL 105	Clinical Practice	8
XXX xxx	Occupationally Related Elective (See advisor for recommended list)	5

Total Credit Hours in Occupational Curriculum: 17

Medical Receptionist Specialty (50 total credit hours in specialty)

BUS 1130	Document Processing	6
BUS 1240	Office Procedures	5
BUS 2320	Medical Document Processing/Transcription	5
BUS 2340	Medical Administrative Procedures	5

Total Credit Hours in Occupational Curriculum: 21

Medical Coding Specialty (51 total credit hours in specialty)

BUS 1130	Document Processing	6
MAS 112	Human Diseases	5
MAS 151	ICD-9-CM Coding I	3
MAS 152	ICD-9 Coding II	3
MAS 153	Physicians' Procedural Coding	3

Total Credit Hours in Occupational Curriculum: 22
02/08

HEALTH CARE SCIENCE (HHS1)
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 program of study is consistent with the purpose of Georgia Northwestern Technical College. The program provides academic foundations in communications, mathematics, and human relations, as well as technical fundamentals. Program graduates are trained in the underlying fundamentals of health care delivery and are well prepared for employment and subsequent upward mobility.

Length of Program: Minimum of four quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: 17 years of age for admission into pre-occupational classes
18 years of age for admission into Health Technology programs
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and math on the GNTC Admissions Placement Test (ASSET or COMPASS) or on one of the approved entrance tests (ACT or SAT) to be admitted as regular students. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Program Final Exit Point: Health Care Science Technical Certificate of Credit
Upon completion of the Health Care Science program graduates will be prepared for entry level employment in one of two health care fields: certified nursing assistant or phlebotomy technician.

Pre-Occupational Curriculum (28 Credit Hours)		Credit Hours
ENG 1101	Composition and Rhetoric	5
MAT 1111	College Algebra	5
or		
MAT 1101	Mathematical Modeling	(5)
or		
MAT 1113	Precalculus	(5)
or		
MAT 1100	Quantitative Skills and Reasoning	(6)
PSY 1101	Introduction to Psychology	5
HUM 1101	Introduction to Humanities	5
SPC 1101	Public Speaking	5
SCT 100	Intro to Computers	3

(Program requirements continued on following page)

HEALTH CARE SCIENCE, (CONT.)

Plus a total of no more than 30 hours from the three (3) categories below:

1. Sciences (10-20 Credit Hours)		**Credit Hours**
10-20 Credit Hours to be selected from the following list:		
BIO 1111	Biology I	5
BIO 1112	Biology I	5
BIO 2113	Anatomy and Physiology I	5
BIO 2114	Anatomy and Physiology II	5
BIO 2117	Introductory Microbiology	5
CHM 1111	Chemistry I	5
or		
AHS 1127	Health Sciences Chemistry	(5)
PHY 1110	Introductory Physics	5
or		
AHS 1126	Health Science Physics	(5)

Total Credit Hours: Maximum of 20

2. General Occupational Curriculum		**Credit Hours**
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3

Total Credit Hours: 6

3. And completion of ONE of the following sets of occupational curriculum for a specialization

3A. Certified Nursing Assistant Specialty		**Credit Hours**
CNA 100	CNA Fundamentals	8
AHS 103	Nutrition and Diet Therapy	2

Total Credit Hours: 10

3B. Phlebotomy Specialty		
PHL 103	Introduction to Venipuncture	4
PHL 105	Clinical Practice	8

Total Credit Hours: 12

MAMMOGRAPHY (MZN1)
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. 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 quarter.

Length of Program: Minimum of one (1) quarter

Entrance Date: Beginning of any quarter (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: High school diploma or GED is required. Open to anyone who is registered with the ARRT as a radiographer (RRT).
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Mammography Technical Certificate of Credit

Required Courses		Credit Hours
RAD 251	Mammography Clinical	7
RAD 252	Mammography Anatomy-Pathology and Positioning	4
RAD 253	Mammography Physics, Instrumentation, & Quality Assurance	5

Total Credit Hours: 16 Minimum Credit Hours for Graduation

PHARMACY ASSISTANT (PHO1)
CERTIFICATE

Campus Availability:

• *Walker County Campus*

Program Description:

The Pharmacy Assistant certificate program provides students the knowledge, skills, and attitudes necessary to succeed in the pharmaceutical field. Program graduates will be competent in mathematics, microcomputer applications, anatomy and physiology, fundamental concepts and principles in the pharmaceutical field, drug calculation, and administrative principles of receiving, storing, and dispensing medications, and skills applications.

Length of Program: Minimum of one (2) quarter

Entrance Date: Fall, Spring quarters (Day); Winter quarter (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; 3) achievement of program ready or provisional scores on the placement test; and 4) completion of general admission.
Education: High School transcript or GED official notice of completion is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the Admissions Placement Test (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.
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).

Program Final Exit Point: Pharmacy Assistant Technical Certificate of Credit.

Please note: Pharmacy Assistant certificate classes are offered both day and evening; however, DIS 150 may require some clinical hours during the daytime. Pharmacy Technology degree and diploma offered only daytime.

Occupational Curriculum		**Credit Hours**
MAT 1012	Foundations of Mathematics	5
AHS 1011	Anatomy and Physiology	5
BUS 2310	Anatomy and Medical Terminology for the Medical Adm. Asst.	5
SCT 100	Introduction to Microcomputers	3
PHR 1010	Pharmacy Technology Fundamentals	5
PHR 1000	Pharmaceutical Calculations	5
PHR 1020	Principles of Dispensing Medications	6
PHR 1050	Pharmacy Technology Practicum	3
Total Credit Hours Required for Graduation		**37**

Note: PHR 1050 may require some clinical hours during the daytime.

PHLEBOTOMY TECHNICIAN (PYP1)
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.

Length of Program: Minimum of two (2) quarters

Entrance Date: Winter Quarter

Entrance Requirements:
Age: 17 years old for entrance into Health Technology pre-occupational curriculum
18 years old for entrance into Health Technology programs
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.
Other: 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 PHL 103 course.

Program Final Exit Point: Phlebotomy Technician Technical Certificate of Credit

Required Courses		**Credit Hours**
AHS 1011	Anatomy and Physiology	5
BUS 2310	Anatomy and Medical Terminology for the Medical Admin. Asst.	5
PHL 103	Introduction to Venipuncture	4
PHL 105	Clinical Practice	8

Total Credit Hours: 22 Minimum Credit Hours for Graduation
02/09

Note: PHL 105 may require some clinical hours during the daytime.

Nursing and Allied Health Technologies

Denise Grant, Dean

The following associate of applied science (A.A.S.) 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 Degree Nursing Programs

Associate Degree Nursing (NUN3) - W
Nursing LPN to ADN Transition (NUR3) - W

Associate of Applied Science Degree Programs

Medical Assisting (MA03) - W
Medical Office Management (MOM3) - F
Surgical Technology (ST03) - W

Diploma Programs

Medical Assisting (MA02) - F, W
Paramedic Technology (EM02) - F
Practical Nursing (PN04) - F, W
Surgical Technology (ST02) - W

Certificate Programs

Central Sterile Processing (CSR1) - W
Emergency Medical Technician, Basic (EMB1) - F
Emergency Medical Technician, Intermediate (EM01) - F, G, W
Health Care Assistant (5CJ1) - F, G, P, W
Health Care Science (HHS1) - F, G, P, W
Patient Care Assisting (TTP1) - F
Patient Care Technician (PCG1) - 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.

Upon completion of programs in the Nursing and Allied Health Division, students will have many employment opportunities.

I. Admission Procedures

A. Submit an application to GNTC and $15 application fee. This is a non-returnable, one-time fee. You may submit the application and credit card information by downloading the application in PDF format from GNTC's website: http://www.gntc.edu, printing it, completing it, and mailing it to:

Floyd County Campus
Admissions Office
Georgia Northwestern Technical College
One Maurice Culberson Drive
Rome, Georgia 30161

Walker County Campus
Admissions Office
Georgia Northwestern Technical College
PO Box 569
265 Bicentennial Trail
Rock Spring, Georgia 30739

B. Submit an official High School Transcript, or official GED completion record, and all transcripts from any colleges or postsecondary schools attended for credit.

C. Complete COMPASS/ASSET Admission Testing. Applicants who have not taken an entrance assessment within the last five (5) years will be required to do so. Acceptable SAT or ACT scores may be substituted if taken within the last five (5) years. Note: Any applicant, who has successfully completed, with a "C" grade or better, transferable English and math courses from an accredited institution, may be exempt from taking the entrance examination. These courses must be the equivalent to the entry-level English and math courses required in the applicant's chosen program of study.

D. 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 must 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 quarter 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 quarter. This form will be available to students during the third week of the quarter. An announcement will be made to students regarding this process.

E. 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 pre-occupational 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 Allied

Health 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 quarter, 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 qualified for entry into the program. All students in the eligibility pool will be notified of their status and advised of their options.

F. 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.

G. 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 (During pre-occupational curriculum only)
b. Nursing and Allied Health - (Pre-occupational)
c. Occupational

A. Learning Support 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 eligible

for Learning Support Admissions. Learning Support courses are offered to enable students to meet recommended standards. Instruction is offered in the fundamentals of reading, math, and English, thus improving the student's chance of success upon enrolling into a regular program of study. Students in this category can take any pre-occupational curriculum not directly related to the area of the student's developmental studies. Upon successful completion of the Learning Support program including reassessment as required by school policy, a student is eligible for acceptance to the Nursing and Allied Health - Pre-occupational designation.

An admission placement test is used to determine whether a student is recommended to take Learning Support course(s). Based upon test results, the student may be recommended to take classes in one, two, or all of these areas. If an applicant scores below the recommended level for entry into Learning Support courses, referral will be made to the Adult Education program.

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 (5CJ1), Health Care Science (HHS1), and/or Technical Communications (5DQ1). 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 in a biological or physical sciences degree field, 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 with approval by the Office of Student Affairs. 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 Microcomputers	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 quarterly 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 is required for all Nursing and Allied Health programs. There is an exception for high school dual enrollment in the Patient Care Technician Certificate.

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 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
Associate Degree
COMPASS:
Reading Skills 80, Numerical Skills 40, Writing Skills 63, Algebra 42
SAT: Critical Reading/Verbal 480, Math 440
ACT: English 21, Math 19

Diploma/Certificate
COMPASS:
Reading Skills 74, Numerical Skills 36, Writing Skills 38, Algebra 33
SAT: Critical Reading/Verbal 430, Math 400
ACT: English 18, Math 16

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 Degree Nursing
The Associate Degree 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 Technician (PCT)/Patient Care Assisting (CNA)
The Patient Care Technician and Patient Care Assisting programs at Georgia Northwestern Technical College are 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 Course Requirements

Degree and Diploma Programs
Classes taken during a student's pre-occupational period provide a foundation of knowledge built upon during the occupational program courses. Most of the courses must be taken before a student enters the program of choice for which they qualify, but some may be taken during the occupational program period. The charts below indicate the pre-occupational curriculum for each program and when they may be taken.

	Associate Degrees Nursing (ADN)		Associate of Applied Science Degrees			Diplomas			
ALL courses in this section must be completed before a student can be placed in GNTC's program pool.	NUN3 Nursing	NUR3 Nursing LPN/ADN Transition	MA03 Medical Assisting	MOM3 Medical Office Management	ST03 Surgical Technology	MA02 Medical Assisting	EM02 Paramedic Technology	PN04 Practical Nursing	ST02 Surgical Technology
	BIO 2113 BIO 2114 BIO 2117 *PSY 1101 PSY 2103 *MAT 1111 or Equivalent in higher Math *ENG 1101 *ENG1102 or *HUM 1101 or *ART 1101 or *MUS 1101 *SPC 1101 SCT 100	BIO 2113 BIO 2114 BIO 2117 PSY 1101 PSY 2103 *MAT 1111 or *Equivalent in higher Math * ENG 1101 *ENG1102 or *HUM 1101 or *ART 1101 or *MUS 1101 *SPC 1101 SCT 100	*ENG 1101 *ENG 1102 or *HUM 1101 or *ART 1101 or *MUS 1101 *SPC1101 or *ENG 1105 *PSY 1101 SOC 1101 BIO 2113 BIO 2114 *MAT 1111 BUS 1130 BUS 1140 SCT 100 AHS 104 AHS 109	*ENG 1101 *HUM 1101 or *ART 1101 or *MUS 1101 or *ENG 1102 *MAT 1111 *PSY 1101 *SPC 1101 or *ENG 1105 BIO 2113 BIO 2114 AHS 104 AHS 109 BUS 1130 SCT 100	*ENG 1101 *HUM 1101 or *ART 1101 or *MUS 1101 or *ENG 1102 *SPC 1101 *SOC 1101 or *ENG 1105 *MAT 1111 *PSY 1101 BIO 2113 BIO 2114 BIO 2117 AHS 104 AHS 109 SCT 100	*ENG 1010 *MAT 1012 *PSY 1010 AHS 1011 AHS 104 AHS 109 BUS 1130 SCT 100	*ENG 1010 *MAT 1012 AHS 1011 SCT 100	*ENG 1010 *MAT 1012 * PSY 1010 AHS 1011 AHS 103 AHS 104 AHS 109 SCT 100	*ENG 1010 *MAT 1012 * PSY 1010 AHS 1011 AHS 104 AHS 109 SCT 100

*Indicates general core curriculum.
**Must have 60 hours from a diploma Nursing and Allied Health Technologies program in order to graduate with an associate of applied science degree in Health.

Pre-Occupational Course Requirements Chart Legend

ADN Degree Programs	A.A.S. Degree Programs	Diploma Programs
NUN3 Nursing	MA03 Medical Assisting	MA02 Medical Assisting
NUR3 Nursing LPN to ADN Transition	MOM3 Medical Office Management	EM02 Paramedic Technology
	ST03 Surgical Technology	PN04 Practical Nursing
		ST02 Surgical Technology

NURSING (NUN3)
ASSOCIATE DEGREE NURSING (ADN)

Campus Availability:
• *Walker County Campus*

Program Description: The associate degree 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 six (6) quarters after being admitted into Nursing courses

Entrance Date: ADN - Beginning of any quarter for pre-occupational curriculum, fall quarter for occupational curriculum

Entrance Requirements for Entering Nursing Pre-Occupational Curriculum (See guidelines on the following 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-Occupational Curriculum (48 Credit Hours)		**Credit Hours****
BIO 2113	Anatomy and Physiology I	5 (4 class, 3 lab)
BIO 2114	Anatomy and Physiology II	5 (4 class, 3 lab)
BIO 2117	Introductory Microbiology	5 (4 class, 3 lab)
*PSY 1101	Introduction to Psychology	5 (5 class)
*PSY 2103	Human Development	5 (5 class)
*MAT 1111	College Algebra	5 (5 class)
or		
*XXX xxx	Equivalent or Higher Math Course	(5)
(Note: Contemporary Math no longer fills this requirement.)		
*ENG 1101	Composition and Rhetoric	5 (5 class)
*ENG 1102	Literature and Composition	5 (5 class)
or		
*HUM 1101	Introduction to Humanities	(5) (5 class)
or		
*ART 1101	Art Appreciation	(5) (5 class)
or		
*MUS 1101	Music Appreciation	(5) (5 class)
*SPC 1101	Public Speaking	5 (5 class)
SCT 100	Introduction to Microcomputers	3 (3 class)

(Program requirements continued on following page)

NURSING ADN (CONT.)

Nursing Curriculum (62 Credit Hours)

NUR 191	Fundamentals of Nursing	6 (5 class, 3 lab)
NUR 192	Dosage Calculations	3 (3 class)
NUR 193	Lifespan Nursing Care I	10 (7 class, 9 lab)
NUR 194	Lifespan Nursing Care II	10 (7 class, 9 lab)
NUR 291	Nursing Care of the Childbearing Family	10 (7 class, 9 lab)
NUR 292	Nursing to Promote Mental Health	10 (7 class, 9 lab)
NUR 293	Lifespan Nursing Care III	10 (7 class, 9 lab)
NUR 294	Nursing Seminar	3 (3 class)

Total Credit Hours: 110 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 ADN program take the required classes. Please contact the Nursing Division for more information.

Associate Degree Nursing (ADN) Guidelines: The associate degree 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 ADN program, may begin taking general core curriculum classes at any time. Students who are enrolled in these courses should understand that enrollment in general education classes does not guarantee admission to the ADN 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 ADN 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 summer quarter. An application to the ADN program (available in the Nursing and Allied Health Technologies office) 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 quarter. 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.

By the end of the spring quarter prior to selection, the applicants must
1) be officially admitted to Georgia Northwestern Technical College and have declared associate degree nursing as a major;

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 (all attempts will be included in the calculation);
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 ADN 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 spring quarter 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. 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 ADN 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) Health Stream programs,
7) ADN 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.

Additional Guidelines for Generic Track
Transfer Credit
Students with transfer credit from another nursing program may be considered for admission with advanced standing on a-case-by case basis. They must meet the same entrance requirements as all other students; however, satisfying the listed requirements does not guarantee admission to the program with advanced standing. Transferring students will not be given priority over currently enrolled or returning students. Each student must also submit a letter of recommendation from his or her former nursing program director.

Retention Policies
In order to progress through the associate degree nursing program, students must:
1) Maintain a cumulative GPA of 2.0 (70%) 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 80% or 90% 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. 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 ADN program for an interview at least one quarter prior to the quarter of readmission.

In order to be considered for readmission, students must:
1) Meet the current admission requirements.
2) Enroll in the unsuccessful course.
3) Complete current program requirements.

Re-entry is conditional upon class and clinical space availability. If re-entry is requested for NUR 191 or NUR 192 (first quarter nursing courses) students will be placed back into the applicant pool for the next class selection. They will be ranked using the same process as all other candidates; however, Nursing courses will be included in the criteria used and in calculating the GPA. If the re-entry is for any subsequent courses, a re-entry score will be calculated based on prior nursing course averages and dosage calculations examination averages. Students will then be ranked according to the re-entry score. All efforts will be made to facilitate re-entry.

Graduation Requirements
All courses in the Nursing curriculum must be successfully completed in order to graduate; however, only students who have completed required course work, and received the ADN 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 NUR 294 Nursing Seminar course in the final quarter of the program. Students must score 875 on the HESI Exit Exam within three attempts to pass NUR 294. 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 quarter, 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 NUR 294 and will have to repeat the course. 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 ADN TRANSITION PROGRAM (NUR3)
ADN – ASSOCIATE DEGREE NURSING

Campus Availability:
• *Walker County Campus*

Program Description: The associate degree 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 of four (4) quarters

Entrance Date: Beginning of any quarter for pre-occupational curriculum, summer quarter 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: Associate Degree in Nursing

Pre-Occupational Curriculum (48 Credit Hours)		**Credit Hours**
BIO 2113	Anatomy and Physiology I	5 (4 class, 3 lab)
BIO 2114	Anatomy and Physiology II	5 (4 class, 3 lab)
BIO 2117	Introductory Microbiology	5 (4 class, 3 lab)
*PSY 1101	Introduction to Psychology	5 (5 class)
*PSY 2103	Human Development	5 (5 class)
*MAT 1111	College Algebra	5 (5 class)
or		
*XXX xxx	Equivalent or Higher Math Course	(5)
(Note: Contemporary Math no longer fills this requirement.)		
*ENG 1101	Composition and Rhetoric	5 (5 class)
*ENG 1102	Literature and Composition	5 (5 class)
or		
*HUM 1101	Introduction to *Humanities	(5)(5 class)
or		
*ART 1101	Art Appreciation	(5)(5 class)
or		
*MUS 1101	Music Appreciation	(5)(5 class)
*SPC 1101	Public Speaking	5 (5 class)
SCT 100	Introduction to Microcomputers	3 (3 class)

Nursing Curriculum (9 Credit Hours)	
**NUR 200 LPN to ADN Transition	9 (7 class, 6 clinical)

Total Credit Hours: 57 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 ADN program take the required classes. Please contact the Nursing Division for more information.

Nursing LPN to ADN Transition: Guidelines

Transition Students

The associate degree Nursing (ADN) program has an accelerated track for LPNs who desire to transition to ADN. The LPN to ADN Transition track of the ADN program provides qualified licensed practical nurses the opportunity to advance their formal nursing education to achieve an associate degree in Nursing 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 degree nursing as a major;
2) Have completed all required core courses by the end of Spring Quarter;
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 (all attempts will be included in this calculation);
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 and Allied Health Technologies office by February 1 prior to the summer quarter they plan to begin the Nursing sequence.

Process for Application

Students may apply to the associate degree nursing program at any time after acceptance to the college and declaring nursing as their major.
1) Obtain an application form from the Nursing and Allied Health Technologies Division;
2) Return the completed application form to the above office no later than February 1st preceding the summer quarter they wish to enter the program;
3) Submit a copy of current LPN license and proof of employment hours;

Selection Process
During winter quarter the Nursing and Allied Health Technologies secretary will send a letter to LPNs who have applied for advanced placement in the ADN 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 and provide the Nursing and Allied Health Technologies secretary with a copy of the receipt of payment. The pre-entrance examination will be administered in late winter or early spring quarter.

Failure to take the examination will result in forfeiture of the examination cost.

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. Upon attainment of a minimum score of 850 on this examination, applicants will take a dosage calculation examination. There will be two attempts available for this 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 quarter.

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.

Additional Guidelines for Transition Track
Transfer Credit
Students with transfer credit from another nursing program may be considered for admission with advanced standing on a-case-by case basis. They must meet the same entrance requirements as all other students; however, satisfying the listed requirements does not guarantee admission to the program with advanced standing. Transferring students will not be given priority over currently enrolled or returning students. Each student must also submit a letter of recommendation from his or her former Nursing program director.

Retention Policies
In order to progress through the associate degree nursing program, students must:
1) Maintain a cumulative GPA of 2.0 (70%) 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 80% or 90% 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. 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 ADN program for an interview at least one quarter prior to the quarter of readmission.

In order to be considered for readmission, students must:
1) Meet the current admission requirements;
2) Enroll in the unsuccessful course;
3) Complete current program requirements.

Re-entry is conditional upon class and clinical space availability. If re-entry is requested for NUR 191 or NUR 192 (first quarter nursing courses) students will be placed back into the applicant pool for the next class selection. They will be ranked using the same process as all other candidates; however, Nursing courses will be included in the criteria used and in calculating the GPA. If the re-entry is for any subsequent courses, a re-entry score will be calculated based on prior Nursing course averages and dosage calculations examination averages. Students will then be ranked according to the re-entry score. All efforts will be made to facilitate re-entry.

Graduation Requirements
All courses in the Nursing curriculum must be successfully completed in order to graduate; however, only students who have completed required course work, and received the ADN 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 NUR 294 Nursing Seminar course in the final quarter of the program. Students must score 875 on the HESI Exit Exam within three attempts to pass NUR 294. 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 quarter, 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 NUR 294 and will have to repeat the course. 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 contender 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 (MA03)
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.

Length of Program: Minimum of seven (7) quarters

Entrance Date: Beginning of any quarter for pre-occupational curriculum, summer quarter for occupational curriculum

Entrance 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.
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: Medical Assisting Associate of Applied Science Degree

(Program requirements continued on following page)

MEDICAL ASSISTING (CONT.)

Pre-Occupational Curriculum (60 Credit Hours)		**Credit Hours**
*ENG 1101	Composition and Rhetoric	5
*ENG 1102	Literature and Composition	5
or		
*HUM 1101	Introduction to Humanities	(5)
or		
*ART 1101	Art Appreciation	(5)
or		
*MUS 1101	Music Appreciation	(5)
*SPC 1101	Public Speaking	5
or		
*ENG 1105	Technical Communications	(5)
*PSY 1101	Introductory Psychology	5
SOC 1101	Introduction to Sociology	5
BIO 2113	Anatomy and Physiology I	5
BIO 2114	Anatomy and Physiology II	5
*MAT 1111	College Algebra	5
BUS 1130	Document Processing	6
BUS 1140	Word Processing	5
AHS 109	Medical Terminology for Allied Health Sciences	3
SCT 100	Introduction to Microcomputers	3
AHS 104	Introduction to Health Care	3
Occupational Curriculum (78 Credit Hours)		
MAS 101	Legal Aspects of the Medical Office	3
MAS 103	Pharmacology	5
MAS 106	Medical Office Procedures	5
MAS 108	Medical Assisting Skills I	6
MAS 109	Medical Assisting Skills II	6
MAS 110	Medical Insurance Management	3
MAS 111	Administrative Practice Management	4
MAS 112	Human Diseases	5
MAS 117	Medical Assisting Externship	8
MAS 118	Medical Assisting Seminar	4
MAS 151	ICD-9-CM Coding I	3
MAS 152	ICD-9 Coding II	3
MAS 153	Physicians' Procedural Coding	3

Total Credit Hours: 118 Minimum Credit Hours for Graduation

*General core education courses

MEDICAL OFFICE MANAGEMENT (MOM3)
ASSOCIATE OF APPLIED SCIENCE DEGREE

No Longer Accepting New Students

Campus Availability:
• *Floyd County Campus*

Program Description:
The Medical Office Management program prepares students for employment in a variety of positions in medical offices. The Medical Office 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 medical office management.

Length of Program: Minimum of seven (7) quarters (including pre-occupational curriculum)

Entrance Dates: Beginning of any quarter for core courses. Occupational courses start spring and fall quarters.

Entrance Requirements:
Age: 17 years old for entrance into pre-occupational curriculum
18 years old for entrance into Health Technology programs
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the GNTC Admissions Placement Test (ASSET/COMPASS) or on one of the approved entrance tests (ACT or SAT) to be admitted as regular students. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Program Final Exit Point: Medical Office Management Associate of Applied Science Degree

Pre-Occupational Curriculum (50 Credit Hours)		**Credit Hours**
*ENG 1101	Composition and Rhetoric	5
*HUM 1101	Introduction to Humanities	5
*MAT 1111	College Algebra	5
*PSY 1101	Introduction to Psychology	5
*SPC 1101	Public Speaking	5
*BIO 2113	Anatomy and Physiology I	5
*BIO 2114	Anatomy and Physiology II	5
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3
BUS 1130	Document Processing	6
SCT 100	Introduction to Microcomputers	3

Occupational Curriculum (67 Credit Hours)		**Credit Hours**
MAS 101	Legal Aspects of the Medical Office	3
MAS 103	Pharmacology	5
MAS 106	Medical Office Procedures	5
MAS 108	Medical Assisting Skills I	6
MAS 109	Medical Assisting Skills II	6

(Program requirements continued on following page)

MEDICAL OFFICE MANAGEMENT (CONT.)

Occupational Curriculum (Cont.)		**Credit Hours**
MAS 110	Medical Insurance Management	3
MAS 111	Administrative Practice Management	4
MAS 112	Human Diseases	5
MSD 175	Business Spanish	5
HIT 198	Coding and Classifications	4
HIT 199	Reimbursement Methodologies	5
MKT 101	Principles of Management	5
or		
MSD 100	Principles of Management	(5)
MSD 104	Human Resource Management	5
MOM 191	Medical Office Management OBI I	3
MOM 192	Medical Office Management OBI II	3

Total Credit Hours: 117 Minimum Credit Hours for Graduation

***Indicates General Core Curriculum**
06/08

SURGICAL TECHNOLOGY (ST03)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:
• *Walker County Campus*

Program Description:
The Surgical Technology program prepares students to work with nurses and surgeons to help provide the best possible care of surgical patients. They function as a part of the operating room team responsible for the cleanliness, safety, and efficiency of the operating room that leads to good patient care. His or her experience with aseptic surgical techniques qualifies them to prepare materials for use at the operating table and to assist in the use of those materials.

Length of Program: Minimum of 6 quarters
Entrance Dates: Beginning of any quarter for pre-occupational curriculum, spring quarter for occupational curriculum at Floyd County campus, winter quarter for occupational curriculum at Walker County campus.

Entrance Requirements:
Age: 17 years old for entrance into pre-occupational curriculum
18 years old for entrance into Health Technology programs
Education: High school diploma or GED
Assessment Results: Applicants must make minimum scores in reading, writing, and math on the GNTC Admissions Placement Test (ASSET/COMPASS) or on one of the approved entrance tests (ACT or SAT) to be admitted as regular students. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.
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 quarter 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: Surgical Technology Associate of Applied Science Degree
Program graduates will be eligible to sit for the Certified Surgical Technologist examination.
(Program requirements continued on following page)

SURGICAL TECHNOLOGY, (CONT.)

Pre-Occupational Curriculum (54 Credit Hours)		**Credit Hours**
*ENG 1101	Composition and Rhetoric	5
*HUM 1101	Introduction to Humanities	5
or		
*ENG 1102	Literature and Composition	(5)
or		
*ART 1101	Art Appreciation	(5)
or		
*MUS 1101	Music Appreciation	(5)
*SPC 1101	Public Speaking	5
*SOC 1101	Introduction to Sociology	5
*MAT 1111	College Algebra	5
or		
*MAT 1101	Mathematical Modeling	(5)
*PSY 1101	Introduction to Psychology	5
BIO 2113	Anatomy and Physiology I	5
BIO 2114	Anatomy and Physiology II	5
BIO 2117	Introduction to Microbiology	5
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3
SCT 100	Introduction to Microcomputers	3
Occupational Curriculum (55 Credit Hours)		
SUR 101	Introduction to Surgical Technology	6
SUR 102	Principles of Surgical Technology	5
SUR 109	Surgical Patient Care	3
SUR 110	Surgical Pharmacology	3
SUR 112	Introductory Surgical Practicum	7
SUR 203	Surgical Procedures I	6
SUR 204	Surgical Procedures II	6
SUR 213	Specialty Surgical Practicum	8
SUR 214	Advanced Specialty Surgical Practicum	8
SUR 224	Seminar in Surgical Technology	3

Total Credit Hours: 109 Minimum Credit Hours for Graduation
03/09

*Indicates General Core Curriculum

MEDICAL ASSISTING (MA02)
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.

Length of Program: Minimum of five (5) quarters

Entrance Dates: Beginning of any quarter for pre-occupational curriculum. Spring and fall quarters for occupational curriculum at the Floyd County Campus; varies but always summer quarter 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
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Medical Assisting Diploma.
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.

(Program requirements continued on following page)

Readmission Policies
All current admission requirements must be met before applying for readmission.

Program Final Exit Point: Medical Assisting Diploma
Graduates from the Medical Assisting program are eligible to sit for the national certification exam to become certified medical assistants.

Pre-Occupational Curriculum (35 Credit Hours)		**Credit Hours**
*ENG 1010	Fundamentals of English I	5
*MAT 1012	Foundations of Mathematics	5
*PSY 1010	Basic Psychology	5
AHS 1011	Anatomy and Physiology	5
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3
BUS 1130	Document Processing	6
SCT 100	Introduction to Microcomputers	3

Occupational Curriculum (49 Credit Hours)		
MAS 101	Legal Aspects of the Medical Office	3
MAS 103	Pharmacology	5
MAS 106	Medical Office Procedures	5
MAS 108	Medical Assisting Skills I	6
MAS 109	Medical Assisting Skills II	6
MAS 110	Medical Insurance Management	3
MAS 111	Administrative Practice Management	4
MAS 112	Human Diseases	5
MAS 117	Medical Assisting Externship	8
MAS 118	Medical Assisting Seminar	4

Total Credit Hours: 84 Minimum Credit Hours for Graduation
03/09

*Indicates General Core Curriculum

PARAMEDIC TECHNOLOGY (EM02)
DIPLOMA

Campus Availability:
• *Floyd County Campus*

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

Length of Program: Minimum of five (5) quarters

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

Entrance Requirements:
Age: 17 years old for entrance into pre-occupational curriculum
18 years old for entrance into occupational program curriculum
Education: High school diploma or GED is required. Must be a certified EMT. Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Paramedic Technology Diploma
Graduates from the Paramedic Technology program are eligible to sit for the national certification exam to become a certified paramedic.

Program Fees: This program requires some additional fees over and above tuition cost. See the Financial Information section of this Catalog for information on these fees.

Pre-Occupational Curriculum (18 Credit Hours)		**Credit Hours**
*ENG 1010	Fundamentals of English I	5
*MAT 1012	Foundations of Mathematics	5
AHS 1011	Anatomy and Physiology	5
SCT 100	Introduction to Microcomputers	3
Occupational Curriculum (61 Credit Hours)		
EMS 126	Introduction to Paramedic Profession	3
EMS 127	Patient Assessment	4
EMS 128	Applied Physiology and Pathophysiology	3
EMS 129	Pharmacology	4
EMS 130	Respiratory Emergencies	5
EMS 131	Trauma	5
EMS 132	Cardiology I	5
EMS 133	Cardiology II	4
EMS 134	Medical Emergencies	5
EMS 135	Maternal/Pediatric	5
EMS 136	Special Patients	2

(Program requirements continued on following page)

PARAMEDIC TECHNOLOGY, (CONT.)

Occupational Curriculum

EMS 210	Clinical Application for EMT-Paramedic I	2
EMS 211	Clinical Application for EMT-Paramedic II	2
EMS 212	Clinical Application for EMT-Paramedic III	2
EMS 213	Clinical Application for EMT-Paramedic IV	2
EMS 214	Clinical Application for EMT-Paramedic V	2
EMS 215	Clinical Application for EMT-Paramedic VI	1
EMS 201	Summative Evaluations	5

Total Credit Hours: 79 Minimum Credit Hours for Graduation

*Indicates General Core Curriculum
03/09

PRACTICAL NURSING (PN04)
DIPLOMA

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
The Practical Nursing program is designed to prepare students to take 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.

Length of Program: Minimum of six (6) quarters day, eight (8) quarters evening

Entrance Dates: Beginning of any quarter for pre-occupational curriculum. Every quarter is a possible entrance quarter for occupational curriculum at the Floyd County campus. Spring and fall quarters for occupational curriculum in the day program; fall quarter, 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 quarter.

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 Health Technology programs

Education: High school diploma or GED is required.

Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Note: 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: ENG 1010, MAT 1012, PSY 1101, SCT 100, AHS 109 or BUS 2310, AHS 1011 (or AHS 101), AHS 103, and AHS 104.

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 quarter of the nursing program. In all nursing courses and AHS 102, students must attain a 75% unit test average. AHS 102 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 quarter 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: Practical Nursing Diploma

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-Occupational Curriculum (26 Credit Hours)		**Credit Hours**
*ENG 1010	Fundamentals of English I	5
*MAT 1012	Foundations of Mathematics	5
*PSY 1010	Basic Psychology	5
AHS 1011	Anatomy and Physiology	5
AHS 109	Medical Terminology for Allied Health Sciences	3
SCT 100	Introduction to Microcomputers	3

(Program requirements continued on following page)

PRACTICAL NURSING, (CONT.)

Occupational Curriculum (69 Credit Hours)

AHS 102	Drug Calculation and Administration	3
AHS 103	Nutrition and Diet Therapy	2
AHS 104	Introduction to Health Care	3
NSG 110	Nursing Fundamentals I	10
NSG 112	Medical-Surgical Nursing I	9
NSG 113	Medical-Surgical Nursing II	9
NSG 212	Pediatric Nursing	5
NSG 213	Obstetrical Nursing	5
NSG 215	Nursing Leadership	2
NPT 112	Medical-Surgical Nursing Practicum I	7
NPT 113	Medical-Surgical Nursing Practicum II	7
NPT 212	Pediatric Nursing Practicum	2
NPT 213	Obstetrical Nursing Practicum	3
NPT 215	Nursing Leadership Practicum	2

Total Credit Hours: 95 Minimum Credit Hours for Graduation
03/09

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.

* Indicates General Core Curriculum

SURGICAL TECHNOLOGY (ST02)
DIPLOMA

Campus Availability:
• *Walker County Campus*

Program Description:
The Surgical Technology program prepares students to work with nurses and surgeons to help provide the best possible care of surgical patients. They function as a part of the operating room team responsible for the cleanliness, safety, and efficiency of the operating room that leads to good patient care. His or her experience with aseptic surgical techniques qualifies them to prepare materials for use at the operating table and to assist in the use of those materials.

Length of Program: Minimum of 6 quarters

Entrance Dates: Beginning of any quarter for pre-occupational courses, spring quarter for occupational curriculum at Floyd County Campus and winter quarter for the Walker County campus.

Entrance Requirements:
Age: 17 years old for entrance into pre-occupational curriculum
18 years old for entrance into occupational program curriculum
Education: High school diploma or GED.
Assessment Results: Applicants must make minimum scores in reading, writing, and math on the GNTC Admissions Placement Test (ASSET/COMPASS) or on one of the approved entrance tests (ACT or SAT) to be admitted as regular students. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.
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 quarter 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: Surgical Technology Diploma
Program graduates will be eligible to sit for the certified surgical technologist examination.

SURGICAL TECHNOLOGY, (CONT.)

Pre-Occupational Curriculum (29 Credit Hours)		**Credit Hours**
*ENG 1010	Fundamentals of English I	5
*MAT 1012	Fundamentals of Mathematics	5
*PSY 1010	Basic Psychology	5
AHS 1011	Anatomy and Physiology	5
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3
SCT 100	Introduction to Microcomputers	3

Occupational Curriculum (58 Credit Hours)		
SUR 101	Introduction to Surgical Technology	6
SUR 102	Principles of Surgical Technology	5
SUR 108	Surgical Microbiology	3
SUR 109	Surgical Patient Care	3
SUR 110	Surgical Pharmacology	3
SUR 112	Introductory Surgical Practicum	7
SUR 203	Surgical Procedures I	6
SUR 204	Surgical Procedures II	6
SUR 213	Specialty Surgical Practicum	8
SUR 214	Advanced Specialty Surgical Practicum	8
SUR 224	Seminar in Surgical Technology	3

Total Credit Hours: 87 Minimum Credit Hours for Graduation

*Indicates General Core Curriculum
03/09

CENTRAL STERILE PROCESSING TECHNICIAN (CSR1)
CERTIFICATE

Campus Availability:
• *Walker County Campus*

Program Description: The purpose of the Central Sterile Processing Technician certificate is 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.

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.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of winter quarter
Entrance 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: Central Sterile Processing Technician Technical Certificate of Credit

Required Courses		Credit Hours
BUS 2310	Anatomy and Medical Terminology for the Admin. Asst.	5
MAT 1012	Foundations of Mathematics	5
SCT 100	Introduction to Microcomputers	3
CSP 101	Introduction to Central Sterile Processing	9
SUR 108	Surgical Microbiology	3
CSP 102	Central Sterile Processing Practicum	10

Total Credit Hours: 35 Minimum Credit Hours for Graduation
03/09

EMERGENCY MEDICAL TECHNICIAN - BASIC (EMB1)
CERTIFICATE

Campus Availability:
•*Floyd County Campus*

Program Description:
This program covers the 1994 Emergency Medical Technician-Basic Curriculum. The EMT-Basic program is designed to provide training, knowledge, and skills in specific aspects at the basic level. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians EMT-Basic certification examination and receive Georgia licensure as an EMT-Basic.

Length of Program: Minimum of two (2) quarters

Entrance Date: Fall quarter

Entrance Requirements:
Age: 18 years old
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing and numeric skills 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.

Program Final Exit Point: Emergency Medical Technician - Basic Technical Certificate of Credit

Program Fees: This program requires some additional fees over and above tuition cost. See the Financial Information section of this Catalog for information on these fees.

Required Courses		Credit Hours
EMS 1101	Introduction to the EMT Profession	4
EMS 1103	Patient Assessment for the EMT	2
EMS 1105	Airway Management for the EMT	2
EMS 1107	Medical and Behavioral Emergencies for the EMT	3
EMS 1109	Assessment and Management Across the Lifespan for the EMT	2
EMS 1111	Trauma Emergencies and WMD Response	4
EMS 1113	Clinical Applications for the EMT Basic	1
EMS 1115	Practical Applications for the EMT Basic	2

Total Credit Hours: 20 Minimum Credit Hours for Graduation
03/09

EMERGENCY MEDICAL TECHNICIAN INTERMEDIATE (EM01)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Walker County Campus*

Program Description:
This program covers both the U.S. Department of Transportation 1985 Emergency Medical Technician-Intermediate curriculum and the 1994 Emergency Medical Technician-Basic curriculum. The EMT-Intermediate program is designed to provide additional training and increased knowledge and skills in specific aspects of advanced life support above the basic level. Successful completion of the program allows the graduate to take the National Registry of Emergency Medical Technicians EMT-Intermediate/85 certification examination and receive Georgia licensure as an EMT-Intermediate. Upon completion of EMS 1115, students would be eligible to sit for the National Registry of EMTs EMT-Basic Exam on the Floyd and Gordon County campuses.

Length of Program: Minimum of four (4) quarters

Entrance Date: Fall quarter, and as needed

Entrance Requirements:
Age: 17 years old for entrance into pre-occupational curriculum
18 years old for entrance into occupational program curriculum
Education: Documentation of high school graduation (official transcript) or successful completion of GED (official notice)
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.
Other:
1) Hold a valid driver's license;
2) Complete EMT program application;
3) Be formally accepted to the EMT program by the EMT Admissions Committee on the basis of an interview and an assessment of student potential;
4) Be physically able to perform the duties of an EMT as verified by a note from a physician;
Note: If you are pregnant or become pregnant, and wish to enter or remain in the EMT program, you must present a doctor's release that states that the requirements of the EMT program will not endanger your health or the health of the baby;
Note: EMT students are required to purchase liability insurance. The cost is $46.00.
Note: Students will be required to purchase mandatory uniform and minimal supplies for the EMT program.
Program Final Exit Point: Emergency Medical Technician–Intermediate Technical Certificate of Credit. In order to receive your technical certificate of credit and take the National Registry Exam you must be 18 years old and a high school or GED graduate. Successful completion of the Registry Exam qualifies the graduate for entry into the Paramedic program or employment.

(Program requirements continued on following page)

EMERGENCY MEDICAL TECHNICIAN-INTERMEDIATE (CONT.)

Program Fees: This program requires some additional fees over and above tuition cost. See the Financial Information section of this Catalog for information on these fees.

Occupational Curriculum		Credit Hours
EMS 1101	Introduction to the EMT Profession	4
EMS 1103	Patient Assessment for the EMT	2
EMS 1105	Airway Management for the EMT	2
EMS 1107	Medical and Behavioral Emergencies for the EMT	3
EMS 1109	Assessment and Management Across the Lifespan for the EMT	2
EMS 1111	Trauma Emergencies and WMD Response	4
EMS 1113	Clinical Applications for the EMT-Basic	1
EMS 1115	Practical Applications for the EMT-Basic	2
EMS 1201	Pharmacology and Shock/Trauma for the EMT-Intermediate	3
EMS 1203	Clinical Applications for the EMT-Intermediate I	1
EMS 1205	Clinical Applications for the EMT-Intermediate II	1
EMS 1207	Practical Applications for the EMT-Intermediate	2

Total Credit Hours: 27 Minimum Credit Hours for Graduation

Revised curriculum Winter Quarter2009
03/09

HEALTH CARE ASSISTANT (5CJ1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Polk County Campus*
- *Walker County Campus*

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

Program Description:
The Health Care Assistant program of study is consistent with the purpose of Georgia Northwestern Technical College. The program provides academic foundations in communications, mathematics, and human relations, as well as technical fundamentals. Program graduates are trained in the underlying fundamentals of Health Care delivery and are well prepared for employment and subsequent upward mobility.

Length of Program: Minimum of four (4) quarters

Entrance Date: Varies

Entrance Requirements:
Age: 17 years old for entrance into pre-occupational curriculum
18 years old for entrance into Health Technology programs
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and math on the GNTC Admissions Placement Test (ASSET) or on one of the approved entrance tests (ACT or SAT) to be admitted as regular students. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Program Final Exit Point: Health Care Assistant Technical Certificate of Credit
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 (15 credit hours)		**Credit Hours**
*ENG 1010	Fundamentals of English I	5
*MAT 1012	Foundations of Mathematics	5
or		
*MAT 1013	Algebraic Concepts	(5)
PSY 1010	Basic Psychology	5
General Occupational Curriculum (14 credit hours)		
SCT 100	Introduction to Microcomputers	3
AHS 1011	Anatomy and Physiology	5
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3

(Program requirements continued on following page)

HEALTH CARE ASSISTANT, (CONT.)

And completion of 15-30 credit hours in one of the following specializations:

Certified Nursing Assistant Specialty (44 total credit hours in specialty)

CNA 100	Patient Care Fundamentals	8
AHS 103	Nutrition and Diet Therapy	2
XXX xxx	Occupationally related elective (See advisor for recommended list)	5

Total Credit Hours in Occupational Curriculum: 15

Phlebotomy Specialty (46 total credit hours in specialty)

PHL 103	Introduction to Venipuncture	4
PHL 105	Clinical Practice	8
XXX xxx	Occupationally Related Elective (See advisor for recommended list)	5

Total Credit Hours in Occupational Curriculum: 17

Medical Receptionist Specialty (50 total credit hours in specialty)

BUS 1130	Document Processing	6
BUS 1240	Office Procedures	5
BUS 2320	Medical Document Processing/Transcription	5
BUS 2340	Medical Administrative Procedures	5

Total Credit Hours in Occupational Curriculum: 21

Medical Coding Specialty (51 total credit hours in specialty)

(Floyd County Campus only)

BUS 1130	Document Processing	6
MAS 112	Human Diseases	5
MAS 151	ICD-9-CM Coding I	4
MAS 152	ICD-9 Coding II	4
MAS 153	Physicians' Procedural Coding	3

Total Credit Hours in Occupational Curriculum: 22
03/08

HEALTH CARE SCIENCE (HHS1)
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 program of study is consistent with the purpose of Georgia Northwestern Technical College. The program provides academic foundations in communications, mathematics, and human relations, as well as technical fundamentals. Program graduates are trained in the underlying fundamentals of Health Care delivery and are well prepared for employment and subsequent upward mobility.

Length of Program: Minimum of four quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: 17 years of age for admission into pre-occupational classes
18 years of age for admission into Health Technology programs
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and math on the GNTC Admissions Placement Test (ASSET or COMPASS) or on one of the approved entrance tests (ACT or SAT) to be admitted as regular students. Acceptable math and English courses may be used in lieu of an entrance exam for transfer students.

Program Final Exit Point: Health Care Science Technical Certificate of Credit
Upon completion of the Healthcare Science program graduates will be prepared for entry level employment in one of two health care fields: Certified Nursing Assistant or Phlebotomy Technician.

Pre-Occupational Curriculum (28 Credit Hours)		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
MAT 1111	College Algebra	5
or		
MAT 1101	Mathematical Modeling	(5)
or		
MAT 1113	Precalculus	(5)
or		
MAT 1100	Quantitative Skills and Reasoning	(6)
PSY 1101	Introduction to Psychology	5
HUM 1101	Introduction to Humanities	5
SPC 1101	Public Speaking	5
SCT 100	Intro to Computers	3

(Program requirements continued on following page)

HEALTH CARE SCIENCE, (CONT.)

Plus a total of no more than 30 hours from the three (3) categories below:

1. Sciences (10-20 Credit Hours)		**Credit Hours**
10-20 Credit Hours to be selected from the following list:		
BIO 1111	Biology I	5
BIO 1112	Biology I	5
BIO 2113	Anatomy and Physiology I	5
BIO 2114	Anatomy and Physiology II	5
BIO 2117	Introductory Microbiology	5
CHM 1111	Chemistry I	5
or		
AHS 1127	Health Sciences Chemistry	(5)
PHY 1110	Introductory Physics	5
or		
AHS 1126	Health Science Physics	(5)

Total Credit Hours: Maximum of 20

2. General Occupational Curriculum		**Credit Hours**
AHS 104	Introduction to Health Care	3
AHS 109	Medical Terminology for Allied Health Sciences	3

Total Credit Hours: 6

3. And completion of ONE of the following sets of occupational curriculum for a specialization

3A. Certified Nursing Assistant Specialty		**Credit Hours**
CNA	100 CNA Fundamentals	8
AHS	103 Nutrition and Diet Therapy	2

Total Credit Hours: 10

3B. Phlebotomy Specialty		
PHL 103	Introduction to Venipuncture	4
PHL 105	Clinical Practice	8

Total Credit Hours: 12

03/09

PATIENT CARE ASSISTING (TTP1)
CERTIFICATE

Campus Availability:
• *Floyd County Campus*

Program Description:
This program provides a sequence of courses that emphasize a combination of theory, clinical, and practical experience application necessary for successful employment. The patient care assistant may give most of the basic care to a patient. Graduates of the Patient Care Assisting TCC are eligible to sit for the state examination to become Certified Nursing Assistants.

Length of Program: Minimum of one (1) quarter

Entrance Date: Varies

Entrance Requirements:
Age: 17 years old for entrance into pre-occupational curriculum
18 years old for entrance into Health Technology programs
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Patient Care Assisting Technical Certificate of Credit
Graduates will be able to sit for Georgia's Certified Nursing Assistant (CNA) examination.

Required Courses		Credit Hours
CNA 100	Patient Care Fundamentals	8
AHS 103	Nutrition and Diet Therapy	2
AHS 109	Medical Terminology for Allied Health Sciences	3
EMP 1000	Interpersonal Relations and Professional Development	3

Total Credit Hours: 16 Minimum Credit Hours for Graduation
03/09

PATIENT CARE TECHNICIAN (PCG1)
CERTIFICATE

Campus Availability:
• *Walker County Campus*

Program Description:
The program provides a sequence of courses that emphasize a combination of theory, clinical, and practical experience application necessary for successful employment. The patient care technician may give most of the basic care to a patient. Graduates of the Patient Care Technician TCC are eligible to sit for the state examination to become Certified Nursing Assistants.

Length of Program: Minimum of two (2) quarters

Entrance Date: Fall and spring quarters

Entrance Requirements:
Age: 17 years old
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Patient Care Technician Technical Certificate of Credit Graduates will be able to sit for Georgia's Certified Nursing Assistant (CNA) examination.

Required Occupational Curriculum		Credit Hours
CNA 100	Patient Care Fundamentals	8
BUS 2310	Anatomy and Terminology for the Medical Admin. Assistant	5
AHS 104	Introduction to Health Care	3

Total Credit Hours: 16 Minimum Credit Hours for Graduation

Industrial Technologies

Barry Williams, Dean

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; and W-Walker County Campus).

Associate of Applied Science Degree Programs

Automotive Technology (UTA3) - W
Aviation Maintenance Technology (AV03) - A
Construction Management (CM03) - G
Drafting Technology (DR03) - F, W
Electronics Technology (EFA3) - W
Industrial Systems Technology (ICS3) - W
Instrumentation and Controls Technician (IAC3) - P
Public Works Civil Technology (PWC3) - G

Diploma Programs

Air Conditioning Technology (AI02) - F, W
Automotive Collision Repair (AU02) - F
Automated Manufacturing Technology (AM02) - F
Automotive Fundamentals (UT02) - F, W
Automotive Technology (UTA4) - F, W
Aviation Maintenance Technology (AV04) - A
Avionics Maintenance Technology (AO04) - A
Carpentry (CR02) - F
CNC Technology (CNC2) - F, W
Construction Management (CMN2) - G
Drafting Technology (DR02) - F, W
Electrical Construction and Maintenance (WO02) - F
Electrical Control Systems (ECS2) - F, W
Electronics Fundamentals (EF02) - W
Electronics Technology (EFA4) - F, W
Environmental Horticulture (EH02) - F
Industrial Electrical Technology (IEA2) - F
Industrial Mechanical Systems (MEH2) - F
Industrial Systems Technology (ICS4) - F, W
Machine Tool Technology (MT02) - F
Public Works Civil Technology (PWC2) - G

Welding and Joining Technology (WJ02) - F, W

Certificate Programs

Advanced Mechanical Drafting Specialist (MDF1) - W
Advanced PLC and HMI Technician I (ADP1) - F
Advanced PLC and HMI Technician II (ISY1) - F
Automotive Automatic Transmission/Transaxle Technician (5CT1) - F, W
Automotive Body Repair Assistant (5DV1)
Automotive Brake Technician (5CU1) - F, W
Automotive Electrical/Electronic Systems Technician (5AS1) - F, W
Automotive Engine Performance Technician (AEG1) - F, W
Automotive Engine Repair Technician (5CS1) - F, W
Automotive Heating and Air Conditioning Technician (5AM1) - F, W
Automotive Manual Drive Train and Axle Repair Technician (ADT1) - F, W
Automotive Painting and Refinishing Specialists (5DX1)
Automotive Suspension and Steering Technician (5CV1) - F, W
Aviation Maintenance Technician (AVI4) - A
Aviation Maintenance Technician-Airframe (AMA1) - A
Aviation Maintenance Technician-Powerplant (AMP1) - A
Avionics Bench Technician (AVB1) - A
Cabinetmaking Assembly Technician (5CX1) - F
Cabinetmaking Installation Technician (5CW1) - F
CAD Operator (DOP1) - F, W
CAD Operator - Architectural (CD01) - F, W
CAD Operator - Mechanical (OH01) - F, W
Certified Construction Worker (5CZ1) - F
Certified Manufacturing Specialist (TG01) - F
CNC Specialist (CNC1) - F, W
Commercial Truck Driving (TU01) - G, W
Construction Management Apprentice (CNM1) - G
Construction Project Manager (COP1) - G
Electrical Maintenance Technician (ELM1) - F, P
Electrical Technician (LL01) - F
Flat Shielded Metal ARC Welder (5BR1) - F, W
Gas Metal ARC Welder Fabricator(5BW1) - F, W
Gas Tungsten ARC Welder Fabricator (5BT1) - F, W
Industrial Electrician (ISB1) - F, W
Industrial Fluid Power Technician (IFP1) - F, W
Industrial Motor Control Technician (MTC1) - F, W
Industrial Systems Technician (ISF1) - W
Instrumentation and Controls Technician I (IAC1) - F, P, W
Instrumentation and Controls Technician II (IA11) - P
Lathe Operator (5AJ1) - F
Mechanical Maintenance Technician (MHM1) - F, P
Mill Operator (5AH1) - F
Overhead Shielded Metal ARC Welder (5BU1) - F, W
Process Control Technician I (PSC1) - W
Programmable Control Technician I (IPC1) - F, W
Residential Design Drafter (RDE1) - F, W
Robotics Technician (RBT1) - W
Vertical Shielded Metal Arc Welding Fabricator (5BS1) - F, W

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

Associate degrees are typically 1½ to 2 years in length, diploma programs are 1 to 1½ years in length and certificate lengths vary from 1 to 4 quarters. 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.

Industrial Technology Program Accreditations

The Automotive Technology program is Automotive Service Excellence (ASE) certified.

AUTOMOTIVE TECHNOLOGY (UTA3)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:
• *Walker County Campus*

Program Description:
The Automotive Technology program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. Learning opportunities 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 Technology degree that qualifies them as automotive technicians.

Length of Program: Minimum of seven (7) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Automotive Technology Associate of Applied Science Degree

General Core Curriculum (30 Credit Hours)		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
ENG 1102	Literature and Composition	5
or		
HUM 1101	Introduction to Humanities	(5)
or		
ART 1101	Art Appreciation	(5)
or		
MUS 1101	Music Appreciation	(5)
ENG 1105	Technical Communications	5
or		
SPC 1101	Public Speaking	(5)
PSY 1101	Introductory Psychology	5
or		
ECO 1101	Principles of Economics	(5)
MAT 1111	College Algebra	5
or		
MAT 1101	Mathematical Modeling	(5)
PHY 190	Introductory Physics	5

(Program requirements continued on following page)

Occupational Curriculum (90 Credit Hours)		**Credit Hours**
SCT 100	Introduction to Microcomputers	3
AUT 120	Introduction to Automotive Technology	3

AUT 122	Electrical and Electronic Systems	6
AUT 124	Battery Starting and Charging Systems	4
AUT 126	Engine Principles of Operation and Repair	6
AUT 128	Fuel, Ignition and Emission Systems	7
AUT 130	Automotive Brake Systems	4
AUT 132	Suspension and Steering Systems	4
AUT 134	Drivelines	4
AUT 138	Manual Transmission/Transaxle	4
AUT 140	Electronic Engine Control Systems	7
AUT 142	Climate Control Systems	6
AUT 144	Introduction to Automatic Transmissions	4
AUT 210	Automatic Transmission Repair	7
AUT 212	Advanced Electronic Transmission Diagnosis	3
AUT 214	Advanced Electronic Controlled Brake System Diagnosis	4
AUT 216	Adv. Electronic Controlled Suspension and Steering Systems	4
AUT 218	Advanced Electronic Engine Control Systems	4
AUT 220	Automotive Technology Internship	6
or		
XXX xxx	Electives (See advisor for recommended list)	(6)

Total Credit Hours: 120 Minimum Credit Hours for Graduation

02/09

AVIATION MAINTENANCE TECHNOLOGY (AV03)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Location:
• *GNTC Aviation Training Center at Richard B. Russell Regional Airport*

Program Description:
The program is intended to provide students with an introduction to the occupational area of aviation maintenance technology as currently understood and practiced by Federal Aviation Administration 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.

Length of Program: Minimum of eleven (11) quarters

Entrance Dates: Spring or fall quarter (General core courses any quarter)

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Aviation Maintenance Technology Associate of Applied Science Degree

General Core Curriculum (35 Credit Hours)		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
HUM 1101	Introduction to Humanities	5
MAT 1111	College Algebra	5
MAT 1113	Precalculus	5
PHY 1110	Introductory Physics	5
PSY 1101	Introduction to Psychology	5
SPC 1101	Public Speaking	5

***Indicates General Core Curriculum**
(Program requirements continued on following page)

Occupational Curriculum (122 Credit Hours)		**Credit Hours**
AMT 101	Aircraft Maintenance Regulations	3
AMT 102	Aircraft Applied Sciences	13
AMT 103	Aircraft Electricity and Electronics	7
AMT 201	Aircraft Airframe Structures	3
AMT 202	Airframe Sheet Metal and Non-Metallic Structures	7
AMT 203	Airframe Welding	2
AMT 204	Airframe Assembly and Rigging	3

(Program requirements continued on following page)

AVIATION MAINTENANCE TECHNOLOGY (CONT.)

AMT 205	Airframe Inspection	5
AMT 206	Aircraft Hydraulic and Pneumatic Systems	3
AMT 207	Aircraft Landing Gear Systems	4
AMT 208	Aircraft Environmental Control Systems	10
AMT 209	Aircraft Electrical, Communication, and Navigation Systems	9
AMT 221	Reciprocating Engine Powerplants I	5
AMT 222	Reciprocating Engine Powerplants II	7
AMT 223	Gas Turbine Powerplants I	5
AMT 224	Gas Turbine Powerplants II	5
AMT 225	Aircraft Engine Inspection	2
AMT 226	Aircraft Engine Fuel and Fuel Metering Systems	7
AMT 227	Aircraft Engine Electrical, Ignition, and Starting Systems	10
AMT 228	Aircraft Powerplant Accessory Systems	9
SCT 100	Introduction to Microcomputers	3

Total Credit Hours: 157 Minimum Credit Hours for Graduation
02/08

CONSTRUCTION MANAGEMENT (CM03)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:
• *Gordon County Campus*

Program Description:
The Construction Management Associates Degree is designed to develop construction managers, general contractors, project managers, and similar management positions in the construction industry. The program provides learning opportunities which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Graduates of the Construction Management Associate Degree program will be able to obtain entry level positions in the construction field. Construction Management graduates are qualified for a wide range of positions including truss designers, assistant superintendents, construction managers, general contractors, project managers and material salesman. Program graduates are competent in the occupational areas of either residential or commercial carpentry. Courses include topics such as supervision, computer-aided drafting, project management, and accounting. The program contains a combination of basic and advanced carpentry skills and fundamentals of construction management. The initial classes are basic carpentry and required core classes. The construction management classes are taken after the student has a solid understanding of the construction process. .

Length of Program: Minimum of eight (8) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Construction Management Associate of Applied Science Degree

General Core Curriculum (30 Credit Hours)		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
XXX xxxx	Humanities/ Fine Art Elective	5
XXX xxx	Social/Behavioral Sciences Elective	5
MAT 1111	College Algebra	5
or		
MAT 1101	Mathematical Modeling	(5)
XXX xxxx	General Core Elective	10

Occupational Curriculum (75 Credit Hours)		**Credit Hours**
SCT 100	Introduction to Microcomputers	3
CFC 100	Safety	2
CFC 101	Introduction to Construction	2
CFC 102	Professional Tool Use and Safety	4
CFC 103	Materials and Fasteners	3
CFC 105	Construction Print Reading Fundamentals	5
CAR 107	Site Layout, Footings, and Foundations	5

(Program requirements continued on following page)

CONSTRUCTION MANAGEMENT (CONT.)

CAR 110	Floor Framing	3
CAR 111	Wall Framing	3
CAR 112	Ceiling and Roof Framing	6
CAR 114	Roof Coverings	2
CAR 115	Exterior Finishes and Trim	5
CAR 117	Interior Finishes I	4
ACC 1101	Principles of Accounting I	6
CMT 201	Residential Estimating Review	4
CMT 202	Construction Drafting I	4
CMT 205	Residential Code Review	5
CMT 213	Computerized Construction Scheduling	4
CMT 217	Construction Contracting	5

Total Credit Hours: 105 Minimum Credit Hours for Graduation

DRAFTING TECHNOLOGY (DR03)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
The Drafting Technology program is designed to prepare students for employment in a variety of positions in the drafting 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 upgrade pre-knowledge and skills or to retrain in drafting. Graduates of the program receive an Associate of Applied Science degree in Drafting Technology.

Length of Program: Minimum of five (5) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Drafting Technology Associate of Applied Science Degree

General Core Curriculum (35 Credit Hours)		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
ENG 1102	Literature and Composition	5
or		
HUM 1101	Introduction to Humanities	(5)
or		
ART 1101	Art Appreciation	(5)
or		
MUS 1101	Music Appreciation	(5)
SPC 1101	Public Speaking	5
or		
ENG 1105	Technical Communication	(5)
MAT 1111	College Algebra	5
MAT 1113	Precalculus	5
PHY 1110	Introductory Physics	5
PSY 1101	Introduction to Psychology	5

Occupational Curriculum (61 Credit Hours)		**Credit Hours**
DDF 100	Drafting Fundamentals	6
or		
DDF 101	Introduction to Drafting	(6)

(Program requirements continued on following page)

DRAFTING TECHNOLOGY (CONT.)

Occupational Curriculum (Cont.)		**Credit Hours**
DDF 102	Size and Shape Description I	5
DDF 107	Introduction to CAD	6
DDF 111	Intermediate CAD	6
DDF 112	3D Drawing and Modeling	6
SCT 100	Introduction to Microcomputers	3
XXX xxx	Completion of one of the specializations below	29

Mechanical Drafting Specialization (MD03)

Courses		**Credit Hours**
DDF 103	Size and Shape Description II	5
DDF 105	Auxiliary Views	3
DDF 106	Fasteners	6
DDF 108	Intersections and Development	5
DDF 109	Assembly Drawings I	5
XXX xxx	Elective	5

Total Credit Hours: 96 Minimum Credit Hours for Graduation

Architectural Drafting Specialization (AD03)

Courses		**Credit Hours**
DDS 203	Surveying I	3
or		
DDS 204	Estimating	3
DDS 205	Residential Architectural Drawing I	6
DDS 207	Mechanical Systems for Architecture	3
DDS 208	Residential Architectural Drawing II	6
XXX xxx	Elective	11

Total Credit Hours: 96 Minimum Credit Hours Required for Graduation

Each course within all of Georgia Northwestern Technical College's diploma/ certificate level programs is acceptable for full credit toward the general Elective hours for this associate degree.

ELECTRONICS TECHNOLOGY (EFA3)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:

• *Walker County Campus*

Program Description: The Computer Electronics Specialization prepares students to work in the computer service industry. Learning opportunities develop academic, technical, and professional knowledge, as well as the skills required for job acquisition, retention, and advancement. The program emphasizes a combination of electronics technology theory and practical applications necessary for successful employment as computer service and repair technicians.

The Industrial Electronics Specialization prepares students to work in industrial electronics. Learning opportunities develop academic, technical, and professional knowledge, as well as the skills required for job acquisition, retention, and advancement. The program emphasizes both electronics technology theory and practical applications in the industrial electronics field.

Length of Program: Minimum of eight (8) quarters

Entrance Date: Beginning of fall and spring quarters

Entrance Requirements:

Age: Minimum of 16 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: Electronics Technology Associate of Applied Science Degree

General Core Curriculum (30 Credit Hours)		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
ENG 1102	Literature and Composition	5
or		
HUM 1101	Introduction to Humanities	(5)
or		
ART 1101	Art Appreciation	(5)
or		
MUS 1101	Music Appreciation	(5)
or		
ENG 2130	American Literature	(5)
SPC 1101	Public Speaking	5
or		
ENG 1105	Technical Communication	(5)
MAT 1111	College Algebra	5
MAT 1113	Precalculus	5
PSY 1101	Introductory Psychology	5
or		
ECON 1101	Principles of Economics	(5)

(Program requirements continued on following page)

ELECTRONICS TECHNOLOGY, (CONT.)

Occupational Curriculum (72 Credit Hours)

SCT 100	Introduction to Microcomputers	3
ELC 104	Soldering Technology	2
ELC 108	Direct Current Circuits II	4
ELC 110	Alternating Current II	4
ELC 115	Solid State Devices II	4
ELC 117	Linear Integrated Circuits	4
ELC 118	Digital Electronics I	4
ELC 119	Digital Electronics II	4
ELC 120	Microprocessor Fundamentals	4
IFC 100	Industrial Safety Procedures	2
IFC 101	Direct Current Circuits I	4
IFC 102	Alternating Current I	4
IFC 103	Solid State Devices I	4
XXX xxx	Completion of one of the specializations below:	

Computer Electronics Technology Specialization (OMA3)

ELC 217	Computer Hardware	7
ELC 218	Operating Systems Technology	7
ELC 219	Networking I	4
ELC 286	CompTIA A+ Certification	5
XXX xxx	Technically related electives (See advisor for recommended list)	2

Industrial Electronics Technology Specialization (ILA3)

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

Total Credit Hours: 102 Minimum Credit Hours for Graduation

INDUSTRIAL SYSTEMS TECHNOLOGY (ICS3)
DEGREE

Campus Availability:
• *Walker County Campus*

Program Description:
The Industrial Systems Technology Degree program is designed for the students who wish 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.

Length of Program: Minimum of eight (8) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Industrial Systems Technology Degree

General Core Curriculum (30 Credit Hours)		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
ENG 1102	Literature and Composition	5
or		
HUM 1101	Introduction to Humanities	(5)
or		
ART 1101	Art Appreciation	(5)
or		
MUS 1101	Music Appreciation	(5)
or		
ENG 2130	American Literature	(5)
SPC 1101	Public Speaking	5
or		
ENG 1105	Technical Communication	(5)
MAT 1111	College Algebra	5
MAT 1113	Precalculus	5
or		
PHY 1110	Introductory Physics	5
PSY 1101	Introductory Psychology	5
or		
SOC 1101	Introduction to Sociology	(5)

(Program requirements continued on following page)

INDUSTRIAL SYSTEMS TECHNOLOGY (CONT.)

Occupational Curriculum (77 Credit Hours)		Credit Hours
IFC 100	Industrial Safety Procedures	2
IFC 101	Direct Current Circuits I	4
IFC 102	Alternating Current I	4
IFC 103	Solid State Devices I	4
SCT 100	Introduction to Microcomputers	3
IDS 101	Industrial Computer Applications	5
IDS 103	Industrial Wiring	6
IDS 105	DC and AC Motors	3
IDS 110	Fundamentals of Motor Controls	3
IDS 113	Magnetic Starters and Braking	3
IDS 115	Two-Wire Control Circuits	2
IDS 121	Advanced Motor Controls	2
IDS 131	Variable Speed Motor Control	3
IDS 141	Basic Industrial PLCs	6
IDS 142	Industrial PLCs	6
IDS 209	Industrial Instrumentation	6
IDS 215	Industrial Mechanics	6
IDS 221	Industrial Fluidpower	7
IDS 231	Pumps and Piping Systems	2

Total Credit Hours: 107 Minimum Credit Hours for Graduation

INSTRUMENTATION AND CONTROLS TECHNICIAN (IAC3)
DEGREE

Campus Availability:
• *Polk 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.

Length of Program: Minimum of eight (8) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required. This program has competitive admissions requirements which include earning a Gold level or higher on the Georgia Work Ready assessment.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Instrumentation and Controls Technician Degree

General Core Curriculum (25 Credit Hours)		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
ENG 1102	Literature and Composition	5
or		
HUM 1101	Introduction to Humanities	(5)
or		
ART 1101	Art Appreciation	(5)
or		
MUS 1101	Music Appreciation	(5)
ECO 1101	Principles of Economics	5
or		
ECO 2105	Principles of Macroeconomics	(5)
or		
ECO 2106	Principles of Microeconomics	(5)
or		
ENG 1105	Technical Communications	(5)
or		
SOC 1101	Introduction to Sociology	(5)
or		
SPC 1101	Public Speaking	(5)
or		
PSY 1101	Introductory Psychology	(5)
MAT 1111	College Algebra	5
or		
MAT 1101	Mathematical Modeling	(5)
PHY 1110	Introductory Physics	5

Occupational Curriculum (84 Credit Hours)		Credit Hours
SCT 100	Introduction to Microcomputers	3
IFC 100	Industrial Safety Procedures	2
IDS 102	Print Reading and Problem Solving	4
IDS 104	Electricity	7
IFC 103	Solid State Devices I	4
IDS 105	DC and AC Motors	3
IDS 110	Fundamentals of Motor Controls	3
IDS 131	Variable Speed Motor Control	3
IDS 141	Basic Industrial PLC's	6
IDS 209	Industrial Instrumentation	6
IDS 275	Human Machine Interface	7
IDS 280	Advanced Process Control	7
IDS 283	Networking Industrial Equipment	7
IDS 285	Industrial Graphical Communications	7
ICT 205	Fund of Pressure, Temp., Flow and Level	3
ICT 207	Maintenance and Calibration	7
ICT 209	Final Control Elements	5

Total Credit Hours: 109 Minimum Credit Hours for Graduation

PUBLIC WORKS CIVIL TECHNOLOGY (PWC3)
ASSOCIATE OF APPLIED SCIENCE DEGREE

No Longer Accepting New Students

Campus Availability:
• Gordon County Campus

Program Description:
The Public Works Civil Technology associate of applied science degree program is designed to develop future public works professionals to meet the increasing demand in the field. The PWCT program is designed primarily to train PWCT graduates for successful performance in the public works construction and maintenance career area. Graduates will be prepared to assume mid-level positions in public works infrastructure construction, construction inspection, and public works infrastructure maintenance. Program graduates receive a Public Works Civil Technology associate of applied science degree.

Length of Program: Minimum of six (6) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and math on the Admissions Placement Test (ASSET/COMPASS) or one or 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.

Program Final Exit Point: Public Works Civil Technology Associate of Applied Science Degree

General Core Courses (30 Credit Hours)		Credit Hours
ENG 1101	Composition and Rhetoric	5
HUM 1101	Introduction to Humanities	5
SPC 1101	Public Speaking	5
ENG 1105	Technical Communications	5
PSY 1101	Introductory to Psychology	5
MAT 1111	College Algebra	5
or		
MAT 1113	Precalculus	(5)

Occupational Courses (63 Credit Hours)		Credit Hours
SCT 100	Introduction to Microcomputers	3
CET 130	Civil Computer Aided Drafting	5
CET 190	Construction Materials	5
PWC 100	Publics Works Infrastructure	5
PWC 105	Construction Methods and Cost Estimating	5
PWC 110	Plan Reading	5
PWC 115	Highway Design	5
PWC 120	Project Management	5

(Program requirements continued on following page)

PUBLIC WORKS CIVIL TECHNOLOGY (CONT).

Occupational Courses (Cont.)		Credit Hours
DDS 203	Surveying I	3
DDS 219	Route Location and Design	7
PWC 140	Internship	10
XXX xxx	Occupational elective (See advisor for recommended list)	5

Total Credit Hours: 93 Minimum Credit Hours for Graduation
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AIR CONDITIONING TECHNOLOGY (AI02)
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. Graduates find employment as air conditioning servicers/installers, furnace servicers/installers, refrigeration mechanics, and as general maintenance personnel.

Length of Program: Minimum of five (5) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: No high school diploma or GED is required to enter program but must have documentation of high school diploma or GED to graduate and receive the diploma (or technical certificate of credit). See the Success Center for information on earning your high school diploma or GED.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Air Conditioning Technology Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
MAT 1012	Foundations of Mathematics	5
EMP 1000	Interpersonal Relations and Professional Development	3
Occupational Curriculum (72 Credit Hours)		
ACT 100	Refrigeration Fundamentals	4
ACT 101	Principles and Practices of Refrigeration	7
ACT 102	Refrigeration Systems Components	7
ACT 103	Electrical Fundamentals	7
ACT 104	Electric Motors	4
ACT 105	Electrical Components	5
ACT 106	Electric Control Systems and Installation	4
IFC 100	Industrial Safety Procedures	2
ACT 107	Air Conditioning Principles	8
ACT 108	Air Conditioning Systems and Installation	3
ACT 109	Troubleshooting Air Conditioning Systems	7
ACT 110	Gas Heating Systems	5
ACT 111	Heat Pumps and Related Systems	6
SCT 100	Introduction to Microcomputers	3

Total Credit Hours: 85 Minimum Credit Hours for Graduation

AUTOMOTIVE COLLISION REPAIR (AU02)
DIPLOMA

Campus Availability:
• *Floyd County Campus*

Program Description:
The Auto 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. Program graduates receive an Automotive Collision Repair diploma, which qualifies them as major collision repair technicians or painting and refinishing technicians.

Length of Program: Minimum of five (5) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: No high school diploma or GED is required to enter program but must have documentation of high school diploma or GED to graduate and receive the diploma (or technical certificate of credit). See the Success Center for information on earning your high school diploma or GED.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Automotive Collision Repair Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
MAT 1012	Foundations of Mathematics	5
EMP 1000	Interpersonal Relations and Professional Development	3

Occupational Curriculum (54 Credit Hours)		
ACR 1000	Safety	1
ACR 1010	Automobile Components Identification	3
ACR 1020	Equipment and Hand Tools Identification	1
ACR 1040	Mechanical and Electrical Systems	2
ACR 1050	Body Fiberglass, Plastic, and Rubber Repair Techniques	3
ACR 1060	Welding and Cutting	6
ACR 1070	Trim, Accessories, and Glass	2
ACR 1090	Damage Identification and Assessment	3
ACR 1100	Minor Collision Repair	2
SCT 100	Introduction to Microcomputers	3

And completion of one of the following specializations:

Major Collision Repair Specialization		
ACR 1200	Conventional Frame Repair	3

(Program requirements continued on following page)

AUTOMOTIVE COLLISION REPAIR (cont.)

Major Collision Repair Specialization (Cont.)

Occupational Curriculum		Credit Hours
ACR 1210	Unibody Identification and Damage Analysis	2
ACR 2240	Unibody Measuring, Fixturing and Strengthening Systems	6
ACR 2250	Unibody Structural Panel Repair and Replacement	3
ACR 2260	Conventional Body Structural Panel Repair	5
ACR 1270	Unibody Suspension and Steering Systems	2
ACR 1280	Bolt-on Body Panel Removal and Replacement	4
ACR 1290	Major Collision Repair Internship/Practicum	3
or		
XXXX xxx	Elective(s)	(3)

Paint and Refinishing Specialization

ACR 1300	Sanding, Priming, and Paint Preparation	5
ACR 1320	Special Refinishing Application	5
ACR 2340	Urethane Enamels Refinishing Application	5
ACR 2350	Tint and Match Colors	5
ACR 2360	Detailing	2
ACR 2370	Paint and Refinishing Internship	3
XXX xxx	Elective(s)	3

Total Credit Hours: 67 Minimum Credit Hours for Graduation

AUTOMATED MANUFACTURING TECHNOLOGY (AM02)
DIPLOMA

Campus Availability:
• Floyd County Campus

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

Length of Program: Minimum of eight (8) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Automated Manufacturing Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
EMP 1000	Interpersonal Relations and Professional Development	3
MAT 1013	Algebraic Concepts	5
Occupational Curriculum (74 Credit Hours)		
AMF 103	Manufacturing Processes Survey	4
AMF 106	Introduction to Robotics	4
AMF 108	Applied Hydraulics, Pneumatics, and Mechanisms	3
AMF 113	Programmable Controllers I	4
AMF 115	Manufacturing Control and Work Cell Interfacing	5
AMF 206	Work Cell Design Laboratory	3
AMF 207	Flexible Manufacturing Systems I	4
AMF 208	Flexible Manufacturing Systems II	4
AMF 209	Flexible Manufacturing Systems Project	2
AMF 214	Programmable Controllers II	4
DDF 107	Introduction to CAD	6
ELC 117	Linear Integrated Circuits	4
ELT 118	Electrical Controls	5
IFC 100	Industrial Safety Procedures	2
IFC 101	Direct Current Circuits I	4
IFC 102	Alternating Current I	4
IFC 103	Solid State Devices	4
MCH 118	Computer/CNC Literacy	5
SCT 100	Introduction to Microcomputers	3

Total Credit Hours: 87 Minimum Credit Hours for Graduation

AUTOMOTIVE FUNDAMENTALS (UT02)
DIPLOMA

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
The Automotive Fundamentals diploma program is a sequence of courses that prepares students for the automotive service and repair profession. Learning opportunities develop academic, occupational, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of automotive fundamentals theory and practical application necessary for successful employment. Program graduates receive an Automotive Fundamentals 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 automotive field.

Length of Program: Minimum of four (4) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Automotive Fundamentals Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
EMP 1000	Interpersonal Relations and Professional Development	3
MAT 1012	Foundations of Mathematics	5
Occupational Curriculum (64 Credit Hours)		
SCT 100	Introduction to Microcomputers	3
AUT 120	Introduction to Automotive Technology	3
AUT 122	Electrical and Electronic Systems	6
AUT 124	Battery Starting and Charging Systems	4
AUT 126	Engine Principles of Operation and Repair	6
AUT 128	Fuel, Ignition and Emission Systems	7
AUT 130	Automotive Brake Systems	4
AUT 132	Suspension and Steering Systems	4
AUT 134	Drivelines	4
AUT 140	Electronic Engine Control Systems	7
AUT 142	Climate Control Systems	6
AUT 144	Introduction to Automatic Transmissions	4
AUT 220	Automotive Technology Internship	6
OR		
XXX xxx	Elective(s) (See advisor for recommended list)	(6)

Total Credit Hours: 77 Minimum Credit Hours for Graduation

AUTOMOTIVE TECHNOLOGY (UTA4)
DIPLOMA

No Longer Accepting Students Into This Program

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
The Automotive Technology program is a sequence of courses designed to prepare students for careers in the automotive service and repair profession. Learning opportunities 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 Technology diploma that qualifies them as automotive technicians.

Length of Program: Minimum of five (5) quarters

Entrance Dates: Beginning of any quarter (Floyd County); fall and spring quarters (Walker County)

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Automotive Technology Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
EMP 1000	Interpersonal Relations and Professional Development	3
MAT 1012	Foundations of Mathematics	5

Occupational Curriculum (90 Credit Hours)		**Credit Hours**
SCT 100	Introduction to Microcomputers	3
AUT 120	Introduction to Automotive Technology	3
AUT 122	Electrical and Electronic Systems	6
AUT 124	Battery Starting and Charging Systems	4
AUT 126	Engine Principles of Operation and Repair	6
AUT 128	Fuel, Ignition and Emission Systems	7
AUT 130	Automotive Brake Systems	4
AUT 132	Suspension and Steering Systems	4
AUT 134	Drivelines	4
AUT 138	Manual Transmission/Transaxle	4
AUT 140	Electronic Engine Control Systems	7
AUT 142	Climate Control Systems	6
AUT 144	Introduction to Automatic Transmissions	4

(Program requirements continued on following page)

AUTOMOTIVE TECHNOLOGY (CONT.)

AUT 210	Automatic Transmission Repair	7
AUT 212	Advanced Electronic Transmission Diagnosis	3
AUT 214	Advanced Electronic Controlled Brake System Diagnosis	4
AUT 216	Adv. Electronic Controlled Suspension and Steering Systems	4
AUT 218	Advanced Electronic Engine Control Systems	4
AUT 220	Automotive Technology Internship	6
OR		
XXX xxx	Elective(s) (See advisor for recommended list)	(6)

Total Credit Hours: 103 Minimum Credit Hours for Graduation

AVIATION MAINTENANCE TECHNOLOGY (AV04)
DIPLOMA

Location:
• *GNTC Aviation Training Center at Richard B. Russell Regional Airport*

Program Description:
The program is intended to provide students with an introduction to the occupational area of aviation maintenance technology as currently understood and practiced by Federal Aviation Administration 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.

Length of Program: Minimum of nine (9) quarters

Entrance Dates: Spring or fall quarter (General core courses any quarter)

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Aviation Maintenance Technology Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
EMP 1000	Interpersonal Relations and Professional Development	3
MAT 1013	Algebraic Concepts	5

Occupational Curriculum (128 Credit Hours)		
AMT 100	Aviation Mathematics	3
AMT 101	Aircraft Maintenance Regulations	3
AMT 102	Aircraft Applied Sciences	13
AMT 103	Aircraft Electricity and Electronics	7
AMT 121	Aviation Physics	3
AMT 201	Aircraft Airframe Structures	3
AMT 202	Airframe Sheet Metal and Non-Metallic Structures	7
AMT 203	Airframe Welding	2
AMT 204	Airframe Assembly and Rigging	3
AMT 205	Airframe Inspection	5
AMT 206	Aircraft Hydraulic and Pneumatic Systems	3
AMT 207	Aircraft Landing Gear Systems	4
AMT 208	Aircraft Environmental Control Systems	10

(Program requirements continued on following page)

AVIATION MAINTENANCE TECHNOLOGY (CONT.)

Occupational Curriculum (Cont.)		**Credit Hours**
AMT 209	Aircraft Electrical, Communication, and Navigation Systems	9
AMT 221	Reciprocating Engine Powerplants I	5
AMT 222	Reciprocating Engine Powerplants II	7
AMT 223	Gas Turbine Powerplants I	5
AMT 224	Gas Turbine Powerplants II	5
AMT 225	Aircraft Engine Inspection	2
AMT 226	Aircraft Engine Fuel and Fuel Metering Systems	7
AMT 227	Aircraft Engine Electrical, Ignition, and Starting Systems	10
AMT 228	Aircraft Powerplant Accessory Systems	9
SCT 100	Introduction to Microcomputers	3

Total Credit Hours: 141 Minimum Credit Hours for Graduation

AVIONICS MAINTENANCE TECHNOLOGY (AO04)
DIPLOMA

Location:
• *GNTC Aviation Training Center at Richard B. Russell Regional Airport*

Program Description:
The Avionics Maintenance Technology 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 and avionics theory and practical application necessary for successful employment. Program graduates receive an Avionics Maintenance Technology diploma that qualifies them as avionics technicians.

Length of Program: Minimum of nine (9) quarters

Entrance Dates: Spring or fall quarter (General core courses any quarter)

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Avionics Maintenance Technology Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
EMP 1000	Interpersonal Relations and Professional Development	3
MAT 1013	Algebraic Concepts	5

Occupational Curriculum (128 Credit Hours)		
AMT 100	Aviation Mathematics	3
AMT 101	Aircraft Maintenance Regulations	3
AMT 102	Aircraft Applied Sciences	13
AMT 103	Aircraft Electricity and Electronics	7
AMT 121	Aviation Physics	3
AMT 201	Aircraft Airframe Structures	3
AMT 202	Airframe Sheet Metal and Non-Metallic Structures	7
AMT 203	Airframe Welding	2
AMT 204	Airframe Assembly and Rigging	3
AMT 205	Airframe Inspection	5
AMT 206	Aircraft Hydraulic and Pneumatic Systems	3
AMT 207	Aircraft Landing Gear Systems	4
AMT 208	Aircraft Environmental Control Systems	10
AMT 209	Aircraft Electrical, Communication, and Navigation Systems	9

(Program requirements continued on following page)

AVIONICS MAINTENANCE TECHNOLOGY (CONT.)

Occupational Curriculum (Cont.)		Credit Hours
AVT 101	Basic Electronics	6
AVT 102	Avionics Maintenance Practices	5
AVT 103	Advanced Electronics	6
AVT 104	Digital Electronics	6
AVT 106	Aircraft Logic Systems	6
AVT 107	Aircraft Communication Systems	7
AVT 108	Navigation Systems	7
AVT 109	Flight Director and Autopilot Systems	7
SCT 100	Introduction to Microcomputers	3

Total Credit Hours: 141 Minimum Credit Hours for Graduation
06/08

CARPENTRY (CR02)
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.

Length of Program: Minimum of four (4) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 16 years of age

Education: No high school diploma or GED is required to enter program but must have documentation of high school diploma or GED to graduate and receive the diploma (or technical certificate of credit). See the Success Center for information on earning your high school diploma or GED.

Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Carpentry Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
EMP 1000	Interpersonal Relations and Professional Development	3
MAT 1012	Foundations of Mathematics	5
Occupational Curriculum (63 Credit Hours)		**Credit Hours**
SCT 100	Introduction to Microcomputers	3
CFC 100	Safety	2
CFC 101	Introduction to Construction	2
CFC 102	Professional Tool Use and Safety	4
CFC 103	Materials and Fasteners	3
CFC 105	Construction Print Reading Fundamentals	5
CAR 107	Site Layout, Footings, and Foundations	5
CAR 110	Floor Framing	3
CAR 111	Wall Framing	3
CAR 112	Ceiling and Roof Framing	6
CAR 114	Roof Coverings	2
CAR 115	Exterior Finishes and Trim	5
CAR 117	Interior Finishes I	4
CAR 118	Interior Finishes II	4
CAR 119	Interior Finishes III	3
CAR 121	Cornice and Soffit	2
CAR 126	Stairs	3
CAR 127	Residential Carpentry Internship	4
or		
XXX xxx	Electives (See advisor for recommended list)	(4)

Total Credit Hours: 76 Minimum Credit Hours for Graduation

CNC TECHNOLOGY (CNC2)
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.

Length of Program: Minimum of five (5) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required to enter program
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: CNC Technology Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
EMP 1000	Interpersonal Relations and Professional Development	3
ENG 1010	Fundamentals of English I	5
MAT 1012	Foundations of Mathematics	5
Occupational Curriculum (75 Credit Hours)		**Credit Hours**
MCH 101	Introduction to Machine Tool	6
MCH 102	Blueprint Reading I	5
MCH 107	Characteristics of Metals/Heat Treatment I	4
MCH 109	Lathe Operations I	6
MCH 112	Surface Grinder Operations	3
MCH 115	Mill Operations I	6
MCA 211	CNC Fundamentals	7
MCA 213	CNC Mill Manual Programming	7
MCA 215	CNC Lathe Manual Programming	7
MCA 219	CAD/CAM Programming	6
SCT 100	Introduction to Microcomputers	3
XXX xxx	Occupational Related Elective(s)	5
MCH 104	Machine Tool Math I	5
or		
MAT 1013	Algebraic Concepts	5
MCH 105	Machine Tool Math II	5
or		
MCH 1015	Geometry and Trigonometry	5

Total Credit Hours: 88 Minimum Credit Hours for Graduation

CONSTRUCTION MANAGEMENT (CMN2)
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 builds upon the diploma program in carpentry providing 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.

Length of Program: Minimum of six (6) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Construction Management Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
MAT 1012	Foundations of Mathematics	5
EMP 1000	Interpersonal Relations and Professional Development	3
ENG 1010	Fundamentals of English I	5

Occupational Curriculum (75 Credit Hours)		**Credit Hours**
SCT 100	Introduction to Microcomputers	3
CFC 100	Safety	2
CFC 101	Introduction to Construction	2
CFC 102	Professional Tool Use and Safety	4
CFC 103	Materials and Fasteners	3
CFC 105	Construction Print Reading Fundamentals	5
CAR 107	Site Layout, Footings, and Foundations	5
CAR 110	Floor Framing	3
CAR 111	Wall Framing	3
CAR 112	Ceiling and Roof Framing	6
CAR 114	Roof Coverings	2
CAR 115	Exterior Finishes and Trim	5
CAR 117	Interior Finishes I	4
ACC 1101	Principles of Accounting I	6
CMT 201	Residential Estimating Review	4
CMT 202	Construction Drafting I	4
CMT 205	Residential Code Review	5
CMT 213	Computerized Construction Scheduling	4
CMT 217	Construction Contracting	5

Total Credit Hours: 88 Minimum Credit Hours for Graduation

DRAFTING TECHNOLOGY (DR02)
DIPLOMA

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
The Drafting program, while specializing in mechanical drafting, is designed to prepare students for employment in a variety of positions in the drafting 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 upgrade present knowledge and skills or to retrain in drafting. Graduates of the program receive a Drafting Technology diploma.

Length of Program: Minimum of five (5) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Drafting Technology Diploma

General Core Curriculum (18 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
MAT 1013	Algebraic Concepts	5
MAT 1015	Geometry and Trigonometry	5
EMP 1000	Interpersonal Relations and Professional Development	3

Occupational Curriculum (59 Credit Hours)		**Credit Hours**
DDF 100	Drafting Fundamentals 6	
or		
DDF 101	Introduction to Drafting	(6)
DDF 102	Size and Shape Description I	5
DDF 107	Introduction to CAD	6
DDF 111	Intermediate CAD	6
DDF 112	3-D Drawing and Modeling	6
SCT 100	Introduction to Microcomputers	3
XXX xxx	Completion of one of the specializations below	27

Mechanical Drafting Specialization (MD02)

DDF 103	Size and Shape Description II	5
DDF 105	Auxiliary Views	3
DDF 106	Fasteners	6

(Program requirements continued on following page)

DRAFTING TECHNOLOGY (CONT.)

Mechanical Drafting Specialization (Cont.)		**Credit Hours**
DDF 108	Intersections and Developments	5
DDF 109	Assembly Drawings I	5
XXX xxx	Electives	3

Architectural Drafting Specialization (AD02)		
DDS 203	Surveying I	3
or		
DDS 204	Estimating	(3)
DDS 205	Residential Architectural Drawing I	6
DDS 207	Mechanical Systems for Architecture	3
DDS 208	Residential Architectural Drawing II	6
XXX xxx	Electives	9

Total Credit Hours: 77 Minimum Credit Hours for Graduation

ELECTRICAL CONSTRUCTION AND MAINTENANCE (WO02)
DIPLOMA

Campus Availability:
• *Floyd County Campus*

Program Description:
The Electrical Construction and Maintenance program is a sequence of courses designed to prepare students for careers in residential and commercial electrical industries. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of theory and practical application necessary for successful employment. Program graduates receive an Electrical Construction and Maintenance diploma and have the qualifications of a residential and commercial electrician.

Length of Program: Minimum of six (6) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Electrical Construction and Maintenance Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
EMP 1000	Interpersonal Relations and Professional Development	3
MAT 1012	Foundations of Mathematics	5

Occupational Curriculum (59 Credit Hours)		**Credit Hours**
ELT 106	Electrical Prints, Schematics, Symbols	4
ELT 107	Commercial Wiring I	5
ELT 108	Commercial Wiring II	5
ELT 109	Commercial Wiring III	5
ELT 111	Single Phase and Three Phase Motors	5
ELT 112	Variable Speed/Low Voltage Controls	3
ELT 118	Electrical Controls	5
ELT 119	Electricity Principles II	4
ELT 120	Residential Wiring I	5
ELT 121	Residential Wiring II	6
IFC 100	Industrial Safety Procedures	2
IFC 101	Direct Current Circuits I	4
SCT 100	Introduction to Microcomputers	3
XXX xxx	Technical Electives (See advisor for recommended list)	3

Total Credit Hours: 72 Minimum Credit Hours for Graduation

ELECTRICAL CONTROL SYSTEMS (ECS2)
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.

Length of Program: Minimum of seven (7) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 16 years of age

Education: No high school diploma or GED is required to enter program but must have documentation of high school diploma or GED to graduate and receive the diploma (or technical certificate of credit). See the Success Center for information on earning your high school diploma or GED.

Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Electrical Control Systems Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
MAT 1013	Algebraic Concepts	5
EMP 1000	Interpersonal Relations and Professional Development	3
Occupational Curriculum (65 Credit Hours)		**Credit Hours**
IFC 100	Industrial Safety Procedures	2
IFC 101	Direct Current Circuits I	4
IFC 102	Alternating Current I	4
IFC 103	Solid State Devices I	4
SCT 100	Introduction to Microcomputers	3
IDS 101	Industrial Computer Applications	5
IDS 103	Industrial Wiring	6
IDS 105	DC and AC Motors	3
IDS 110	Fundamentals of Motor Controls	3
IDS 113	Magnetic Starters and Braking	3
IDS 115	Two-Wire Control Circuits	2
IDS 121	Advanced Motor Controls	2
IDS 131	Variable Speed Motor Control	3
or		
ELC 212	Motor Controls	(6)
IDS 141	Basic Industrial PLCs	6
IDS 142	Industrial PLCs	6

(Program requirements continued on following page)

ELECTRICAL CONTROL SYSTEMS, (CONT.)

Occupational Curriculum (Cont.)		**Credit Hours**
IDS 209		Industrial
Instrumentation		6
or		
ELC 211	Process Control	(6)
XXX xxx	Electives (See advisor for recommended list)	3

Total Credit Hours: 78 Minimum Credit Hours for Graduation

ELECTRONICS FUNDAMENTALS (EF02)
DIPLOMA

Campus Availability:
• *Walker County Campus*

Program Description: The Electronics Fundamentals diploma program prepares students for entry-level positions in electronics technology professions. Learning opportunities develop academic, technical, and professional knowledge as well as the 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 electronic systems.

Length of Program: Minimum of six (6) Quarters

Entrance Date: Fall and spring quarters

Entrance Requirements:
Age: Minimum of 16 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: Electronics Fundamentals Diploma

General Core Curriculum (18 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
MAT 1013	Algebraic Concepts	5
MAT 1015	Geometry and Trigonometry	5
EMP 1000	Interpersonal Relations & Professional Development	3

Occupational Curriculum (47 Credit Hours		**Credit Hours**
SCT 100	Introduction to Microcomputers	3
ELC 104	Soldering Technology	2
ELC 108	Direct Current Circuits II	4
ELC 110	Alternating Current II	4
ELC 115	Solid State Devices II	4
ELC 117	Linear Integrated Circuits	4
ELC 118	Digital Electronics I	4
ELC 119	Digital Electronics II	4
ELC 120	Microprocessors Fundamentals	4
IFC 100	Industrial Safety Procedures	2
IFC 101	Direct Current Circuits I	4
IFC 102	Alternating Current I	4
IFC 103	Solid State Devices I	4

Total Credit Hours: 65 Minimum Credit Hours for Graduation

ELECTRONICS TECHNOLOGY (EFA4)
DIPLOMA

Campus Availability:

- *Floyd County Campus*
- *Walker County Campus*

Program Description:

The Electronics Technology 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 should 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 computer electronics, industrial electronics, or telecommunications electronics.

Length of Program: Minimum of six (6) quarters

Entrance Dates: Beginning of any quarter (Floyd County); fall and spring quarters (Walker County)

Entrance Requirements:

Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Electronics Technology Diploma

General Core Curriculum (18 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
EMP 1000	Interpersonal Relations and Professional Development	3
MAT 1013	Algebraic Concepts	5
MAT 1015	Geometry and Trigonometry	5

Occupational Curriculum (72 Credit Hours)		**Credit Hours**
ELC 104	Soldering Technology	2
IFC 100	Industrial Safety Procedures	2
IFC 101	Direct Current Circuits I	4
ELC 108	Direct Current Circuits II	4
IFC 102	Alternating Current I	4
IFC 103	Solid State Devices I	4
ELC 110	Alternating Current II	4
SCT 100	Introduction to Microcomputers	3
ELC 115	Solid State Devices II	4
ELC 117	Linear Integrated Circuits	4
ELC 118	Digital Electronics I	4
ELC 119	Digital Electronics II	4
ELC 120	Microprocessor Fundamentals	4

(Program requirements continued on following page)

ELECTRONICS TECHNOLOGY (CONT.)

And completion of one of the following specializations:

Computer Electronics Technology Specialization (OMA4)

ELC 217	Computer Hardware	7
ELC 218	Operating Systems Technology	7
ELC 219	Networking I	4
ELC 286	CompTIA A+ Certification	5
XXX xxx	Technically related electives (See advisor for recommended list)	2

Industrial Electronics Technology Specialization (ILA4)

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

Telecommunications Specialization Courses (TLA4)		**Credit Hours**
ELC 217	Computer Hardware	7
ELC 219	Networking I	4
ELC 259	Fiber Optics Systems	4
ELC 260	Telecommunication and Data Cabling	4
ELC 261	Telecommunications Systems Installation and Programming	3
ELC 262	Telecommunications and Data Transmission Concepts	3

Total Credit Hours: 90 Minimum Credit Hours for Graduation
09/08

ENVIRONMENTAL HORTICULTURE (EH02)
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. Graduates of the program receive an Environmental Horticulture diploma which qualifies them as a horticulturist.

Length of Program: Minimum of 5 quarters.

Entrance Dates: Beginning of any quarter.

Entrance Requirements:

Age: Minimum of 16 years of age.
Education: No high school diploma or GED is required to enter program but must have documentation of high school diploma or GED to graduate and receive the diploma (or technical certificate of credit). See the Success Center for information on earning your high school diploma or GED.
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.

Program Final Exit Point: Environmental Horticulture Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
EMP 1000	Interpersonal Relations and Professional Development	3
ENG 1010	Fundamentals of English I	5
MAT 1012	Foundations of Mathematics	5

Occupational Curriculum (65 Credit Hours)		
EHO 100	Horticulture Science	5
EHO 101	Woody Ornamental Plant Identification	6
EHO 102	Herbaceous Plant Identification	5
EHO 108	Pest Management	5
EHO 115	Environmental Horticulture Internship	3
SCT 100	Introduction to Microcomputers	3

(Program requirements continued on following page)

ENVIRONMENTAL HORTICULTURE (CONT.)

And completion of one of the following specializations:

Horticulturist Specialization Courses (HOR2)		**Credit Hours**
EHO 103	Greenhouse Operations	3
EHO 104	Horticulture Construction	3
EHO 105	Nursery Production	4
EHO 106	Landscape Design	5
EHO 107	Landscape Installation	3
EHO 112	Landscape Management	5
EHO 114	Garden Center Management	3
XXX xxx	Elective(s) (See advisor for recommended list)	12

Landscape Management Specialization Courses (LNM2)		
EHO 104	Horticulture Construction	3
EHO 106	Landscape Design	5
EHO 107	Landscape Installation	3
EHO 112	Landscape Management	5
EHO 133	Turfgrass Management	5
EHO 131	Irrigation	5
XXX xxx	Elective(s) (See advisor for recommended list)	12

Plant Production Specialization Courses (PPR2)		
EHO 103	Greenhouse Operations	3
EHO 105	Nursery Production	4
EHO 125	Plant Propagation	5
EHO 123	Greenhouse Production	6
EHO 131	Irrigation	5
XXX xxx	Elective(s) (See advisor for recommended list)	15

Floral Design Specialization Courses (FLD2)		
EHO 172	Floral Design	4
EHO 173	Floral Design II	5
EHO 175	Interiorscaping	5
EHO 248	Floral Design III	5
EHO 249	Floral Design IV	5
XXX xxx	Elective(s) (See advisor for recommended list)	14

Golf Course Specialization Courses (GLF2)		
EHO 107	Landscape Installation	3
EHO 112	Landscape Management	5
EHO 141	Soils	5
EHO 131	Irrigation	5
EHO 133	Turfgrass Management	5
EHO 142	Golf Course Design, Construction, and Management	5
XXX xxx	Elective(s) (See advisor for recommended list)	10

Total Credit Hours: 78 Minimum Credit Hours for Graduation

INDUSTRIAL ELECTRICAL TECHNOLOGY (IEA2)
DIPLOMA

Campus Availability:

• *Floyd County Campus*

Program Description:

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

Length of Program: Minimum of five (5) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 16 years of age
Education: No high school diploma or GED is required to enter program but must have documentation of high school diploma or GED to graduate and receive the diploma (or technical certificate of credit). See the Success Center for information on earning your high school diploma or GED.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Industrial Electrical Technology Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
MAT 1012	Foundations of Mathematics	5
EMP 1000	Interpersonal Relations and Professional Development	3
Occupational Curriculum (75 Credit Hours)		**Credit Hours**
ELT 106	Electrical Prints, Schematics, Symbols	4
ELT 107	Commercial Wiring I	5
ELT 108	Commercial Wiring II	5
ELT 109	Commercial Wiring III	5
ELT 111	Single-Phase and Three-Phase Motors	5
ELT 112	Variable Speed/Low Voltage Controls	3
ELT 116	Transformers	4
ELT 117	National Electrical Code Industrial Applications	4
ELT 118	Electrical Controls	5
ELT 119	Electricity Principles II	4
ELT 120	Residential Wiring I	5
ELT 121	Residential Wiring II	6
ELT 122	Industrial PLCs	6
IFC 100	Industrial Safety Procedures	2
IFC 101	Direct Current Circuits I	4
SCT 100	Introduction to Microcomputers	3
XXX xxx	Technical Electives (See advisor for recommended list)	5

Total Credit Hours: 88 Minimum Credit Hours for Graduation
09/08

INDUSTRIAL MECHANICAL SYSTEMS (MEH2)
DIPLOMA

(Currently not offering this program)

Campus Availability:
• *Floyd County Campus*

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.

Length of Program: Minimum of four (4) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: No high school diploma or GED is required to enter program but must have documentation of high school diploma or GED to graduate and receive the diploma (or technical certificate of credit). See the Success Center for information on earning your high school diploma or GED.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Industrial Mechanical Systems Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
MAT 1012	Foundations of Mathematics	5
EMP 1000	Interpersonal Relations and Professional Development	3

Occupational Curriculum (63 Credit Hours)		**Credit Hours**
IDS 102	Print Reading and Problem Solving	4
IDS 105	DC and AC Motors	3
IDS 107	Basic Mechanics	5
IDS 109	Mechanical Laws and Principles	7
IDS 215	Industrial Mechanics	6
IDS 221	Industrial Fluidpower	7
IDS 231	Pumps and Piping Systems	2
IDS 241	Maintenance for Reliability	7
IFC 100	Industrial Safety Procedures	2
IFC 101	Direct Current Circuits I	4
IFC 102	Alternating Current I	4

(Program requirements continued on following page)

INDUSTRIAL MECHANICAL SYSTEMS (CONT.)

MCH 109	Lathe Operations I	6
or		
IDS 110	Fundamentals of Motor Controls	(3)
and		
IDS 225	Advanced Pneumatics	(4)
SCT 100	Introduction to Microcomputers	3
WLD 133	Metal Welding and Cutting Techniques	3

Total Credit Hours: 76 Minimum Credit Hours for Graduation
02/09

INDUSTRIAL SYSTEMS TECHNOLOGY (ICS4)
DIPLOMA

Campus Availability:
- *Floyd County Campus*
- *Walker County 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, industrial systems technicians or I and E technicians.

Length of Program: Minimum of eight (8) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Industrial Systems Technology Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
MAT 1013	Algebraic Concepts	5
EMP 1000	Interpersonal Relations and Professional Development	3

Occupational Curriculum (77 Credit Hours)		**Credit Hours**
IFC 100	Industrial Safety Procedures	2
IFC 101	Direct Current Circuits I	4
IFC 102	Alternating Current I	4
IFC 103	Solid State Devices I	4
SCT 100	Introduction to Microcomputers	3
IDS 101	Industrial Computer Applications	5
IDS 103	Industrial Wiring	6
IDS 105	DC and AC Motors	3

(Program requirements continued on following page)

INDUSTRIAL SYSTEMS TECHNOLOGY (CONT.)

Occupational Curriculum (Cont.)		Credit Hours
IDS 110	Fundamentals of Motor Controls	3
IDS 113	Magnetic Starters and Braking	3
IDS 115	Two-Wire Control Circuits	2
IDS 121	Advanced Motor Controls	2
IDS 131	Variable Speed Motor Control	3
IDS 141	Basic Industrial PLCs	6
IDS 142	Industrial PLCs	6
IDS 209	Industrial Instrumentation	6
IDS 215	Industrial Mechanics	6
IDS 221	Industrial Fluidpower	7
IDS 231	Pumps and Piping Systems	2

Total Credit Hours: 90 Minimum Credit Hours for Graduation

MACHINE TOOL TECHNOLOGY (MT02)
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.

Length of Program: Minimum of five (5) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: No high school diploma or GED is required to enter program but must have documentation of high school diploma or GED to graduate and receive the diploma (or technical certificate of credit).
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Machine Tool Technology Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
EMP 1000	Interpersonal Relations and Professional Development	3
ENG 1010	Fundamentals of English I	5
MAT 1012	Foundations of Mathematics	5
Occupational Curriculum (72 Credit Hours)		**Credit Hours**
MCH 101	Introduction to Machine Tool	6
MCH 102	Blueprint Reading I	5
MCH 104	Machine Tool Math I	5
MCH 105	Machine Tool Math II	5
MCH 107	Characteristics of Metals/Heat Treatment I	4
MCH 109	Lathe Operations I	6
MCH 110	Lathe Operations II	6
MCH 112	Surface Grinder Operations	3
MCH 114	Blueprint Reading II	5
MCH 115	Mill Operations I	6
MCH 116	Mill Operations II	6
MCA 211	CNC Fundamentals	7
SCT 100	Introduction to Microcomputers	3
MCH xxx	Elective(s) (Choose from list below)	5

(Program requirements continued on following page)

MACHINE TOOL TECHNOLOGY (CONT.)

Choose from these Electives:

Course		Credit Hours
MCH 103	Applied Measurement	5
MCH 106	Welding for Machine Tool	1
MCH 152	Industrial Machine Applications	6
MCH 153	Sawing and Drilling	2
or		
	Any credit course within the Technical College System	

Total Credit Hours: 85 Minimum Credit Hours for Graduation
09/08

PUBLIC WORKS CIVIL TECHNOLOGY (PWC2)
DIPLOMA

No Longer Accepting New Students

Campus Availability:
• *Gordon County Campus*

Program Description:
The Public Works Civil Technology (PWCT) graduate will have the knowledge and basic skills to assume entry level paraprofessional tasks and responsibilities in the area of public works infrastructure, construction and construction inspection, and public works infrastructure maintenance, and to learn to perform these tasks and responsibilities independently in a minimum period of time. The PWCT graduate will also have the knowledge base to quickly and efficiently assume supervisory and management responsibilities in these career areas.

Length of Program: Minimum of 6 quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age.
Education: High school diploma or GED is 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.

Program Final Exit Point: Public Works Civil Technology Diploma

General Core Curriculum (18 Credit Hours)		**Credit Hours**
EMP 1000	Interpersonal Relations & Professional Development	3
ENG 101	Basic English	5
MAT 1013	Algebraic Concepts	5
MAT 1015	Geometry & Trigonometry	5

Occupational Curriculum (57 Credit Hours)		**Credit Hours**
SCT 100	Introduction to Microcomputers	3
CET 130	CAD	4
CET 190	Construction Materials	5
DDS 203	Surveying I	3
DDS 219	Route Location and Design	7
PWC 100	Public Works Infrastructure	5
PWC 105	Construction Methods and Cost Estimating	5
PWC 110	Plan Reading	5
PWC 115	Highway Design	5
PWC 120	Project Management	5
PWC 140	Internship	10

Total Credit Hours: 75 Minimum Credit Hours for Graduation

WELDING AND JOINING TECHNOLOGY (WJ02)
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.

Length of Program: Minimum of six (6) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: No high school diploma or GED is required to enter program but must have documentation of high school diploma or GED to graduate and receive the diploma (or technical certificate of credit). See the Success Center for information on earning your high school diploma or GED.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Welding and Joining Technology Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
EMP 1000	Interpersonal Relations and Professional Development	3
ENG 1010	Fundamentals of English I	5
MAT 1012	Foundations of Mathematics	5
Occupational Curriculum (62 Credit Hours)		
SCT 100	Introduction to Microcomputers	3
WLD 100	Introduction to Welding Technology	6
WLD 101	Oxyfuel Cutting	4
WLD 103	Blueprint Reading I	3
WLD 104	Shielded Metal Arc Welding I	6
WLD 105	Shielded Metal Arc Welding II	6
WLD 106	Shielded Metal Arc Welding III	6
WLD 107	Shielded Metal Arc Welding IV	6
WLD 108	Blueprint Reading II	3
WLD 109	Gas Metal Arc Welding	6
WLD 110	Gas Tungsten Arc Welding	4
WLD 112	Preparation for Industrial Qualification	4

(Program requirements continued on following page)

WELDING AND JOINING TECHNOLOGY (CONT.)

WLD 160	Welding and Joining Technology Half Time Internship	5
or		
XXX xxx	Elective(s) (See advisor for recommended list)	(5)

Recommended Electives		**Credit Hours**
WLD 102	Oxyacetylene Welding	1
WLD 150	Advanced Gas Tungsten Arc Welding	5
WLD 151	Fabrication Processes	5
WLD 152	Pipe Welding	5
WLD 153	Flux Cored Arc Welding	5
WLD 154	Plasma Cutting	5

Total Credit Hours: 75 Minimum Credit Hours for Graduation
02/09

ADVANCED MECHANICAL DRAFTING SPECIALIST (MDF1) CERTIFICATE

No Longer Accepting Students Into This Program

Campus Availability:

• *Walker County Campus*

Program Description:

The Advanced Mechanical Drafting Specialist certificate program is designed to prepare students for employment in a variety of positions in the drafting 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 upgrade present knowledge and skills or to retrain in drafting

Length of Program: Minimum of four (4) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Advanced Mechanical Drafting Specialist Technical Certificate of Credit

Required Courses		Credit Hours
DDS 201	Strength of Materials	5
or		
PHY 191	Mechanics	(5)
or		
PHY 1110	Introductory Physics	(5)
DDS 225	Principles of Metallurgy	4
or		
DDS 226	Manufacturing Processes	(4)
DDS 227	Jig, Fixture and Die Drawing	6
DDS 229	Gears and Cams	6
DDS 230	Mechanisms I	7
DDS 232	Mechanical Power Transmission	6
or		
DDS 243	Mechanical Power Transmission O.B.I.	(6)

Total Credit Hours: 34 Minimum Credit Hours for Graduation

ADVANCED PLC AND HMI TECHNICIAN I (ADP1)
CERTIFICATE

Campus Availability:
• *Floyd County Campus*

Program Description:
The Advanced PLC and HMI Technician I certificate program is designed to offer advanced technical training in high technology automated systems being used in industry. The certificate offers advanced skills for Industrial Systems Technology graduates and industry personnel. Graduates are eligible for advanced employment in industrial settings.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Advanced PLC and HMI Technician I Technical Certificate of Credit

Required Courses		Credit Hours
IDS 270	Advanced PLC I	7
IDS 273	Advanced PLC II	7
IDS 275	Human Machine Interface	7

Total Credit Hours: 21 Minimum Credit Hours for Graduation
09/08

ADVANCED PLC AND HMI TECHNICIAN II (ISY1)
CERTIFICATE

Campus Availability:
• *Floyd County Campus*

Program Description:
The Advanced PLC and HMI Technician II certificate program continues the advanced technical training in high technology automated systems being used in industry. This certificate offers advanced skills in advanced process control, equipment networking, and industrial graphic communications. Graduates are eligible for advanced employment in industrial settings.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Advanced PLC and HMI Technician II Technical Certificate of Credit

Required Courses		Credit Hours
IDS 270	Advanced PLC's I	7
IDS 273	Advanced PLC's II	7
IDS 275	Human Machine Interface	7
IDS 280	Advanced Process Control	7
IDS 283	Networking Industrial Equipment	7
IDS 285	Industrial Graphical Communications	7

Total Credit Hours: 42 Minimum Credit Hours for Graduation
09/08

AUTOMOTIVE AUTOMATIC TRANSMISSION/TRANSAXLE TECHNICIAN (5CT1) CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
This certificate program introduces students to basic automotive transmission/transaxle, and fundamental theory. Students attain proficiency in electrical components, power sources, fundamental hydraulic circuitry, diagnostic techniques, and repair of universal joints, differentials, final drives, and shafts. Additional emphasis is on rear wheel drive, front wheel drive, universal joints, constant velocity joints, and differentials.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter (Floyd County campus); Fall and spring quarters (Walker County campus)

Entrance Requirements:
Age: Minimum of 16 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: Automotive Automatic Transmission Transaxle Technician Technical Certificate of Credit

Required Courses		Credit Hours
AUT 120	Introduction to Automotive Technology	3
AUT 122	Electrical and Electronic Systems	6
AUT 144	Introduction to Automatic Transmissions	4
AUT 210	Automatic Transmission Repair	7
AUT 212	Advanced Electronic Transmission Diagnosis	3

Total Credit Hours: 23 Minimum Credit Hours for Graduation
09/08 (Replaces AAT1 eff 200902)

AUTOMOTIVE BODY REPAIR ASSISTANT (5DV1)
CERTIFICATE

Campus Availability:
• *Floyd County Campus*

Program Description:

The Auto Body Repair Assistant certificate program prepares students for employment as assistants to technicians in an automotive collision repair shop. Training is provided in minor collision repair, mechanical and electrical systems, body fiberglass plastics, and rubber repair techniques. Students will also learn the proper techniques for bolt-on body panel removal and replacement, sanding, priming and paint preparation.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Auto Body Repair Assistant Technical Certificate of Credit

Required Courses		Credit Hours
ACR 1000	Safety	1
ACR 1010	Automotive Components Identification	3
ACR 1020	Equipment and Hand Tools Identification	1
ACR 1040	Mechanical and Electrical Systems	2
ACR 1060	Welding and Cutting	6
ACR 1050	Body Fiberglass, Plactic, and Rubber Repair Techniques	3
ACR 1070	Trim, Accessories, and Glass	2
ACR 1100	Minor Collision Repair	2
ACR 1280	Bolt-On Body Panel Removal and Replacement	4
ACR 1300	Sanding, Priming and Painting Preparation	5

Total Credit Hours: 29 Minimum Credit Hours for Graduation

AUTOMOTIVE BRAKE TECHNICIAN (5CU1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
The Automotive Brake Technician certificate program provides students with entry-level skills for entering the automotive industry as brake technicians. This program includes fundamental hydraulics, braking systems theory, operation, drum brakes, disc brakes, power assisted brakes, anti lock braking systems, brake system diagnostics, brake system repair, and brake system servicing.

Length of Program: Minimum of one (1) quarter

Entrance Date: Beginning of any quarter (Floyd County campus); Fall and spring quarters (Walker County campus)

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or equivalent
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: Automotive Brake Technician Technical Certificate of Credit

Required Courses		Credit Hours
AUT 120	Introduction to Automotive Technology	3
AUT 122	Electrical and Electronic Systems	6
AUT 130	Automotive Brake Systems	4
AUT 214	Advanced Electronic Controlled Brake System Diagnosis	4

Total Credit Hours: 17 Minimum Credit Hours for Graduation
09/08 (Replaces ABR1 eff 200902)

AUTOMOTIVE ELECTRICAL/ELECTRONIC SYSTEMS TECHNICIAN (5AS1) 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.

Length of Program: Minimum of one (1) quarter

Entrance Date: Beginning of any quarter (Floyd County campus); Fall and spring quarters (Walker County campus)

Entrance Requirements:
Age: Minimum of 16 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: Automotive Electrical/Electronic Systems Technician Technical Certificate of Credit

Required Courses		Credit Hours
AUT 120	Introduction to Automotive Technology	3
AUT 122	Electrical and Electronic Systems	6
AUT 124	Battery Starting and Charging Systems	4
AUT xxx	Elective	2

Total Credit Hours: 15 Minimum Credit Hours for Graduation
09/08 (Replaces AEC1 eff 200902)

AUTOMOTIVE ENGINE PERFORMANCE TECHNICIAN (AEG1) 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.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter (Floyd County campus); Fall and spring quarters (Walker County campus)

Entrance Requirements:
Age: Minimum of 16 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: Automotive Engine Performance Technician Technical Certificate of Credit

Required Courses		Credit Hours
AUT 128	Fuel, Ignition, and Emission Systems	7
AUT 140	Electronic Engine Control Systems	7
AUT 218	Advanced Electronic Engine Control Systems	4

Total Credit Hours: 18 Minimum Credit Hours for Graduation

AUTOMOTIVE ENGINE REPAIR TECHNICIAN (5CS1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
The Automotive Engine Repair Technician certificate provides the student with entry-level 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.

Length of Program: Minimum of one (1) quarter

Entrance Date: Beginning of any quarter (Floyd County campus); Fall and spring quarters (Walker County campus)

Entrance Requirements:
Age: Minimum of 16 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: Auto Engine Repair Technician Technical Certificate of Credit

Required Courses		Credit Hours
AUT 120	Introduction to Automotive Technology	3
AUT 122	Electrical and Electronic Systems	6
AUT 126	Engine Principles of Operation and Repair	6

Total Credit Hours: 15 Minimum Credit Hours for Graduation
09/08

AUTOMOTIVE HEATING AND AIR CONDITIONING TECHNICIAN (5AM1) CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
The Automotive Heating and Air Conditioning Technician certificate provides students with skills for entering the automotive industry as entry-level heating and air conditioning technicians. This program includes theory, diagnosis, servicing, and repair of automotive heating and air conditioning systems.

Length of Program: Minimum of one (1) quarter

Entrance Date: Beginning of any quarter (Floyd County campus); Fall and spring quarters (Walker County campus)

Entrance Requirements:
Age: Minimum of 16 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: Automotive Heating and Air Conditioning Technician Technical Certificate of Credit

Required Courses		Credit Hours
AUT 120	Introduction to Automotive Technology	3
AUT 122	Electrical and Electronic Systems	6
AUT 142	Climate Control Systems	6

Total Credit Hours: 15 Minimum Credit Hours for Graduation
02/09

AUTOMOTIVE MANUAL DRIVE TRAIN AND AXLE REPAIR TECHNICIAN (ADT1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
This program provides students with the knowledge and skills necessary to enter the automotive industry as entry-level automotive manual drive and axle repair technicians. The program includes theory, diagnosis, servicing, removal, replacement, and repair of manual transmissions, clutches, drive shafts, differentials, and axles.

Length of Program: Minimum of one (1) quarter

Entrance Date: Beginning of any quarter (Floyd County campus); Fall and spring quarters (Walker County campus)

Entrance Requirements:
Age: Minimum of 16 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: Automotive Manual Drive Train and Axle Repair Technician Technical Certificate of Credit

Required Courses		Credit Hours
AUT 120	Introduction to Automotive Technology	3
AUT 122	Electrical and Electronic Systems	6
AUT 134	Drivelines	4
AUT 138	Manual Transmissions/Transaxles	4

Total Credit Hours: 17 Minimum Credit Hours for Graduation
09/08

AUTOMOTIVE PAINTING AND REFINISHING SPECIALISTS(5DX1) CERTIFICATE

Campus Availability:
• *Floyd County Campus*

Program Description:

This program is intended to produce graduates who are entry-level Paint and Refinishing Specialists. Program graduates should be competent in the following occupational areas of auto body**:** sand, prime, and paint preparation, special refinishing application, urethane enamels application, tint and match colors, and detailing. This program is intended to produce graduates who are entry-level Paint and Refinishing Specialists. The program includes: sanding, priming, painting preparation, special refinishing application, urethane enamel applications, tinting and matching of colors, and detailing.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Automotive Painting and Refinishing Specialists Technical Certificate of Credit

Required Courses		Credit Hours
ACR 1000	Safety	1
ACR 1300	Sanding, Priming and Paint Preparation	5
ACR 1320	Special Refinishing Application	5
ACR 2340	Urethane Enamels Refinishing Applications	5
ACR 2350	Tint and Match Colors	5
ACR 2360	Detailing	2

Total Credit Hours: 23 Minimum Credit Hours for Graduation

AUTOMOTIVE SUSPENSION AND STEERING TECHNICIAN (5CV1) 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 suspension and steering entry-level technicians. The program presents vehicle chassis types; chassis components; steering and suspension systems; steering and suspension operation, design, service, repair, alignment, and problem solving.

Length of Program: Minimum of one (1) quarter

Entrance Date: Beginning of any quarter (Floyd County campus); Fall and spring quarters (Walker County campus)

Entrance Requirements:
Age: Minimum of 16 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: Automotive Suspension and Steering Technician Technical Certificate of Credit

Required Courses		Credit Hours
AUT 120	Introduction to Automotive Technology	3
AUT 122	Electrical and Electronic Systems	6
AUT 132	Suspension and Steering Systems	4
AUT 216	Advanced Electronic Controlled Suspension and Steering Syst.	4

Total Credit Hours: 17 Minimum Credit Hours for Graduation
02/09

AVIATION MAINTENANCE TECHNICIAN (AVI4)
CERTIFICATE

Location:

• *GNTC Aviation Training Center at Richard B. Russell Regional Airport*

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.

Length of Program: Minimum of eight (8) quarters

Entrance Date: Spring or fall quarter

Entrance Requirements:

Age: Minimum of 16 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: Aviation Maintenance Technician Technical Certificate of Credit

Required Courses

Occupational Curriculum (125 Credit Hours)		Credit Hours
AMT 100	Aviation Mathematics	3
AMT 101	Aircraft Maintenance Regulations	3
AMT 102	Aircraft Applied Sciences	13
AMT 103	Aircraft Electricity and Electronics	7
AMT 121	Aviation Physics	3
AMT 201	Aircraft Airframe Structures	3
AMT 202	Airframe Sheet Metal and Non-Metallic Structures	7
AMT 203	Airframe Welding	2
AMT 204	Airframe Assembly and Rigging	3
AMT 205	Airframe Inspection	5
AMT 206	Aircraft Hydraulic and Pneumatic Systems	3
AMT 207	Aircraft Landing Gear Systems	4
AMT 208	Aircraft Environmental Control Systems	10
AMT 209	Aircraft Electrical, Communication, and Navigation Systems	9
AMT 221	Reciprocating Engine Powerplants I	5
AMT 222	Reciprocating Engine Powerplants II	7
AMT 223	Gas Turbine Powerplants I	5
AMT 224	Gas Turbine Powerplants II	5
AMT 225	Aircraft Engine Inspection	2
AMT 226	Aircraft Engine Fuel and Fuel Metering Systems	7
AMT 227	Aircraft Engine Electrical, Ignition, and Starting Systems	10
AMT 228	Aircraft Powerplant Accessory Systems	9

Total Credit Hours: 125 Minimum Credit Hours for Graduation

AVIATION MAINTENANCE TECHNICIAN-AIRFRAME (AMA1) CERTIFICATE

Location:
• *GNTC Aviation Training Center at Richard B. Russell Regional Airport*

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 aircraft maintenance application. This program meets the academic requirement for the FAA Airframe and Powerplant certification.

Length of Pro gram: Minimum of five (5) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Aviation Maintenance Technician-Airframe Technical Certificate of Credit

Required Courses		Credit Hours
AMT 100	Aviation Mathematics	3
AMT 101	Aircraft Maintenance Regulations	3
AMT 102	Aircraft Applied Sciences	13
AMT 103	Aircraft Electricity & Electronics	7
AMT 121	Aviation Physics	3
AMT 201	Aircraft Airframe Structures	3
AMT 202	Airframe Sheet Metal & Non-Metallic Structures	7
AMT 203	Airframe Welding	2
AMT 204	Airframe Assembly & Rigging	3
AMT 205	Airframe Inspection	5
AMT 206	Aircraft Hydraulic & Pneumatic Systems	3
AMT 207	Aircraft Landing Gear Systems	4
AMT 208	Aircraft Environmental Control Systems	10
AMT 209	Aircraft Electrical, Com. & Nav. Systems	9

Total Credit Hours: 75 Minimum Credit Hours for Graduation
09/08

AVIATION MAINTENANCE TECHICIAN-POWERPLANT (AMP1) CERTIFICATE

Location:
• *GNTC Aviation Training Center at Richard B. Russell Regional Airport*

Program Description:
The Aviation Maintenance Technician-Powerplant 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.

Length of Program: Minimum of five (5) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Aviation Maintenance Technician-Powerplant Technical Certificate of Credit

Required Courses		Credit Hours
AMT 100	Aviation Mathematics	3
AMT 101	Aircraft Maintenance Regulations	3
AMT 102	Aircraft Applied Sciences	13
AMT 103	Aircraft Electricity & Electronics	7
AMT 121	Aviation Physics	3
AMT 221	Reciprocating Engine Powerplants I	5
AMT 222	Reciprocating Engine Powerplants II	7
AMT 223	Gas Turbine Powerplants I	5
AMT 224	Gas Turbine Powerplants II	5
AMT 225	Aircraft Engine Inspection	2
AMT 226	Aircraft Engine Fuel & Fuel Metering Sys.	7
AMT 227	Aircraft Engine Electrical, Ign. & Start. Sys.	10
AMT 228	Aircraft Powerplant Accessory Systems	9

Total Credit Hours: 79 Minimum Credit Hours for Graduation
09/08

AVIONICS BENCH TECHNICIAN (AVB1)
CERTIFICATE

Location:
• *GNTC Aviation Training Center at Richard B. Russell Regional Airport*

Program Description:
The Avionics Bench Technician program is a sequence of courses that prepares students for employment in the field of avionics maintenance technology (aircraft electronics). Graduates of the program receive an Avionics Bench Technician technical certificate of credit.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Avionics Bench Technician Technical Certificate of Credit

Required Courses		Credit Hours
AVT 101	Basic Electronics	6
AVT 102	Avionics Maintenance Practices	5
AVT 103	Advanced Electronics	6
AVT 104	Digital Electronics	6
AVT 106	Aircraft Logic Systems	6
AVT 107	Aircraft Communication Systems	7
AVT 108	Navigation Systems	7
AVT 109	Flight Director and Autopilot Systems	7

Total Credit Hours: 50 Minimum Credit Hours for Graduation

CABINETMAKING ASSEMBLY TECHNICIAN (5CX1)
CERTIFICATE

Campus Availability:
• *Floyd County Campus*

Program Description: This certificate in intended to prepare individuals for employment as cabinetmaking workers. Program completers are trained in the use of hand and power tools, materials, blueprint reading, cabinet design and layout, wood joints, fastening methods, and assembly techniques.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Cabinetmaking Assembly Technician Technical Certificate of Credit

Required Courses		**Credit Hours**
CAB 108	Cabinet Design and Layout	4
CAB 110	Wood Joints	3
CAB 112	Fastening Methods	4
CAB 114	Cutting Cabinet Components	3
XXX xxx	Occupational Elective (See advisor for recommended list.)	2

Total Credit Hours: 16 Minimum Credit Hours for Graduation
Replaced Advanced Cabinetmaking CBC1 201001

CABINETMAKING INSTALLATION TECHNICIAN (5CW1)
CERTIFICATE

Campus Availability:
• *Floyd County Campus*

Program Description: The Cabinetmaking Installation Technician certificate is intended to prepare individuals for employment as cabinetmaking assemblers and installers. Program completers trained in the use of hand and power tools, materials, blueprint reading, cabinet design and layout, wood joints, fastening methods, assembly techniques, hardware installation, counter tops, finishes, and installation.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Cabinetmaking Installation Technician Technical Certificate of Credit

Required Courses		**Credit Hours**
CAB 116	Cabinet Assembly I	5
CAB 118	Door, Drawer, and Hardware Installation	3
CAB 120	Plastic Laminates and Wood Veneers	3
CAB 122	Cabinet Finishing and Installation	5

Total Credit Hours: 16 Minimum Credit Hours for Graduation
Replaced Cabinet Making Assistant CB01 201001

CAD OPERATOR (DOP1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
The CAD Operator program prepares students to specialize in the drawing field. The program emphasizes a combination of computer aided drafting (CAD) theory and practical application necessary for successful employment. The program is designed primarily for entry-level drafters to continue training after employment.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: CAD Operator Technical Certificate of Credit

Required Courses		Credit Hours
SCT 100	Introduction to Microcomputers	3
DDF 102	Size and Shape Description I	5
DDF 103	Size and Shape Description II	5
DDF 105	Auxiliary Views	3
DDF 106	Fasteners	6
DDF 107	Introduction to CAD	6

Total Credit Hours: 28 Minimum Credit Hours for Graduation

CAD OPERATOR - ARCHITECTURAL (CDO1)
CERTIFICATE

No Longer Accepting Students Into This Program

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
This Drafting technical certificate of credit program is designed to provide a less extensive program option for individuals who already possess a background in the drafting field. This certificate program provides CAD training to individuals who want to progress in their occupation or prepare for employment in architectural or drafting. It is designed to provide advanced training for the job market and update individuals already employed as CAD operators or drafters. This program leads to a certificate and provides an introduction to Computer Assisted Drawing with an emphasis on the architectural field. Day and evening classes are offered.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: CAD Operator - Architectural Technical Certificate of Credit

Required Courses		Credit Hour
SCT 100	Introduction to Microcomputers	3
DDF 107	Introduction to CAD	6
DDF 111	Intermediate CAD	6
DDF 112	3-D Drawings and Modeling	6
DDS 205	Residential Architectural Drawing I	6

Total Credit Hours: 27 Minimum Credit Hours for Graduation

CAD OPERATOR - MECHANICAL (OH01)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
This Drafting technical certificate of credit program is designed to provide a less extensive program option for individuals who already possess a background in the drafting field. This certificate program provides CAD training to individuals who want to progress in their occupation or prepare for employment in mechanical drafting. It is designed to provide advanced training for the job market and update individuals already employed as CAD operators or drafters.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: CAD Operator - Mechanical Technical Certificate of Credit

Required Courses		Credit Hours
SCT 100	Introduction to Microcomputers	3
DDF 107	Introduction to CAD	6
DDF 109	Assembly Drawings I	5
DDF 111	Intermediate CAD	6
DDF 112	3-D Drawing and Modeling	6

Total Credit Hours: 26 Minimum Credit Hours for Graduation

CERTIFIED CONSTRUCTION WORKER (5CZ1)
CERTIFICATE

Campus Availability:
• *Floyd County Campus*

Program Description:
Certified Construction Worker program offers training for the construction industry that provides students with the information and skills needed to work effectively on a construction site.

Length of Program: Minimum of one (1) quarter

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Certified Construction Worker Technical Certificate of Credit

Required Courses		Credit Hours
CFC 100	Safety	2
CFC 101	Introduction To Construction	2
CFC 102	Professional Tool Use and Safety	4
CFC 103	Materials and Fasteners	3
CFC 105	Construction Print Reading Fundamentals	5

Total Credit Hours: 16 Minimum Credit Hours for Graduation
09/08

CERTIFIED MANUFACTURING SPECIALIST (TG01)
CERTIFICATE

No longer accepting students into this program

Campus Availability:
• *Floyd County Campus*

Program Description:
This certificate program provides training in manufacturing service skills. It is designed to provide students with a basic understanding of manufacturing processes and concentrates on those areas successful job applicants need to know to gain employment at the entry level.

Length of Program: Minimum of one (1) quarter

Entrance Date: Varies. See advisor for information.

Entrance Requirements:
Age: Minimum of 16 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: Certified Manufacturing Specialist Technical Certificate of Credit

Required Courses		Credit Hours
AMF 152	Manufacturing Organizational Principles	2
AMF 154	Manufacturing Workforce Skills	2
AMF 156	Manufacturing Production Requirements	2
AMF 158	Automated Manufacturing Skills	4
AMF 160	Representative Manufacturing Skills	5

Total Credit Hours: 15 Minimum Credit Hours for Graduation

CNC SPECIALIST (CNC1)
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. Program graduates receive a CNC Specialist technical certificate of credit.

Length of Program: Minimum of two (2) quarters
NOTE: This program leads to a certificate and requires the completion of the 85 credit hour Machine Tool program. Day and evening classes are offered.

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

A candidate for the CNC Specialist certificate must complete the Machine Tool Technology diploma or degree program or have three years' experience as a machine tool technician and the instructor's permission.

Program Final Exit Point: Computer Numerical Control Specialist (CNC) Technical Certificate of Credit

Required Courses		**Credit Hours**
MCA 211	CNC Fundamentals	7
MCA 213	CNC Mill Manual Programming	7
MCA 215	CNC Lathe Manual Programming	7
MCA 217	CNC Practical Applications	4
MCA 219	CAD/CAM Programming	6
XXX xxx	Electives (See advisor for recommended list)	5

Total Credit Hours: 36 Minimum Credit Hours for Graduation
09/08

COMMERCIAL TRUCK DRIVING (TU01)
CERTIFICATE

Campus Availability:

- *Gordon County: 632 Richardson Road Commercial Truck Driving Facility*
- *Walker County Campus*

Program Description:

The Commercial Truck Driving certificate program is a sequence of courses designed to prepare students for careers in commercial truck driving. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in the fundamentals of CTD (CTD 101), basic CTD operation (CTD 102), advanced CTD operation (CTD 103), and a CTD internship (CTD 104) with a company to provide the advanced training, which focuses on developing driving skills. Each student must receive a minimum program total of 44 hours of individual behind-the-wheel (BTW) instructional time; at least 12 hours must be spent on the range; and at least 12 hours must be spent on the street/road for each student. The remaining 20 hours may be used in any combination of range and street/road BTW time. Note: State law requires that, whenever a vehicle is operated on public roads, an instructor must be present in the truck while a student is driving.

Length of Program: Eight (8)-twelve (12) weeks depending on class. Call the Student Success Center for specific information.

Entrance Requirements:

Age: Minimum of 21 years of age. (18-20 year olds may take the program, however, they can only drive in Georgia.)
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.
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 college-approved physician/medical center; (4) Pass a DOT drug test dated within 90 days of class begin date from a college-approved 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.

Program Final Exit Point: Commercial Truck Driving Technical Certificate of Credit

Approximate Program Cost: $3,870 plus fees for drug screening, DOT physical, CDL road test, MVR report and fuel surcharge (appx. $500).

Required Courses (15 Credit Hours)		Credit Hours
CTD 101	Fundamentals of Commercial Truck Driving	5
CTD 102	Basic Operations of Commercial Truck Driving	5
CTD 103	Advanced Operations of Commercial Truck Driving	5
or		
CTD 104	Internship	5

Total Credit Hours: 15 Minimum Credit Hours for Graduation

CONSTRUCTION MANAGEMENT APPRENTICE (CNM1)
CERTIFICATE

Campus Availability:
• *Gordon County Campus*

Program Description:
The program emphasizes a combination of theory and practical application necessary for successful employment. The program is designed primarily for entry-level construction management supervisory positions.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Construction Management Apprentice Technical Certificate of Credit

Required Courses		Credit Hours
SCT 100	Introduction to Microcomputers	3
CAR 101	Safe Tool of Use	3
CAR 103	Materials	3
CAR 105	Print Reading	5
CAR 107	Site Layout and Footings	5
CFC 100	Safety	1
CMT 201	Residential Estimating Review	4
CMT 202	Construction Drafting I	4
CMT 205	Residential Code Review	5

Total Credit Hours: 33 Minimum Credit Hours for Graduation

CONSTRUCTION PROJECT MANAGER (COP1)
CERTIFICATE

No Longer Accepting Students Into This Program

Campus Availability:
• *Gordon County Campus*

Program Description:
The program emphasizes a combination of theory and practical application necessary for successful employment. The program is designed primarily for entry-level construction project management.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Construction Project Manager Technical Certificate of Credit

Required Courses		Credit Hours
SCT 100	Introduction to Microcomputers	3
CMT 201	Residential Estimating Review	4
CMT 202	Construction Drafting I	4
CMT 213	Computerized Construction Scheduling	4
CMT 217	Construction Contracting	5
ACC 1101	Principles of Accounting I	6

Total Credit Hours: 26 Minimum Credit Hours for Graduation

ELECTRICAL MAINTENANCE TECHNICIAN (ELM1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Polk County Campus*

Program Description:
The Electrical Maintenance Technician certificate is designed to offer related electrical training. This technical certificate provides instruction in safety procedures, programmable logic controls, direct current concepts, alternating current concepts, and industrial wiring.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Electrical Maintenance Technician Technical Certificate of Credit

Required Courses		Credit Hours
IDS 102	Print Reading and Problem Solving	4
IDS 103	Industrial Wiring	6
IDS 105	DC and AC Motors	3
IDS 110	Fundamentals of Motor Controls	3
IDS 113	Magnetic Starters and Braking	3
IDS 141	Basic Industrial PLCs	6
IDS 142	Industrial PLCs	6
IFC 100	Industrial Safety Procedures	2
IFC 101	Direct Current Circuits I	4
IFC 102	Alternating Current I	4

Total Credit Hours: 41 Minimum Credit Hours for Graduation

ELECTRICAL TECHNICIAN (LL01)
CERTIFICATE

Campus Availability:
• *Floyd County Campus*

Program Description:
This certificate program provides educational opportunities to individuals that will enable them to obtain the knowledge, skills, and attitudes necessary to succeed in the field of residential wiring.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Electrical Technician Technical Certificate of Credit

Required Courses		Credit Hours
MAT 1012	Foundations of Mathematics	5
IFC 100	Industrial Safety Procedures	2
IFC 101	Direct Current Circuit I	4
ELT 106	Electrical Prints, Schematics and Symbols	4
ELT 119	Electricity Principles II	4
ELT 120	Residential Wiring I	5
ELT 121	Residential Wiring II	6

Total Credit Hours: 30 Minimum Credit Hours for Graduation

FLAT SHIELDED METAL ARC WELDER (5BR1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description: Flat Shielded Metal Arc Welder prepares students for careers in shielded metal arc welding.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

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 NTC 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: Flat Shielded Metal ARC Welder Technical Certificate of Credit

Required Courses		Credit Hours
WLD 100	Introduction to Welding Technology	6
WLD 101	Oxyfuel Cutting	4
WLD 104	Shielded Metal Arc Welding I	6

Total Credit Hours: 16 Minimum Credit Hours for Graduation
02/09

GAS METAL ARC WELDER FABRICATOR (5BW1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description: Gas Metal Arc Welder prepares students for careers in gas metal arc welding.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Gas Metal ARC Welder Fabricator Technical Certificate of Credit

Required Courses		Credit Hours
WLD 100	Introduction to Welding Technology	6
WLD 101	Oxyfuel Cutting	4
WLD 109	Gas Metal Arc Welding (GMAW/MIG)	6
XXX xxx	Elective	3

Total Credit Hours: 19 Minimum Credit Hours for Graduation
02/09

GAS TUNGSTEN ARC WELDER (5BT1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description: Gas Tungsten Arc Welder introduces students to gas tungsten arc welding.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Gas Tungsten ARC Welder Fabricator Technical Certificate of Credit

Required Courses		Credit Hours
WLD 100	Introduction to Welding Technology	6
WLD 101	Oxyfuel Cutting	4
WLD 110	GTAW TIG	4
XXX xxx	Elective (See advisor for recommended list)	3

Total Credit Hours: 17 Minimum Credit Hours for Graduation
02/09

INDUSTRIAL ELECTRICIAN (ISB1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
The Industrial Electrician program prepares students for employment using basic electrical maintenance skills. This certificate program will provide knowledge and skills in the occupational areas of industrial safety, direct current circuits, alternating current circuits, and industrial wiring.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Industrial Electrician Technical Certificate of Credit

Required Courses		Credit Hours
IDS 103	Industrial Wiring	6
IFC 100	Industrial Safety Procedures	2
IFC 101	Direct Current Circuits I	4
IFC 102	Alternating Current I	4

Total Credit Hours: 16 Minimum Credit Hours for Graduation
09/08

INDUSTRIAL FLUID POWER TECHNICIAN (IFP1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
The Industrial Fluid Power Technician Technical Certificate is designed to prepare students for employment in today's industrial setting. This program provides learning opportunities in the following: industrial safety, industrial mechanics, industrial hydraulics, industrial pneumatics, and pumps and piping systems.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Industrial Fluid Power Technician Technical Certificate of Credit

Required Courses		Credit Hours
IFC 100	Industrial Safety Procedures	2
IDS 215	Industrial Mechanics	6
IDS 221	Industrial Fluidpower	7
IDS 231	Pumps and Piping Systems	2

Total Credit Hours: 17 Minimum Credit Hours for Graduation
09/08

INDUSTRIAL MOTOR CONTROL TECHNICIAN (MTC1) CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
The Industrial Motor Control Technician certificate is designed to offer industrial motor controls training. This program provides instruction in DC and AC motors, basic and advanced motor controls, and variable speed drives.

Length of Program: Minimum of four (4) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Industrial Motor Control Technician Technical Certificate of Credit

Required Courses		Credit Hours
IDS 105	DC and AC Motors	3
IDS 110	Fundamentals of Motor Controls	3
IDS 113	Magnetic Starters and Braking	3
IDS 115	Two-Wire Control Circuits	2
IDS 121	Advanced Motor Controls	2
IDS 131	Variable Speed Motor Control	3

Total Credit Hours: 16 Minimum Credit Hours for Graduation
02/09

INDUSTRIAL SYSTEMS TECHNICIAN (ISF1)
CERTIFICATE

Campus Availability:
• *Walker County Campus*

Program Description: The Industrial Systems Technician certificate program prepares students for employment in a variety of positions in today's industrial systems 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. Graduates of the program are qualified as industrial systems technician.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Industrial Systems Technician Technical Certificate of Credit

Required Courses		Credit Hours
IFC 100	Industrial Safety Procedures	2
IFC 101	Direct Current Circuits I	4
IFC 102	Alternating Current I	4
MAT 1013	Algebraic Concepts	5
SCT 100	Introduction to Microcomputers	3

Total Credit Hours: 18 Minimum Credit Hours for Graduation
02/09

INSTRUMENTATION AND CONTROLS TECHNICIAN I (IAC1) CERTIFICATE

Campus Availability:

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

Program Description:

The Instrumentation and Controls Technician I technical certificate provides additional educational opportunities for plant personnel or other experienced individuals who need further training in the area of instrumentation and process control. This certificate 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.

Length of Program: Minimum of three (3) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 18 years of age

Education: High school diploma or GED is required. Qualified students must have an earned associates degree or higher or have a minimum of five years work experience in a related field.

Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Instrumentation and Controls Technician I Certificate of Credit

Required Courses		Credit Hours
SCT 100	Introduction to Microcomputers	3
IFC 100	Industrial Safety Procedures	2
IFC 103	Solid State Devices I	4
IDS 102	Print Reading and Problem Solving	4
IDS 104	Electricity	7
IDS 105	DC and AC Motors	3
IDS 110	Fundamentals of Motor Controls	3
IDS 131	Variable Speed Motor Control	3
IDS 141	Basic Industrial PLC's	6
IDS 209	Industrial Instrumentation	6

Total Credit Hours: 41 Minimum Credit Hours for Graduation

INSTRUMENTATION AND CONTROLS TECHNICIAN II (IA11)
CERTIFICATE

Campus Availability:
• *Polk County Campus*

Program Description:
The Instrumentation and Controls Technician II is the certificate that builds on the curriculum completed from the Instrumentation and Controls Technician I certificate.

Length of Program: Minimum of three (3) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 18 years of age
Education: High school diploma or GED is required. Completion of Instrumentation and Controls Technician I certificate or five years or more work experience in a related field.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Instrumentation and Controls Technician II Certificate of Credit

Required Courses		Credit Hours
IDS 275	Human Machine Interface	7
IDS 280	Advanced Process Control	7
IDS 283	Networking Industrial Equipment	7
IDS 285	Industrial Graphical Communications	7
ICT 205	Fund of Pressure, Temp., Flow and Level	3
ICT 207	Maintenance and Calibration	7
ICT 209	Final Control Elements	5

Total Credit Hours: 43 Minimum Credit Hours for Graduation

LATHE OPERATOR (5AJ1)
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.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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.
Note: Students must have the physical capabilities sufficient to lift, carry, or move materials or equipment weighing up to 50 pounds in the machine tool lab.

Program Final Exit Point: Lathe Operator Technical Certificate of Credit

Required Courses		**Credit Hours**
MCH 101	Introduction to Machine Tool	6
MCH 102	Blueprint Reading I	5
MCH 109	Lathe Operations I	6
MCH 110	Lathe Operations II	6
XXX xxx	Elective(s)	5

Total Credit Hours: 28 Minimum Credit Hours for Graduation
02/09

MECHANICAL MAINTENANCE TECHNICIAN (MHM1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Polk County Campus*

Program Description:
The Mechanical Maintenance Technician certificate is designed to offer industrial related mechanical training. This program provides instruction in safety procedures, problem solving skills, industrial application of mechanical principles, shielded metal arc welding, lathe operations, and milling operations.

Length of Program: Minimum of four (4) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Mechanical Maintenance Technician Technical Certificate of Credit

Required Courses		Credit Hours
IDS 102	Print Reading and Problem Solving	4
IDS 107	Basic Mechanics	5
IDS 211	Industrial Pneumatics	4
IDS 215	Industrial Mechanics	6
IDS 231	Pumps & Piping Systems	2
MCH 101	Introduction to Machine Tool	6
MCH 102	Blueprint Reading I	5
MCH 109	Lathe Operations I	6
MCH 115	Mill Operations I	6
WLD 104	Shielded Metal Arc Welding I	6
WLD 133	Metal Welding and Cutting Techniques	3

Total Credit Hours: 53 Minimum Credit Hours for Graduation
09/08

MILL OPERATOR (5AH1)
CERTIFICATE

Campus Availability:
• *Floyd County Campus*

Program Description: The Milling Machine 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 machine operator.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Mill Operator Technical Certificate of Credit

Required Courses		Credit Hours
MCH 101	Introduction to Machine Tool	6
MCH 102	Blueprint Reading I	5
MCH 115	Milling Operations I	6
MCH 116	Milling Operations II	6
XXX xxx	Elective(s) (See advisor for suggested list.)	5

Total Credit Hours: 28 Minimum Credit Hours for Graduation
02/09

OVERHEAD SHIELDED METAL ARC WELDER (5BU1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description: Overhead Shielded Metal Arc Welder prepares students for careers in welding.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

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.
Prerequisite to taking program: Completion of Flat Shielded Metal Arc Welder Certificate

Program Final Exit Point: Overhead Shielded Metal ARC Welder Technical Certificate of Credit

Required Courses		Credit Hours
WLD 105	Shielded Metal ARC Welding II	6
WLD 106	Shielded Metal ARC Welding III	6
WLD 107	Shielded Metal ARC Welding IV	6

Total Credit Hours: 18 Minimum Credit Hours for Graduation
02/09

PROCESS CONTROL TECHNICIAN I (PSC1)
CERTIFICATE

Campus Availability:
• *Walker County Campus*

Program Description:
The Process Control Technician I Certificate is designed to prepare students for employment in today's industrial setting. This program provides learning opportunities in the following: motor controls, industrial mechanics, industrial hydraulics, industrial pneumatics, and Basic PLC's.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Process Control Technician I Technical Certificate of Credit

Required Courses		Credit Hours
IDS 121	Advanced Motor Controls	2
IDS 131	Variable Speed Motor Control	3
IDS 141	Basic Industrial PLCs	6
IDS 221	Industrial Fluidpower	7

Total Credit Hours: 18 Minimum Credit Hours for Graduation

PROGRAMMABLE CONTROL TECHNICIAN I (IPC1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County 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.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Programmable Control Technician I Technical Certificate of Credit

Required Courses		Credit Hours
IFC 100	Industrial Safety Procedures	2
IDS 110	Fundamentals of Motor Control	3
IDS 141	Basic Industrial PLCs	6
IDS 142	Industrial PLCs	6

Total Credit Hours: 17 Minimum Credit Hours for Graduation
09/08

RESIDENTIAL DESIGN DRAFTER (RDE1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description: The Residential Design Drafter certificate program is designed for those students interested in residential design drawing. This 15-hour program combines theory with "hands-on" training to develop the skills, attitudes, and knowledge necessary to succeed as an entry level CAD operator with an emphasis on residential drawing.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Residential Design Drafter Technical Certificate of Credit

Required Courses		Credit Hours
DDS 205	Residential Architectural Drawing I	6
DDS 207	Mechanical Systems for Architecture	3
DDS 208	Residential Architectural Drawing II	6

Total Credit Hours: 15 Minimum Credit Hours for Graduation

VERTICAL SHIELDED METAL ARC WELDING FABRICATOR (5BS1) CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Walker County Campus*

Program Description:
The Vertical Shielded Metal Arc Welding Fabricator certificate prepares students for careers in shielded metal arc welding fabrication.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Assessment Results: Previous training and/or education may be evaluated to provide advanced placement in the program or currently employed as a welder or documented working experience in the field indicating ability to succeed. ASSET/COMPASS testing is not required for admission to the program.

Program Final Exit Point: Vertical Shielded Metal Arc Welding Fabricator Technical Certificate of Credit

Required Courses		Credit Hours
WLD 105	Shielded Metal Arc Welding II	6
WLD 106	Shielded Metal Arc Welding III	6
XXX xxx	Program Elective	3

Total Credit Hours: 15 Minimum Credit Hours for Graduation
09/08

ROBOTICS TECHNICIAN (RBT1)
CERTIFICATE

Campus Availability:
• *Walker County Campus*

Program Description:
The Robotic Technician certificate 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.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

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.

Students must possess basic electrical skills. An interview and placement exam is required to assess pre-requisite skills acquired through education and/or experience.

Program Final Exit Point: Robotics Technician Technical Certificate of Credit

Required Courses		Credit Hours
AMF 106	Introduction to Robotics	4
AMF 206	Work Cell Design Laboratory	3
IDS 141	Basic Industrial PLCs	6
IDS 142	Industrial PLC's II	6
IDS 221	Industrial Fluidpower	7
SCT 100	Introduction to Microcomputers	3

Total Credit Hours: 29 Minimum Credit Hours for Graduation

Public Service Technologies

Tom Bojo, Dean

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; R-Richardson Road, Gordon County; and W-Walker County Campus).

Associate of Applied Science Degree Programs

Criminal Justice Technology (CJ03) - G, W
Culinary Arts (CUL3) - F
Early Childhood Care and Education (OO03) - G, P, W
Fire Science (FSN3) - G
Social Work Assistant (SWA3) - W

Diploma Programs

Cosmetology (CS02) - F, P, W
Criminal Justice Technology (CJ02) - G, W
Culinary Arts (CUL4) - F
Early Childhood Care and Education (OO02) - G, P, W
Fire Science (FSN2) - G
Firefighter-EMT (FFE2) - G
Social Work Assistant (SWA2) - W

Technical Certificate of Credit Programs

Assistant Food Service Purchasing Agent (5AA1) - F
Basic Law Enforcement (BLE1) - G
Basic Pastry/Baker (BPB1) - F
Child Care Assistant (CH01) - W
Child Development Associate I (CDA1) - F, G, P, W
Child Development Specialist (CDE1) - G, P, W
*Cosmetic Esthetician (CES1) - P (Currently not offering this program)
Crime Scene Investigation (CRS1) - P, W
Criminal Justice Specialist (CJS1) - F, G, W
Culinary Arts Line Cook (0410) - F
Early Childhood Care and Education Basics (EC11) - F, G, P, W
Early Childhood Exceptionalities (ECC1) - G, P, W
Early Childhood Paraprofessional Specialization (EPS1) - F, G, P, W
Early Childhood Program Administration (OGO1) - F, G, P, W
Family Child Care Provider (FCP1) - G, P
Fire Fighter I (FFI1) - G
Fire Fighter II (FFG1) - G
Fire Officer Level I (FOC1) - G
Fire Officer I - Advanced (FOD1) - G

Fire Officer II (FOE1) - G
Food Production Worker I (5AB1) - F
Infant/Toddler Child Care Specialist (ITC1) - F, G, P, W
Nail Technician (NAP1) - W
Prep Cook (5AC1) - F
Shampoo Technician (SHT1) - F, P, W

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

Associate degrees are 1½ to 2 years in length, diploma programs are 1 to 1 ½ years in length, and certificate lengths vary from 1 to 4 quarters. 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.

*We are currently not offering this program. Please consult this page in the online GNTC Catalog at www.gntc.edu; this notice will be removed when the program is accepting students.

CRIMINAL JUSTICE TECHNOLOGY (CJ03)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:

- *Gordon County Campus*
- *Walker County 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. 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.

Length of Program: Minimum of eight (6) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the Admissions Placement Test (ASSET/COMPASS) or one of the approved entrance tests (SAT or ACT) to be admitted as regular students. Generally, students are not admitted to degree programs on a provisional basis. In exceptional circumstances, provisional acceptance may be granted to degree students. Acceptable math and English courses may be used in lieu of an entrance exam.

Program Final Exit Point: Criminal Justice Technology Associate of Applied Science Degree

General Core Curriculum (30 Credit Hours)*		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
HUM 1101	Introduction to Humanities	5
or		
ENG 1102	Literature and Composition	(5)
SPC 1101	Public Speaking	5
or		
ENG 1105	Technical Communications	(5)
ECO 1101	Principles of Economics	5
MAT 1111	College Algebra	5
or		
MAT 1101	Mathematical Modeling	(5)
PSY 1101	Introduction to Psychology	5
Occupational Curriculum (68 Credit Hours)		
CRJ 101	Introduction to Criminal Justice	5
CRJ 202	Constitutional Law	5
CRJ 103	Corrections	5
CRJ 104	Principles of Law Enforcement	5
CRJ 105	Criminal Procedure	5
CRJ 168	Criminal Law	5

(Program requirements continued on following page)

CRIMINAL JUSTICE TECHNOLOGY (CONT.)

Occupational Curriculum (Cont.)

CRJ 207	Juvenile Justice	5
CRJ 209	Criminal Justice Technology Practicum/Internship	5
CRJ 212	Ethics in Criminal Justice	5
SCT 100	Introduction to Microcomputers	3
XXX xxx	Occupational related electives (See advisor for recommended list)	20

*General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

Total Credit Hours: 98 Minimum Credit Hours for Graduation
09/08

CULINARY ARTS DEGREE (CUL3)
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.

Length of Program: Minimum of eight (8) quarters

Entrance Dates: Beginning of any quarter. Fall quarter for occupational courses

Entrance Requirements:

Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the Admissions Placement Test (ASSET/COMPASS) or one of the approved entrance tests (SAT or ACT) to be admitted as regular students. Generally, students are not admitted to degree programs on a provisional basis. In exceptional circumstances, provisional acceptance may be granted to degree students. Acceptable math and English courses may be used in lieu of an entrance exam.

Program Final Exit Point: Culinary Arts Associate of Applied Science Degree

General Core Curriculum (30 Credit Hours)*		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
HUM 1101	Introduction to Humanities	5
or		
ENG 1102	Literature and Composition	(5)
SPC 1101	Public Speaking	5
MAT 1111	College Algebra	5
or		
MAT 1101	Mathematical Modeling	(5)
PSY 1101	Introduction to Psychology	5
XXX xxxx	General Core Elective	5
Occupational Curriculum (79-80 Credit Hours)		
SCT 100	Introduction to Microcomputers	3
CUL 100	Professionalism in Culinary Arts	3
CUL 110	Food Service Sanitation/Safety	3
CUL 112	Principles of Cooking	6
CUL 114	American Regional Cuisine	5
CUL 116	Food Service Purchasing/Control	3
CUL 121	Baking Principles I	5
CUL 122	Baking Principles II	5
CUL 127	Banquet Prep/Presentation	4
CUL 129	Front of the House Service	3
CUL 130	Pantry, Hors D' Oeuvres, and Canapés	5
CUL 132	Garde Manger	5

Program requirements continued on following page)

CULINARY ARTS DEGREE (CONT)

CUL 133	Food Service Leadership and Decision Making	5
or		
MSD 103	Leadership and Decision Making	5
CUL 137	Nutritional Food and Menu Development	3
CUL 215	Contemporary Cuisine I	5
CUL 220	Contemporary Cuisine II	5
CUL 216	Practicum Internship	11
or		
CUL 124	Resturant and Hotel Baking	6
and		
CUL 224	International Cuisine	6

*General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

Total Credit Hours: 109 Minimum Credit Hours for Graduation

EARLY CHILDHOOD CARE AND EDUCATION (OO03)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:
- *Gordon County Campus*
- *Polk County Campus*
- *Walker County Campus*

Program Description:
The Early Childhood Care/Education associate degree program is a sequence of courses designed to prepare students for careers in child care and related fields. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of early childhood care and education theory and practical application necessary for successful employment. Program graduates receive an Early Childhood Care and Education degree with a specialization in one of the following areas: Paraprofessional, Exceptionalities, Family Childcare Provider, or Infant and Toddler.

Length of Program: Minimum of eight (8) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.
Other Requirements: Prior to enrolling in a lab course (ECE 1012, 1021, 1022, 2240), students must provide the following documentation: (1) A satisfactory criminal record check, (2) Verification of liability insurance, (3) CPR/First Aid certification.

Program Final Exit Point: Early Childhood Care and Education Associate of Applied Science Degree

General Core Curriculum (30 Credit Hours)*		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
ENG 1102	Literature and Composition	5
or		
HUM 1101	Introduction to Humanities	(5)
or		
ART 1101	Art Appreciation	(5)
or		
MUS 1101	Music Appreciation	(5)
MAT 1101	Mathematical Modeling	5
or		
MAT 1111	College Algebra	(5)
or		
MAT 1100	Quantitative Skills and Reasoning	(6)

(Program requirements continued on following page)

EARLY CHILDHOOD CARE & EDUCATION (CONT.)

SPC 1101	Public Speaking	5
or		
ENG 1105	Technical Communications	(5)
PSY 1101	Introduction to Psychology	5
SOC 1101	Introduction to Sociology	5
or		
XXX xxx	General Core Elective* (See advisor for recommended list)	(5)

Occupational Curriculum (65 Credit Hours)

SCT 100	Introduction to Microcomputers	3
ECE 1010	Introduction to Early Childhood Care and Education	5
ECE 1012	Curriculum Development	3
ECE 1013	Art for Children	3
ECE 1014	Music and Movement	3
ECE 1021	Early Childhood Care and Education Practicum I	3
or		
ECE xxxx	Program Elective (See advisor for recommended list)*	(3)
ECE 1022	Early Childhood Care and Education Practicum II	3
or		
ECE xxxx	Program Elective (See advisor for recommended list)*	(3)
ECE 1030	Human Growth and Development I	5
ECE 1050	Health, Safety and Nutrition	5
ECE 2010	Exceptionalities	5
ECE 2020	Social Issues and Family Involvement	5
ECE 2115	Language Arts and Literature	5
ECE 2116	Math and Science	5
ECE 2240	Early Childhood Care and Education Internship	12

And completion of one of the following specializations:

Exceptionalities Specialization (15 credit hours) (EXC3)

ECE 2260	Characteristics of Young Children with Exceptionalities	5
ECE 2262	Classroom Strategies and Intervention	5
ECE 2264	Exploring Your Role in the Exceptional Environment	5

OR

Family Childcare Provider Specialization (15 credit hours) (FYC3)

ECE 2142	Early Childhood Program Management	5
ECE 2144	Early Childhood Business Management	5
ECE xxxx	Elective (See advisor for recommended list)*	5

OR

Infant and Toddler Specialization (15 credit hours) (ITC3)

ECE 2132	Infant/Toddler Development	5
ECE 2134	Infant/Toddler Group Care	5
ECE 2136	Infant/Toddler Curriculum	5

OR

(Program requirements continued on following page)

Paraprofessional Specialization (15 credit hours) (PAR3)

ECE 2030	Human Growth and Development II	5
ECE 2110	Methods and Materials	5
ECE 2120	Professional Practices	5

Program Management Specialization (15 credit hours) (ECC3)

ECE 2170	Program Administrator	5
ECE 2210	Facility Management	5
ECE 2220	Personnel Management	5

*See advisor for recommended list.

*General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

Total Credit Hours: 110 Minimum Credit Hours for Graduation

03/09

FIRE SCIENCE (FSN3)
ASSOCIATE OF APPLIED SCIENCE DEGREE

Campus Availability:
• Gordon County Campus

Program Description:
The Fire Science associate of applied science 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 associate of applied science degree in Fire Science.

Length of Program: Minimum of eight (8) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 18 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills on the Admissions Placement Test (ASSET/COMPASS) or one of the approved entrance tests (SAT or ACT) to be admitted as regular students. Generally, students are not admitted to degree programs on a provisional basis. In exceptional circumstances, provisional acceptance may be granted to degree students. Acceptable math and English courses may be used in lieu of an entrance exam. A medical physical examination may be required.

Program Final Exit Point: Fire Science Associate of Applied Science Degree

General Core Curriculum (30 Credit Hours)*		**Credit Hours**
ENG 1101	Composition and Rhetoric	5
HUM 1101	Introduction to Humanities	5
MAT 1111	College Algebra	5
PSY 1101	Introduction to Psychology	5
SPC 1101	Public Speaking	5
CHM 1111	Chemistry I	5
or		
PHY 1110	Introductory Physics	(5)

Occupational Curriculum (73 Credit Hours)		**Credit Hours**
FSC 101	Introduction to the Fire Service	5
FSC 110	Fire Administration-Supervision and Leadership	5
FSC 121	Firefighting Strategy and Tactics	5
FSC 132	Fire Service Instructor	5
FSC 141	Hazardous Materials Operations	5
FSC 151	Fire Prevention and Inspection	5
FSC 161	Fire Service Safety and Loss Control	5
FSC 201	Fire Administration-Management	5

(Program requirements continued on following page)

FIRE SCIENCE (CONT.)

Occupational Curriculum (Cont.)		**Credit Hours**
FSC 210	Fire Service Hydraulics	5
FSC 220	Fire Protection Systems	5
FSC 230	Fire Service Building Construction	5
FSC 241	Incident Command	5
FSC 270	Fire/Arson Investigation	5
SCT 100	Introduction to Microcomputers	3
XXX xxx	Elective (See advisor for recommended list)	5

Recommended electives

FSC 145	Chemistry of Hazardous Materials	5
or		
FSC 280	Fire Service Law	5

*General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

Total Credit Hours: 103 Minimum Credit Hours for Graduation

10/08

SOCIAL WORK ASSISTANT (SWA3)
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.

Length of Program: Minimum of seven (7) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 18 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: Social Work Assistant Associate of Applied Science Degree

General Core Curriculum (38 Credit Hours)*		**Credit Hours**
*ENG 1101	Composition and Rhetoric	5
ENG 1102	Literature and Composition	5
or		
*HUM 1101	Introduction to Humanities	(5)
or		
ART 1101	Art Appreciation	(5)
or		
MUS 1101	Music Appreciation	(5)
ENG 1105	Technical Communication	5
*SPC 1101	Public Speaking	5
*PSY 1101	Introductory Psychology	5
SOC 1101	Introduction to Sociology	5
*MAT 1111	College Algebra	5
or		
MAT 1101	Mathematical Modeling	(5)
SCT 100	Introduction to Microcomputers	3

(Program requirements continued on following page)

SOCIAL WORK ASSISTANT, (CONT.)

Occupational Curriculum (66 Credit Hours)		Credit Hours
SWG 100	Introduction to Social Services	5
SWG 101	Introduction to Social Work	5
SWG 102	Human Behavior and Social Environment	5
SWG 103	Social Work Methods and Procedures	5
SWG 104	Basic Interviewing and Counseling Skills	5
SWG 105	Abnormal Behavior	5
SWG 200	Special Problems with Youth	5
SWG 201	Adolescent Life Cycle	5
SWG 202	Field Work Experience I	8
SWG 203	Field Work Experience II	8
SWG 204	Social Policies and Programs for the Aging	5
SWG 205	Group Work Intervention	5

*General education courses listed on specific curriculum pages are those typically offered by the college. Other options for general core curriculum are possible (exception ENG 1101 and MAT 1100, MAT 1101, or MAT 1111). A student should see his/her advisor to discuss other options.

Total Credit Hours: 104 Minimum Credit Hours for Graduation
02/09

COSMETOLOGY (CS02)
DIPLOMA

Campus Availability:

- *Floyd 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.

Length of Program: Minimum of four (4) quarters

Entrance Dates:

Fall and spring quarters (Floyd/Polk when openings are available: Day Program)
Winter and summer quarters (Polk-Night Program)
Fall and winter quarters (Walker)

Entrance Requirements:

Age: Minimum of 16 years of age
Education: No high school diploma or GED is required to enter program but must have documentation of high school diploma or GED to graduate and receive the diploma (or technical certificate of credit). See the Success Center for information on earning your high school diploma or GED.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Cosmetology Diploma

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.

General Core Curriculum (13 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
MAT 1012	Foundations of Mathematics	5
EMP 1000	Interpersonal Relations and Professional Development	3
Occupational Curriculum (69 Credit Hours)		
COS 100	Introduction to Cosmetology Theory	5
COS 101	Introduction to Permanent Waving and Relaxing	4
COS 103	Basic Creative Treatment of Hair, Scalp, and Skin	3
COS 105	Introduction to Shampooing and Styling	4

(Program requirements continued on following page)

COSMETOLOGY (CONT.)

Occupational Curriculum (Cont.)		Credit Hours
COS 106	Introduction to Haircutting	3
COS 107	Advanced Haircutting	2
COS 108	Permanent Waving and Relaxing	3
COS 109	Hair Color	6
COS 110	Skin, Scalp, and Hair	3
COS 111	Styling	3
COS 112	Manicuring and Pedicuring	3
COS 113	Cosmetology Practicum I	5
COS 114	Cosmetology Practicum II	8
COS 115	Cosmetology Practicum III	5
COS 116	Cosmetology Practicum IV	5
COS 117	Salon Management	4
SCT 100	Introduction to Microcomputers	3

Total Credit Hours: 82 Minimum Credit Hours for Graduation
02/08

CRIMINAL JUSTICE TECHNOLOGY (CJ02)
DIPLOMA

Campus Availability:

- *Gordon County Campus*
- *Walker County 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. 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.

Length of Program: Minimum of six (6) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Criminal Justice Technology Diploma

General Core Curriculum (15 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
MAT 1012	Foundations of Mathematics	5
PSY 1010	Basic Psychology	5
Occupational Curriculum (58 Credit Hours)		
CRJ 101	Introduction to Criminal Justice	5
CRJ 202	Constitutional Law	5
CRJ 103	Corrections	5
CRJ 104	Principles of Law Enforcement	5
CRJ 105	Criminal Procedure	5
CRJ 168	Criminal Law	5
CRJ 207	Juvenile Justice	5
CRJ 209	Criminal Justice Technology Practicum/Internship	5
CRJ 212	Ethics in Criminal Justice	5
SCT 100	Introduction to Microcomputers	3
XXX xxx	Occupationally related electives (See advisor for recommended list)	10

Total Credit Hours: 73 Minimum Credit Hours Required for Graduation

CULINARY ARTS (CUL4)
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.

Length of Program: Minimum of 6 quarters.

Entrance Dates: Beginning of any quarter for core courses. Fall quarter for occupational courses

Entrance Requirements:

Age: Minimum of 16 years of age
Education: High school diploma or GED is 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.

Program Final Exit Point: Culinary Arts Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
EMP 1000	Interpersonal Relations and Professional Development	3
ENG 1010	Fundamentals of English I	5
MAT 1012	Foundations of Mathematics	5

Occupational Curriculum (79-80 Credit Hours)		**Credit Hours**
CUL 100	Professionalism in Culinary Arts	3
CUL 110	Food Service Safety and Sanitation	3
CUL 112	Principles of Cooking	6
CUL 114	American Regional Cuisine	5
CUL 116	Food Service Purchasing and Control	3
CUL 121	Baking Principles I	5
CUL 122	Baking Principles II	5
CUL 127	Banquet Preparation and Presentation	4
CUL 129	Front of the House Service	3
CUL 130	Pantry, Hors D' Oeuvres, and Canapés	5
CUL 132	Garde Manger	5

(Program requirements continued on following page)

CULINARY ARTS (CONT.)

Occupational Curriculum (Cont.)		Credit Hours
CUL 133	Food Service Leadership and Decision Making	5
or		
MSD 103	Leadership and Decision Making	(5)
CUL 137	Nutrition and Menu Development	3
CUL 215	Contemporary Cuisine I	5
CUL 220	Contemporary Cuisine II	5
CUL 216	Practicum/Internship	11
or		
CUL 124	Restaurant and Hotel Baking	(6)
and		
CUL 224	International Cuisine	(6)
SCT 100	Introduction to Microcomputers	3

Total Credit Hours: 92 Minimum Credit Hours for Graduation

EARLY CHILDHOOD CARE AND EDUCATION (OO02)
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 careers in child care and related fields. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of early childhood care and education theory and practical application necessary for successful employment. Program graduates receive an Early Childhood Care and Education diploma and have the qualification of early childhood care and education provider.

Length of Program: Minimum of six (6) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.
Other Requirements: Prior to enrolling in a lab course (ECE 1012, 1021, 1022, 2240), students must provide the following documentation: (1) A satisfactory criminal record check; (2) Verification of liability insurance; (3) CPR/First Aid certification.

Program Final Exit Point: Early Childhood Care and Education Diploma

Graduates find employment as child care providers with area child development facilities, head start, Pre-K programs, and preschools.

General Core Curriculum (13 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
EMP 1000	Interpersonal Relations and Professional Development	3
MAT 1012	Foundations of Mathematics	5
Occupational Curriculum (60 Credit Hours)		
SCT 100	Introduction to Microcomputers	3
ECE 1010	Introduction to Early Childhood Care and Education	5
ECE 1030	Human Growth & Development I	5
ECE 1050	Health, Safety and Nutrition	5
ECE 1012	Curriculum Development	3
ECE 1021	Early Childhood Care and Education Practicum I	3
or		
ECE xxxx	Program elective (See advisor for recommended list)	(3-5)
ECE 1022	Early Childhood Education Practicum II	3
or		
ECE xxxx	Program elective (See advisor for recommended list)	(3-5)
ECE 1013	Art for Children	3
ECE 1014	Music and Movement	3

(Program requirements continued on following page)

EARLY CHILDHOOD CARE AND EDUCATION (CONT.)

Occupational Curriculum (Cont.)		Credit Hours
ECE 2115	Language Arts and Literature	5
ECE 2116	Math and Science	5
ECE 2020	Social Issues & Family Involvement	5
ECE 2240	Early Childhood Care and Education Internship	12

Total Credit Hours: 73 Minimum Credit Hours Required for Graduation

FIRE SCIENCE (FSN2)
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.

Length of Program: Minimum of five (5) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 18 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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. A medical physical examination may be required.

Program Final Exit Point: Fire Science Diploma

General Core Classes (13 Credit Hours)		**Credit Hours**
EMP 1000	Interpersonal Relations and Professional Development	3
ENG 1010	Fundamentals of English I	5
MAT 1012	Foundations of Mathematics	5

Occupational Curriculum (76 Credit Hours)		**Credit Hours**
SCT 100	Introduction to Microcomputers	3
FSC 101	Introduction to the Fire Service	5
FSC 110	Fire Administration-Supervision and Leadership	5
FSC 121	Fire Fighting Strategy & Tactics	5
FSC 132	Fire Service Instructor	5
FSC 161	Fire Service Safety and Loss Control	5
FSC 141	Hazardous Materials Operations	5
FSC 151	Fire Prevention and Inspection	5
FSC 201	Fire Administration-Management	5
FSC 210	Fire Service Hydraulics	5
FSC 220	Fire Protection Systems	5
FSC 230	Fire Service Building Construction	5
FSC 241	Incident Command	5
FSC 260	Fire Science Information Management	5
FSC 270	Fire/Arson Investigations	5
XXX xxx	Elective (See advisor for recommended list)	3

Total Credit Hours: 89 Minimum Credit Hours for Graduation
10/08

FIREFIGHTER–EMT (FFE2)
DIPLOMA

Campus Availability:
• *Gordon County Campus*

Program Description:
The Firefighter-EMT diploma program is designed to prepare graduates for success in a fire and emergency medical service environment. This program provides the graduating student with a certificate in Emergency Medical Technology and the needed Fire Certification for entry employment in a fire and/or emergency medical service.

Length of Program: Minimum of five (5) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Students need to return completed Medical Report Forms certifying their ability to meet physical performance before attending occupational curriculum in the Firefighter-EMT diploma program.

Program Final Exit Point: Firefighter–EMT Diploma

General Core Curriculum (13 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
MAT 1012	Foundations of Mathematics	5
EMP 1000	Interpersonal Relations and Professional Development	3

Occupational Curriculum (70 Credit Hours)		**Credit Hours**
EMS 120	Emergency Medical Technology I	8
EMS 121	Emergency Medical Technology II	7
EMS 122	Emergency Medical Technology III	9
FSC 102	Basic Firefighter-Emergency Services Fundamentals	4
FSC 103	Basic Firefighter Module I	6
FSC 104	Basic Firefighter Module II	4
FSC 105	Fire and Life Safety Educator I	5
FSC 106	Fire Prevention, Preparedness and Maintenance	4
FSC 109	Introduction to Technical Rescue	6
FSC 108	Fire Ground Operations	4
FSC 141	Hazardous Materials Operations	5
FSC 161	Fire Service Safety and Loss Control	5
SCT 100	Introduction to Microcomputers	3

Total Credit Hours: 83 Minimum Credit Hours for Graduation
10/08

SOCIAL WORK ASSISTANT (SWA2)
DIPLOMA

Campus Availability:
• *Walker County Campus*

Program Description: The Social Work Generalist diploma 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 the social worker 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.

Length of Program:

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 18 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: Social Work Assistant Diploma

General Core Curriculum (18 Credit Hours)		**Credit Hours**
ENG 1010	Fundamentals of English I	5
MAT 1012	Foundations of Mathematics	5
PSY 1010	Basic Psychology	5
SCT 100	Introduction to Microcomputers	3

Occupational Curriculum (66 Credit Hours)		**Credit Hours**
SWG 100	Introduction to Social Services	5
SWG 101	Introduction to Social Work	5
SWG 102	Human Behavior and the Social Environment	5
SWG 103	Social Work Methods and Procedures	5
SWG 104	Basic Interviewing and Counseling Skills	5
SWG 105	Abnormal Behavior	5
SWG 200	Special Problems with Youth	5
SWG 201	Adolescent Life Cycle	5
SWG 202	Field Work Experience I	8
SWG 203	Field Work Experience II	8
SWG 204	Social Policies and Programs for the Aging	5
SWG 205	Group Work Intervention	5

Total Credit Hours: 84 Minimum Credit Hours for Graduation
02/09

ASSISTANT FOOD SERVICE PURCHASING AGENT (5AA1)
CERTIFICATE

No Longer Accepting Students into this Program

Campus Availability:
• *Floyd County Campus*

Program Description:

The Assistant Food Service Purchasing Agent technical certificate of credit offers specialized job training for those seeking entry-level employment in food service and those who want to improve their professional kitchen skills. Subjects include food purchasing, food storage, cost control, sanitation, along with basic cooking skills. Courses in this certificate are transferable to the Culinary Arts diploma and degree program. Certificate graduates are prepared for jobs as entry-level purchasing agents in food service fields.

Length of Program: Minimum of two (2) quarters.

Entrance Dates: Beginning of any quarter.

Entrance Requirements:
Age: Minimum of 16 years of age.
Education: High school diploma or GED is 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.

Program Final Exit Point: Assistant Food Service Purchasing Agent Technical Certificate of Credit

Required Courses (28 Credit Hours)		**Credit Hours**
MAT 1012	Foundations of Mathematics	5
CUL 100	Professionalism in Culinary Arts	3
CUL 110	Food Services Sanitation and Safety	3
CUL 115	Purchasing and Control	3
XXX xxx	Elective	3

Total Credit Hours: 17 Minimum Credit Hours for Graduation
08/09

BASIC LAW ENFORCEMENT (BLE1)
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, proficiently 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.

Length of Program: Minimum of two (2) quarters.

Entrance Dates: Beginning of any quarter.

Entrance Requirements:
Age: Minimum of 18 years of age.
Education: High school diploma or GED is 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.

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.

Program Final Exit Point: Basic Law Enforcement Technical Certificate of Credit

Required Courses (28 Credit Hours)		**Credit Hours**
CRJ 101	Introduction to Criminal Justice	5
CRJ 104	Principles of Law Enforcement	5
CRJ 105	Criminal Procedure	5
CRJ 1010	Basic Law Enforcement Health & Life Safety	3
CRJ 1012	Ethics and Liability for Basic Law Enforcement	2
CRJ 150	Police Patrol Operations	5
CRJ 156	Police Traffic Control and Accident Investigation	5
CRJ 162	Methods of Criminal Investigation	5
CRJ 168	Criminal Law	5
CRJ 1014	Firearms Training for Basic Law Enforcement	5
CRJ 1016	Emergency Vehicle Operations	5
CRJ 1018	Defensive Tactics	4
CRJ 202	Constitutional Law	5

Total Credit Hours: 59 Minimum Credit Hours for Graduation
09/08

BASIC PASTRY/BAKER (BPB1)

No Longer Accepting Students into this Program

Campus Availability:
• *Floyd County Campus*

Program Description:

This technical certificate of credit provides basic and intermediate skills in baking necessary to secure a job in a production kitchen as a baker or entry-level pastry chef.

Length of Program: Minimum of two (2) quarters.

Entrance Dates: Beginning of any quarter.

Entrance Requirements:
Age: Minimum of 16 years of age.
Education: High school diploma or GED is 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.

Program Final Exit Point: Basic Pasty/Baker Technical Certificate of Credit

Required Courses (28 Credit Hours)		Credit Hours
CUL 100	Professionalism in Culinary Arts	3
CUL 110	Food Services Sanitation and Safety	3
CUL 121	Baking Principles I	5
CUL 122	Baking Principles II	5
CUL 124	Restaurant and Hotel Baking	6
XXX xxx	Elective	5

Total Credit Hours: 27 Minimum Credit Hours for Graduation
08/09

CHILD CARE ASSISTANT (CH01)
CERTIFICATE

No Longer Accepting Students into this Program

Campus Availability:
• *Walker County Campus*

Program Description:
This certificate will provide students with the basic knowledge and skills needed to obtain employment as entry-level child care assistants. The certificate emphasizes planning a safe and healthy environment, steps to advance children's physical and intellectual development, positive ways to support children's social and emotional development, strategies to establish developmentally appropriate curriculum for various age groups, observing and recording children's behavior, and principles of child growth and development.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Child Care Assistant Technical Certificate of Credit

Required Courses		Credit Hours
ECE 1010	Intro to Early Childhood Care and Education	5
ECE 1030	Human Growth and Development I	5
ECE 1050	Health, Safety, and Nutrition	5
ECE 1013	Art for Children	3
ECE 1014	Music and Movement	3

Total Credit Hours: 21 Minimum Credit Hours for Graduation
03/09

CHILD DEVELOPMENT ASSOCIATE I (CDA1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Polk County Campus*
- *Walker County Campus*

Program Description:
The CDA I certificate program is designed to meet the training needs of persons already working in the field of early care and education. Persons enrolling in this program must have completed a minimum of 480 hours of work in the field with young children. This program is designed to provide the minimum formal training in early care and education competencies, knowledge, skills and techniques required to apply for a CDA credential from the Council for Early Childhood Recognition in Washington, D.C. The CDA credential is not issued by the technical college and must be applied for and paid for separately from this program. However, this program is approved to provide the needed training to attain this credential. Once achieved, this credential is recognized nationally by Head Start and in Georgia for working State Pre-K programs and in many other public and private early care and education settings.

Length of Program: Minimum of two (2) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 19 years of age
Education: High school diploma or GED is required. Post-secondary credentials from an accredited institution, a current Child Development Associate Credential (CDA), or qualifying experience pending approval of the division chair.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Child Development Associate I Technical Certificate of Credit

Required Courses		Credit Hours
ECE 1010	Introduction to Early Childhood Care and Education	5
ECE 1030	Human Growth and Development I	5
ECE 1050	Health, Safety and Nutrition	5
ECE 1025	Professionalism through CDA Certificate Preparation	2
ECE 1026	CDA Certificate Assessment Preparation	2

Total Credit Hours: 19 Minimum Credit Hours Required for Graduation

CHILD DEVELOPMENT SPECIALIST (CDE1)
CERTIFICATE

Campus Availability:
- *Gordon County Campus*
- *Polk County Campus*
- *Walker County Campus*

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

Length of Program: Minimum of two (2) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 19 years of age
Education: High school diploma or GED is required. Post-secondary credentials from an accredited institution, a current Child Development Associate Credential (CDA), or qualifying experience pending approval of the division chair.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Child Development Specialist Technical Certificate of Credit

Required Courses		Credit Hours
ECE 1010	Introduction to Early Childhood Care and Education	5
ECE 1030	Human Growth and Development I	5
ECE 1050	Health, Safety and Nutrition	5
ECE 1012	Curriculum Development	3
ECE 1021	Early Childhood Care and Education Practicum I	3
or		
EMP 1000	Interpersonal Relations and Professional Development	(3)

Total Credit Hours: 21 Minimum Credit Hours Required for Graduation
08/08

COSMETIC ESTHETICIAN (CES1)
CERTIFICATE
We are currently not offering this program. Please consult this page in the online GNTC Catalog at www.gntc.edu; this notice will be removed when the program is accepting students.

Campus Availability:
• *Polk County Campus*

Program Description:
The Cosmetic Esthetician program is designed to offer esthetics training for entry-level students. Completion of the program prepares students to sit for the Esthetics licensure examination given by the Georgia State Board of Cosmetology and to work in a variety of professions that employ estheticians such as beauty salons, spas, health clubs, cosmetics stores, as well as plastic surgeons' and dermatologists' offices.

Length of Program: Minimum of six (6) quarters (night program)

Entrance Dates: TBA

Entrance Requirements:
Age: Minimum of 17 years of age
Education: High school diploma or GED is required
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Cosmetic Esthetician Certificate

Required Courses		Credit Hours
COS 117	Salon Management	4
EST 100	Introduction to Esthetics	5
EST 101	Anatomy and Physiology of Skin	5
EST 102	Skin Care Procedures	6
EST 103	Electricity and Facial Treatment	7
EST 104	Advanced Skin Care	5
EST 105	Color Theory and Makeup	4
EST 106	Esthetics Practicum I	6
EST 107	Esthetics Practicum II	6

Total Credit Hours: 48 Minimum Credit Hours Required for Graduation
08/08

CRIME SCENE INVESTIGATION (CRS1)
CERTIFICATE

Campus Availability:
- *Polk County Campus*
- *Walker County Campus*

Program Description:
The Crime Scene Investigation certificate program is designed to provide the student with skills in basic crime scene investigation: print lifting, evidence gathering along with techniques of interviews, interrogations, report writing, case preparation, court room testimony, and procedural guidelines. The program fits within the Homeland Security section of the Governor's Strategic Industries Initiative. The program will prepare students to work in a number of law enforcement and investigative agencies.

Length of Program: Minimum of three (3) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 16 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: Crime Scene Investigation Technical Certificate of Credit

Required Courses		**Credit Hours**
CRJ 101	Introduction to Criminal Justice	5
FST 210	Crime Scene Investigation I	5
or		
CRJ 162	Methods of Criminal Investigations	(5)
FST 211	Crime Scene Investigation II	5
FST 212	Interviewing and Interrogation Techniques	5
FST 214	Documentation and Report Writing Preparation	5
FST 215	Case Preparation and Courtroom Testimony	5
FST 230	Criminal Procedure	5
or		
CRJ105	Criminal Procedure	(5)

Total Credit Hours: 35 Minimum Credit Hours for Graduation
02/09

CRIMINAL JUSTICE SPECIALIST (CJS1)
CERTIFICATE

Campus Availability:
- *Floyd County Campus*
- *Gordon County Campus*
- *Walker County Campus*

Program Description:
The Criminal Justice Specialist certificate 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. Completers receive a technical certificate of credit. Entry-level persons will be prepared to pursue opportunities in the criminal justice field.

Length of Program: Minimum of 2 quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 18 years of age.
Education: High school diploma or GED is 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.

Program Final Exit Point: Criminal Justice Specialist Technical Certificate of Credit

Required Courses (28 Credit Hours)		Credit Hours
MSD 175	Business Spanish	5
SCT 100	Introduction to Microcomputers	3
CRJ 101	Introduction to Criminal Justice Technology	5
CRJ 103	Corrections	5
CRJ 104	Principles of Law Enforcement	5
CRJ 202	Constitutional Law	5

Total Credit Hours: 28 Minimum Credit Hours for Graduation

CULINARY ARTS LINE COOK (0410)

No Longer Accepting Students into this Program

Campus Availability:
• *Floyd County Campus*

Program Description:

This technical certificate of credit is designed to provide basic entry-level skills as a food production worker and prep cook. Topics include: introduction to food services, safety and sanitation, principles of cooking and nutrition and menu management.

Length of Program: Minimum of two (2) quarters.

Entrance Dates: Beginning of any quarter.

Entrance Requirements:
Age: Minimum of 16 years of age.
Education: High school diploma or GED is 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.

Program Final Exit Point: Culinary Arts Line Cook Technical Certificate of Credit

Required Courses (30 Credit Hours)		Credit Hours
CUL 100	Professionalism in Culinary Arts	3
CUL 110	Food Services Sanitation and Safety	3
CUL 112	Principles of Cooking	6
CUL 121	Baking Principles I	5
CUL 130	Pantry, Hors D'Oeuvres and Canapes	5
CUL 137	Nutritional Food and Menu Development	3
XXX xxx	Elective	5

Total Credit Hours: 30 Minimum Credit Hours for Graduation
08/09

EARLY CHILDHOOD CARE AND EDUCATION BASICS (EC11) CERTIFICATE

Campus Availability:

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

Program Description:

The Early Childhood Care and Education Basics Technical Certificate of Credit program provides the basic knowledge for individuals entering the care giving field. Topics covered include providing a safe and healthy environment, detecting and reporting child abuse, disease control measures, basic human growth and development, developmentally appropriate practices, and balancing the daily schedule.

Length of Program: Minimum of one (1) quarter

Entrance Date: Beginning of any quarter

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.

Program Final Exit Point: Early Childhood Care and Education Basics Technical Certificate of Credit

Required Courses		Credit Hours
ECE 1010	Introduction to Early Childhood Care and Education	5
ECE 1030	Human Growth and Development I	5
ECE 1050	Health, Safety and Nutrition	5

Total Credit Hours: 15 Minimum Credit Hours for Graduation

EARLY CHILDHOOD EXCEPTIONALITIES (ECC1)
CERTIFICATE

Campus Availability:

- *Gordon County Campus*
- *Polk County Campus*
- *Walker County Campus*

Program Description:

The purpose of this technical certificate is to provide a solid early childhood care and education foundation of knowledge, skills, attitudes, and techniques that will improve the quality of care for children with special needs. Through the coursework in the program, students will be provided with guidelines, information, responsibilities, and techniques necessary to interact in the exceptional environment. Therefore, prospective students must have either post-secondary credentials from an accredited institution, a current Child Development Associate Credential (CDA), or qualifying experience, pending approval of the division chair.

Length of Program: Minimum of three (3) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 19 years of age
Education: High school diploma or GED is required. Post-secondary credentials from an accredited institution, a current Child Development Associate Credential (CDA), or qualifying experience pending approval of the division chair.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Early Childhood Exceptionalities Technical Certificate of Credit

Required Courses (30 Credit Hours)

ECE 1030	Human Growth & Development I	5
ECE 2010	Exceptionalities	5
ECE 2030	Human Growth and Development II	5
ECE 2260	Characteristics of Young Children with Exceptionalities	5
ECE 2262	Classroom Strategies and Intervention	5
ECE 2264	Exploring Your Role in the Exceptional Environment	5

Total Credit Hours: 30 Minimum Credit Hours Required for Graduation

EARLY CHILDHOOD PARAPROFESSIONAL (EPS1) CERTIFICATE

No Longer Accepting Students into this Program

Campus Availability:

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

Program Description:

The purpose of the Early Childhood Paraprofessional Specialization certificate program is to provide students with the knowledge, skills and attitude necessary to work effectively during out-of-school hours with children between the ages of six and fourteen years. The competencies in these courses almost entirely overlap with the newly established competencies for School-Age Care Professionals, as outlined by the Georgia Childhood Care and Education Professional Development System's Collaborative Leadership Team. This certificate program will be the first to address these competencies specifically for Education Paraprofessional Specialization practitioners who wish to receive formal education in this discipline.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 16 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: Early Childhood Paraprofessional Specialization Technical Certificate of Credit

Required Courses		Credit Hours
ECE 2010	Exceptionalities	5
ECE 2020	Social Issues and Family Involvement	5
ECE 2030	Human Growth and Development II	5
ECE 2110	Methods and Materials	5
ECE 2120	Professional Practice	5

Total Credit Hours: 25 Minimum Credit Hours for Graduation
02/09

EARLY CHILDHOOD PROGRAM ADMINISTRATION (OGO1) CERTIFICATE

Campus Availability:

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

Program Description:

The purpose of the Early Childhood Program Administration certificate program is to provide the necessary skills to administer and manage a child-care business anywhere in Georgia, and to provide a career path for people working in the field who wish to move into administration.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 21 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.

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.

Program Final Exit Point: Early Childhood Program Administration Technical Certificate of Credit

Required Courses		Credit Hours
ECE 2170	Program Administration	5
ECE 2210	Facility Management	5
ECE 2220	Personnel Management	5

Total Credit Hours: 15 Minimum Credit Hours for Graduation

FAMILY CHILD CARE PROVIDER (FCP1)
CERTIFICATE

Campus Availability:

- *Gordon County Campus*
- *Polk County Campus*

Program Description:

The purpose of this technical certificate is to provide a solid Early Childhood Care and Education foundation of knowledge, skills, attitudes and techniques that will improve the quality of care for children who are cared for by family child care providers, and to provide guidelines and responsibilities for professional business practices associated with the successful establishment and administration of a family child care home.

Length of Program: Minimum of three (3) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 18 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Family Child Care Provider Technical Certificate of Credit

Required Courses (25 Credit Hours)		**Credit Hours**
ECE 1010	Introduction to Early Childhood Care and Education	5
ECE 1030	Human Growth & Development I	5
ECE 1050	Health, Safety, and Nutrition	5
ECE 2142	Family Childcare Program Management	5
ECE 2144	Family Childcare Business Management	5

Total Credit Hours: 25 Minimum Credit Hours Required for Graduation

FIRE FIGHTER I (FFI1)
CERTIFICATE

Campus Availability:
• *Gordon County Campus*

Program Description:
This technical certificate will be 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.

Length of Program: Minimum of two (2) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Fire Fighter I Technical Certificate of Credit

Required Courses (19 Credit Hours)		Credit Hours
FSC 102	Emergency Service Fundamentals	4
FSC 103	Basic Firefighter Module I	6
FSC 104	Basic Firefighter Module II	4
FSC 141	Hazardous Materials Operations	5

Total Credit Hours: 19 Minimum Credit Hours for Graduation

FIRE FIGHTER II (FFG1)
CERTIFICATE

Campus Availability:
• *Gordon County Campus*

Program Description:
This technical certificate will be 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.

Length of Program: Minimum of two (2) quarters.

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Fire Fighter II Technical Certificate of Credit

Required Courses (19 Credit Hours)		Credit Hours
FSC 105	Fire and Life Safety Educator I	5
FSC 106	Fire Prevention, Preparedness, and Maintenance	4
FSC 109	Introduction to Technical Rescue	6
FSC 108	Fire Ground Operations	4

Total Credit Hours: 19 Minimum Credit Hours for Graduation

FIRE OFFICER LEVEL I (FOC1)
CERTIFICATE

Campus Availability:
• *Gordon County Campus*

Program Description:
The Fire Officer Level I certificate is the first of three steps accomplished while a student works toward completion of the Fire Science diploma, or independently of the diploma option meets qualification standards for national certification. The Fire Officer Level 1 program presents critical subject matter to students who, upon completion of the certificate, may be assigned in their present fire service position, to ride in charge of an engine company, rescue company, etc. on a temporary basis in their daily assigned duties. The assignment would typically involve supervising a crew of firefighters, emergency medical technicians, and paramedics. This assignment would enhance the student's strategy and tactics capabilities while managing the emergency scene.

Length of Program: Minimum of three (3) quarters.

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 18 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Fire Officer Level 1 Technical Certificate of Credit

Required Courses (25 Credit Hours)		Credit Hours
FSC 101	Introduction to Fire Science	5
FSC 110	Fire Administration-Supervision and Leadership	5
FSC 121	Fire Fighting Strategy & Tactics	5
FSC 132	Fire Service Instructor	5
FSC 161	Fire Service Safety & Loss Control	5

Total Credit Hours: 25 Minimum Credit Hours for Graduation

FIRE OFFICER I - ADVANCED (FOD1)
CERTIFICATE

No Longer Accepting Students into this Program

Campus Availability:
• *Gordon County Campus*

Program Description:
Statement of Purpose: The Fire Officer Level 1 - Advanced certificate is the second of three steps accomplished while a student works toward completion of the Fire Science diploma, or may be completed independently of the diploma option. The Fire Officer Level 1 - Advanced program presents critical subject matter to students who, upon completion of the certificate, would be prepared to serve as a fire department supervisor on a permanent basis. The first TCC, Fire Officer Level 1, has prepared the student to fill-in as the supervisor on a temporary basis and lead the engine or rescue company personnel on emergency responses in a safe and effective manner. The Fire Officer Level I - Advanced TCC prepares the student to assume the supervisory duties on a permanent basis and focuses on fire protection systems, hazardous materials, hydraulics, and fire service management. With the completion of this certificate, the student has more fully developed as a leader and manager.

Length of Program: Minimum of three (3) quarters.

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Fire Officer 1–Advanced Technical Certificate of Credit

Required Courses (25 Credit Hours)		Credit Hours
FSC 141	Hazardous Materials Operations	5
FSC 151	Fire Prevention and Inspection	5
FSC 201	Fire Administration-Management	5
FSC 210	Fire Service Hydraulics	5
FSC 220	Fire Protection Systems	5

Total Credit Hours: 25 Minimum Credit Hours for Graduation

FIRE OFFICER II (FOE1)
CERTIFICATE

Campus Availability:
• *Gordon County Campus*

Program Description:
Statement of Purpose: The Fire Officer Level II certificate is the final of three steps accomplished while a student works toward completion of the Fire Science diploma, or it may be completed independently of the diploma option. The Fire Officer Level II program presents critical subject matter to students who, upon completion of the certificate, would meet the requirements for NFPA Fire Officer II. The first TCC, Fire Officer Level I, has prepared the student to fill in as the supervisor on a temporary basis and leads the engine company personnel on emergency responses in a safe and effective manner. The second TCC, Fire Officer Level I- Advanced, prepared the student to assume the supervisory duties on a permanent basis and focuses on leadership, supervision, management, and introduces specific and strategic fire department programs. This, the third and final TCC, Fire Officer Level II, completes the study of fire investigation, building construction, incident command, and fire service information management.

Length of Program: Minimum of two (2) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Fire Officer II Technical Certificate of Credit

Occupational Curriculum (20 Credit Hours)		**Credit Hours**
FSC 230	Fire Service Building Construction	5
FSC 241	Incident Command	5
FSC 260	Fire Service Information Management	5
FSC 270	Fire/Arson Investigation	5

Total Credit Hours: 20 Minimum Credit Hours for Graduation

FOOD PRODUCTION WORKER I (5AB1)

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.

Length of Program: Minimum of two (2) quarters.

Entrance Dates: Beginning of any quarter.

Entrance Requirements:

Age: Minimum of 16 years of age.
Education: High school diploma or GED is 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.

Program Final Exit Point: Culinary Arts Line Cook Technical Certificate of Credit

Required Courses (21 Credit Hours)		Credit Hours
CUL 100	Professionalism in Culinary Arts	3
CUL 110	Food Services Sanitation and Safety	3
CUL 112	Principles of Cooking	6
CUL 114	American Regional Cuisine	5
CUL 127	Banquet Preparation and Presentation	4

Total Credit Hours: 21 Minimum Credit Hours for Graduation
08/09

INFANT/TODDLER CHILD CARE SPECIALIST (ITC1)
CERTIFICATE

Campus Availability:

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

Program Description:

The purpose of this technical certificate is to provide a solid early childhood care and education foundation of knowledge, skills, attitudes and techniques that will improve the quality of care for Georgia's infants and toddlers.

Length of Program: Minimum of three (3) quarters

Entrance Dates: Beginning of any quarter

Entrance Requirements:

Age: Minimum of 18 years of age
Education: High school diploma or GED is required.
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Infant/Toddler Child Care Specialist Technical Certificate of Credit

Required Courses (25 Credit Hours)

ECE 1010	Introduction to Early Childhood Care and Education	5
ECE 1030	Human Growth & Development I	5
ECE 1050	Health, Safety and Nutrition	5
ECE 2132	Infant/Toddler Development	5
ECE 2134	Infant/Toddler Group Care	5

Total Credit Hours: 25 Minimum Credit Hours Required for Graduation

NAIL TECHNICIAN (NAP1)
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.

Length of Program: Minimum of two (2) quarters

Entrance Date: Beginning of any quarter

Entrance Requirements:
Age: Minimum of 16 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: Nail Technician Technical Certificate of Credit

Required Courses		Credit Hours
COS 100	Introduction to Cosmetology Theory	5
COS 112	Manicuring and Pedicuring	3
COS 117	Salon Management	4
COS 118	Nail Care I	7
COS 119	Nail Care II	9

Total Credit Hours: 28 Minimum Credit Hours for Graduation
02/09

PREP COOK (5AC1)

Campus Availability:

• *Floyd County Campus*

Program Description:

This technical certificate of credit provides skills for entry into the food services preparation area as a prep cook. Topics include: food service history, safety and sanitation, purchasing and food control, nutrition and menu development and design, along with the principles of cooking

Length of Program: Minimum of two (2) quarters.

Entrance Dates: Beginning of any quarter.

Entrance Requirements:

Age: Minimum of 16 years of age.
Education: High school diploma or GED is 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.

Program Final Exit Point: Culinary Arts Line Cook Technical Certificate of Credit

Required Courses (23 Credit Hours)		Credit Hours
CUL 100	Professionalism in Culinary Arts	3
CUL 110	Food Services Sanitation and Safety	3
CUL 112	Principles of Cooking	6
CUL 114	American Regional Cuisine	5
CUL 116	Purchasing and Control	3
XXX xxx	Elective	3

Total Credit Hours: 23 Minimum Credit Hours for Graduation
08/09

SHAMPOO TECHNICIAN (SHT1)
CERTIFICATE

Campus Availability:
- *Floyd 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 salespersons, salon managers, or salon owners.

Length of Program: Minimum of two (2) quarters

Entrance Dates:
Fall or spring quarter (Floyd/Polk County campuses-Day Program)
Winter or summer quarter (Polk County campus-Night Program)
Fall or winter quarter (Walker County campus)

Entrance Requirements:
Age: Minimum of 16 years of age
Assessment Results: Applicants must make minimum scores in reading, writing, and numeric skills 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.

Program Final Exit Point: Shampoo Technician Technical Certificate of Credit

Required Curriculum (18 Credit Hours)		Credit Hours
COS 100	Introduction to Cosmetology Theory	5
COS 103	Basic Creative Treatment of Hair, Scalp, and Skin	3
COS 105	Introduction to Shampooing and Styling	4
COS 117	Salon Management	4
XXX xxx	Elective	3

Total Credit Hours: 19 Minimum Credit Hours for Graduation
08/08

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, the number of credit hours students will earn with successful completion of courses, and whether the courses contain lab components.

Opposite each course title are printed three numbers, such as 4-4-6. The first number indicates the number of regular classroom hours for the course each week (when averaged over the 10-week quarter); the second number indicates the number of laboratory hours per week; and the third number indicates the hours of credit awarded for the successful completion of the course. The eight-digit number following some courses (ex.-10092007) indicates the date of revision as recorded on the TCSG Standards website.

Course Number Identification: Courses are identified by name and major code (i.e. ACC 1101) with three digits, some with four digits. All courses are being converted to four digits. Sometimes a course is renamed when it is converted. To identify the three-digit course name that was replaced by a four-digit course name, note information at the end of the course description. For example, in ACC 1101 below, the information "replaces ACC 101" is recorded at the end of the course description. Courses numbered 0090-0099 are Learning Support courses and do not carry credit towards graduation. Courses numbered 100 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 100-299 or 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. ENG 1101, for example, is an associate degree level course. The College reserves the right to cancel or delete any course section with insufficient enrollment.

ACC 1101 - Principles of Accounting I **4-4-6**
Prerequisite/Corequisite: Program admission Introduces the basic concepts of the complete accounting cycle and provides the student with the necessary skills to maintain a set of books for a sole proprietorship. Topics include: accounting vocabulary and concepts, the accounting cycle and accounting for a personal service business, the accounting cycle and accounting for a merchandising enterprise, and cash control. Laboratory work demonstrates theory presented in class. (Replaces ACC 101 eff 200903). 09032008

ACC 1102 - Principles of Accounting II **4-4-6**
Prerequisite: ACC 1101. Applies the basic principles of accounting to specific account classifications and subsidiary record accounting. Topics include: receivables, inventory, plant assets, payroll, payables, partnerships, and sales tax returns. Laboratory work demonstrates theory presented in class. (Replaces ACC 102 eff 200903). 092008

ACC 1103 - Principles of Accounting III **4-4-6**
Prerequisite: ACC 1102. Emphasizes a fundamental understanding of corporate and cost accounting. Topics include: accounting for a corporation, statement of cash flows, cost accounting, budgeting and long term liabilities. Laboratory work demonstrates theory presented in class. (Replaces ACC 103 eff 200903). 09032008

ACC 1104 - Computerized Accounting **1-4-3**
Prerequisites: ACC 1102, SCT 100. Emphasizes operation of computerized accounting systems from manual input forms. Topics include: equipment use, general ledger, accounts receivable and payable, payroll, cash management, and financial reports. Laboratory work includes theoretical and technical application. (Replaces ACC 104 eff 200903). 09032008

ACC 1106 - Spreadsheet Applications **1-4-3**
Prerequisite: SCT 100. Provides instruction in the use of electronic spreadsheet software in business applications. Students become proficient in creating and modifying spreadsheets in a business environment and in printing files that meet business standards. Topics include: spreadsheet concepts, data entry and modification, analyzing data, charts and graphs, formatting data and content and managing workbooks. (Replaces ACC 106 eff 200903). 08262008

ACC 1151 - Individual Tax Accounting **4-2-5**
Provides instruction for preparation of both state and federal income tax. Topics include: taxable income, income adjustments, schedules, standard deductions, itemized deductions, exemptions, tax credits, and tax calculations. (Replaces ACC 151 eff 200903). 08262008

ACC 1152 - Payroll Accounting **4-2-5**
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. (Replaces ACC 152 eff 200903). 08262008

ACC 2105 - Database Applications **1-4-3**
Prerequisite: SCT 100. Emphasizes use of database management software packages to access, manipulate, and create file data. Topics include: database concepts, structuring databases, entering data, organizing data, and managing databases. (Replaces ACC 105 eff 200903). 08262008

ACC 2150 - Cost Accounting **4-4-6**
Prerequisite: ACC 1103. Emphasizes a thorough understanding of cost concepts, cost behavior, and cost accounting techniques as they are applied to manufacturing cost systems. Topics include job order cost accounting, process cost accounting, and standard cost accounting. (Replaces ACC 150 eff 200903). 09032008

ACC 2154 - Personal Finance **5-0-5**
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. (Replaces ACC 154 eff 200903). 09032008

ACC 2155 - Legal Environment of Business **5-0-5**
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. (Replaces ACC 155 eff 200903). 09032008

ACC 2156 - Business Tax Accounting **4-2-5**
Prerequisites: ACC 1101; ACC 1151. 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. (Replaces ACC 156 eff 200903). 08262008

ACC 2157 - Integrated Accounting Management Systems **2-8-6**
Prerequisites: ACC 1103, ACC 1104, ACC 1106. Emphasizes use of database management packages, electronic spreadsheet packages, and accounting software packages for accounting/financial applications with more advanced systems. Topics include: creation and management of database applications, creation and management of spreadsheet applications, and creation and management of accounting integrated software systems. (Replaces ACC 157 eff 200903). 08262008

ACC 2158 - Managerial Accounting **4-4-6**
Prerequisite: ACC 1103. Emphasizes the interpretation of data by management in planning and controlling business activities. Topics include: budgeting, capital investment decisions, price level and foreign exchange, analysis of financial statements, and internal reporting. (Replaces ACC 158 eff 200903). 09032008

ACC 2160 - Advanced Spreadsheet **4-2-5**
Prerequisite: ACC 1106. Provides the fundamental, intermediate and advanced Microsoft Excel competencies to provide user with the skills necessary to obtain the expert user certification. Topics include spreadsheet creation, financial statements, forecast, amortization schedules, workgroup editing and advanced features such as macros, using charts, importing and exporting data, HTML creation, formulas, Web queries, built-in function, templates, and trends and relationships. (Replaces ACC 160 eff 200903). 008272008

ACC 2165 - Capstone Review Course of Accounting Principles 4-4-6
Prerequisite: ACC 1103, ACC 1152, ACC 2150, ACC 2156 or 2 year Associate degree in Accounting. Guides the student in dealing with ethics, internal control, fraud and financial statement analysis in the accounting environment which will require students to confront and resolve accounting problems by integrating and applying skills and techniques acquired from previous courses. Will prepare students in developing a personal code of ethics by exploring ethical dilemmas and pressures they will face as accountants. Will help the student understand financial statement analysis and the relation to fraud, and fraud detection. Will prepare the student for the ACAT Comprehensive Examination for Accreditation in Accountancy. (Replaces ACC 165 eff 200903). 08272008

ACR 1000 - Safety 1-0-1
Prerequisite: Provisional admission. Provides instruction in procedures and practices necessary for safe operation of automotive collision repair facilities. Topics include: work facility safety and cleanliness, safety devices, fire prevention and safety, and environmental safety.

ACR 1010 - Automobile Components Identification 3-1-3
Prerequisite/Corequisite: Provisional admission, ACR 1000. Introduces the structural configuration and identification of the structural members of various automotive unibodies and frames. Topics include: unibody construction, frame types, stub frame types, body panels, and mechanical components.

ACR 1020 - Equipment and Hand Tools Identification 1-1-1
Prerequisite/Corequisite: Provisional admission, ACR 1000. Introduces equipment and hand tools used in automotive collision repair. Topics include: safety procedures, hand tools identification, power hand tools, air supply systems, and hydraulic systems.

ACR 1040 - Mechanical and Electrical Systems 1-3-2
Prerequisites: ACR 1000, ACR 1010, ACR 1020. Introduces various mechanical and electrical systems requiring repair of damages incurred through automobile collisions. Topics include: engine accessory systems, emission control systems, air conditioning systems, braking systems, steering columns, engine removal and replacement sequence, lighting systems, and engine wiring.

ACR 1050 - Body Fiberglass, Plastic, and Rubber Repair Techniques 1-7-3
Prerequisite/Corequisite: Program admission, ACR 1000, ACR 1010, ACR 1020. Provides instruction in non-metallic auto body repair techniques. Topics include: cracked or splintered area repair, bonding agent usage, fiberglass and plastic body parts removal and replacement procedure, partial fiberglass header panel replacement procedure, plastics identification, plastic and rubber welding techniques, and Sheet Molded Compound (SMC) repairs.

ACR 1060 - Welding and Cutting 2-7-6
Prerequisite/Corequisite: ACR 1000, ACR 1010, ACR 1020. Introduces welding and cutting procedures used in auto collision repair. Emphasis will be placed on MIG welding techniques. Topics include: MIG welding, oxyfuel welding, metal cutting techniques, resistance welding, unibody welding techniques, weld removal techniques, safety procedures, and plasma arc cutting.

ACR 1070 - Trim, Accessories, and Glass 1-3-2
Prerequisite/Corequisite: Provisional admission, ACR 1000, ACR 1010, ACR 1020. Provides instruction in removal and replacement methods of a variety of non-structural cosmetic and safety features of the automobile. Topics include: interior and exterior trim, mirrors, weather stripping, stationary and non-stationary glass, interior components, fasteners, and safety procedures.

ACR 1090 - Damage Identification and Assessment 2-2-3
Prerequisite/Corequisite: ACR 1000, ACR1010. Introduces procedures and resources used in the identification and assessment of automotive collision damages. Topics include: assessment plan determination, damage analysis, collision estimation, service manual use, and computerized estimation.

ACR 1100 - Minor Collision Repair 1-5-2
Prerequisite/Corequisite: Provisional admission, ACR 1000, ACR 1010, ACR 1020 Introduces the materials and operations required to repair minor collision damage. Topics include: pick, file, and finish procedures; body repair materials identification; body fillers usage; disc grinder procedures; safety procedures, and stud welders.

ACR 1200 - Conventional Frame Repair 1-5-3
Prerequisite/Corequisite: ACR 1000, ACR 1010, ACR 1020. Emphasizes the diagnosis, straightening, measurement, and alignment of conventional automobile and truck frames. Topics include: alignment measurement systems; damage diagnosis; equipment types and usage; frame straightening, repair, and alignment; safety precautions, and computerized damage diagnosis.

ACR 1210 - Unibody Identification and Damage Analysis 1-4-2
Prerequisite/Corequisite: ACR 1000, ACR 1010, ACR 1020. Provides instruction in the identification and analysis of various forms of unibody damage. Topics include: collapse or buckle damage identification, sag damage identification, sideways damage identification, twist damage identification, secondary damage identification, and lift equipment usage and safety.

ACR 1270 - Unibody Suspension and Steering Systems 2-3-2
Prerequisite/Corequisite: ACR 1000, ACR 1010, ACR 1020. Provides instruction in unibody suspension and steering system damage analysis and repair. Topics include: theory, parallelogram suspension parts removal and replacement, rack and pinion steering system removal and replacement, damage analysis, quick check system damage determination, front end suspension equipment usage, and safety procedures. 03102009

ACR 1280 - Bolt-on Body Panel Removal and Replacement 2-5-4
Prerequisite/Corequisite: ACR 1000, ACR 1010, ACR 1020. Provides instruction in the removal and replacement of bolt-on automobile body panels. Topics include: hood, deck panels, and header panels removal and replacement; fender removal and installation/coining; door removal and installation; headlamp and filler panels removal and replacement; grill removal and replacement; and headlamp adjustment. 03102009

ACR 1290 - Major Collision Repair Internship/Practicum 0-9-3
Prerequisite: Completion of all required courses in the Major Collision Repair specialization. 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.

ACR 1300 - Sanding, Priming and Paint Preparation 3-4-5
Prerequisite/Corequisite: ACR 1000, ACR 1010, ACR 1020. Introduces the materials and procedures involved in preparing automobile bodies for refinishing. Topics include: featheredging, masking procedures, safety procedures, surface preparation, corrosion preventative application, primers, sealers, primer surfacer applications, and spray gun operation and maintenance.

ACR 1320 - Special Refinishing Application 3-5-5
Prerequisite/Corequisite: ACR 1000, ACR 1010, ACR 1020, ACR 1300. Provides instruction in the equipment, material, and techniques used in the application of special paints. Emphasis will be placed on automotive refinishing procedures. Topics include: safety; paint identification; base metals preparation and priming; equipment use and maintenance; color application; original finish sealing; panel and spot repair and blending; thinners, reducers, and additives; and fiberglass, plastics, and rubber refinishing

ACR 2240 - Unibody Measuring, Fixturing and Strengthening Systems 3-7-6
Prerequisite/Corequisite: ACR 1000, ACR 1010, ACR 1020. ACR 1210 Provides instruction in a variety of alignment measuring, fixturing, and straightening systems. Topics include: universal mechanical measuring system/ equipment types and usage; universal laser measuring system/ safety procedures; dedicated fixture system/ primary/ rough and secondary damage pull; upper body panel/single pull correction; English/metric tape alignment measurement/multiple pull correction; and impact or pull stress relief.

ACR 2250 - Unibody Structural Panel Repair and Replacement 1-5-3
Prerequisite/Corequisite: ACR 1000, ACR 1010, ACR 1020. ACR 1060, ACR 1210. Provides instruction in attachment methods, proper repair and replacement of structural panels, dimensional control, areas of high stress concentration, sectional principles, and crush zones. Selection and preparation of recycled parts will be emphasized. Topics include: primary structure, rear cross member, apron and rails, trans X members, rockers, w/s posts, hinge pillar, center pillar, floor pan, spot weld removal, panel sectional cuts, and damaged panel removal and replacement.

ACR 2260 - Conventional Body Structural Panel Repair 3-5-5
Prerequisite/Corequisite: ACR 1000, ACR 1010, ACR 1020. Introduces conventional body structural panel repair. A variety of removal and replacement techniques are emphasized. Topics include: partial or complete quarter panel removal and replacement, rocker panel removal and replacement, and center pillar post removal and replacement.

ACR 2340 - Urethane Enamels Refinishing Application 2-8-5
Prerequisite/Corequisite: ACR 1000, ACR 1010, ACR 1020, ACR 1300. Provides instruction in the equipment, material, and techniques used in the application of urethane enamels paint. Emphasis will be placed on automotive refinishing procedures. Topics include: safety; paint identification; base metals preparation and priming; equipment use and maintenance; base coat/clear coat application; color application of solid and metallic finishes; original finish sealing; panel and spot repair and blending; thinners, reducers, and additives; and tri-coat finishing.

ACR 2350 - Tint and Match Colors **3-5-5**
Prerequisite/Corequisite: ACR 1000, ACR 1010, ACR 1020, ACR 1300. Introduces methods and techniques used in the process of color matching and production. Topics include: tinting methods, gun techniques, variables adjustments, color flip- flop determination and correction, and reduction procedures.

ACR 2360 - Detailing **1-4-2**
Prerequisite/Corequisite: ACR 1000, ACR 1020. Introduces the methods and techniques used in detailing a refinished automotive surface. Topics include: finish analysis, color sanding, polishes and glazes, cleaning vehicle, and decal and stripes.

ACR 2370 - Paint and Refinishing Internship **0-9-3**
Prerequisite: Completion of all required courses in Paint and Refinish specialization. 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; detailing; and employability skills.

ACT 100 - Refrigeration Fundamentals **3-2-4**
Introduces basic concepts and theories of refrigeration. Topics include: the law of thermodynamics, pressure and temperature relationships, heat transfer, the refrigeration cycle, and safety.

ACT 101 - Principles and Practices of Refrigeration **5-5-7**
Prerequisite: ACT 100. Introduces the use of refrigeration tools, materials, and procedures needed to install, repair, and service refrigeration systems. Topics include: refrigeration tools, piping practices, service valves, leak testing, refrigerant recovery, evacuation, charging, and safety.

ACT 102 - Refrigeration Systems Components **5-5-7**
Prerequisites: ACT 100, ACT 101. Provides the student with the skills and knowledge to install, test, and service major components of a refrigeration system. Topics include: compressors, condensers, evaporators, metering devices, service procedures, refrigeration systems, and safety.

ACT 103 - Electrical Fundamentals **5-5-7**
Introduction to fundamental electrical concepts and theories as applied to the air conditioning industry. Topics include: AC and DC theory, electric meters, electric diagrams, distribution systems, electrical panels, voltage circuits, code requirements, and safety.

ACT 104 - Electrical Motors **2-5-4**
Prerequisite: ACT 103. Continues the development of skills and knowledge necessary for applications and service of electric motors commonly used by the refrigeration and air conditioning industry. Topics include: diagnostic techniques, capacitors, installation procedures, and types of electric motors, electric motor service, and safety.

ACT 105 - Electrical Components **3-5-5**
Prerequisite/Corequisite: ACT 103. Provides instruction in identifying, installing, and testing commonly used electrical components in an air conditioning system. Topics include: pressure switches, overload devices, transformers, magnetic starters, other commonly used controls, diagnostic techniques, installation procedures, and safety.

ACT 106 - Electrical Control Systems and Installation **2-5-4**
Prerequisite/Corequisite: ACT 105. Provides instruction on wiring various types of air conditioning systems. Topics include: servicing procedures, solid state controls, system wiring, control circuits, and safety.

ACT 107 - Air Conditioning Principles **6-4-8**
Prerequisite/Corequisite: ACT 102. Introduces fundamental theory and techniques needed to identify major components and functions of air conditioning systems. Instruction is given on types of air conditioning systems and use of instrumentation. Topics include: types of AC systems, heat-load calculation, and properties of air, psychometrics, duct design, air filtration, and safety principles.

ACT 108 - Air Conditioning Systems Installation **2-3-3**
Prerequisites: ACT 102, ACT 106. Provides instruction on the installation and service of residential air conditioning systems. Topics include: installation procedures, service, split-systems, add on systems, packaged systems, and safety.

ACT 109 - Troubleshooting Air Conditioning Systems **5-5-7**
Prerequisites/Corequisites: ACT 108, ENG 1010. Provides instruction on troubleshooting and repair of major components of a residential air conditioning system. Topics include: troubleshooting techniques, electrical controls, airflow, refrigeration cycle, and safety.

ACT 110 - Gas Heating Systems **2-8-5**
Prerequisite: ACT 106. Introduces principles of combustion and service requirements for gas heating systems. Topics include: service procedures, electrical controls, piping, gas valves, venting, code requirements, principles of combustion, and safety.

ACT 111 - Heat Pumps and Related Systems **3-7-6**
Prerequisites/Corequisites: ACT 102, ACT 106. Provides instruction on the principles, application, and operation of a residential heat pump system. Topics include: installation procedures, servicing procedures, electrical components, geothermal ground source energy supplies, dual fuel, troubleshooting, valves, and safety.

AHS 102 - Drug Calculation and Administration **2-2-3**
Prerequisite: MAT 1012 and Program Admission. Utilizes basic mathematical concepts and includes basic drug administration. Topics include: resource materials, systems of measurement, abbreviations, drug calculations, and administration of medications in a simulated clinical environment.

AHS 103 - Nutrition and Diet Therapy **2-0-2**
Prerequisite: AHS 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.

AHS 104 - Introduction to Health Care **2-3-3**
Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. In addition to the essential skills, students explore various delivery systems and related issues. Topics include: basic life support/CPR, basic emergency care/first aid and triage, vital signs, infection control, and blood/airborne pathogens.

AHS 109 - Medical Terminology for Allied Health Sciences **3-0-3**
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, word building, abbreviations and symbols, terminology related to the human anatomy, reading medical orders and reports, and terminology specific to the student's field of study.

AHS 152 - Advanced Anatomy and Physiology **5-0-5**
Prerequisite: AHS 1011. This course is designed to be an advanced level course in human anatomy and physiology specific for Radiologic Technology students. The information covered will be presented in content and context that relates to the medical imaging of the human body and its function. The material will build on knowledge gained from the prerequisite class AHS 1011.

AHS 1010 – Introduction to Anatomy and Physiology **5-0-5**
Prerequisite: Program admission. This course provides a basic study of structure and function of the human body. This course includes an overview of each body system with an emphasis on homeostasis. Medical terminology related to body structure and function is taught as an integral part of the course. Topics include: introduction to medical terms describing the human body; and overview of structure and function of the human body.

AHS 1011 - Anatomy and Physiology **5-0-5**
This course provides a basic study of structure and function of the human body. This course includes an overview of each body system with an emphasis on homeostasis. Medical terminology related to body structure and function is taught as an integral part of the course. Topics include: introduction to medical terms describing the human body; and overview of structure and function of the human body. (Replaces AHS 101 eff 200903). 10012008

AHS 1015 – Basic Inorganic Chemistry **3-2-4**
Prerequisite: MAT 1012. Introduces chemical concept principles, laws, and techniques applicable to the medical laboratory. Topics include: laboratory safety; fundamental principles of chemistry; weight and measures; solutions; and basic laws of chemistry.

AHS 1126- Health Science Physics **5-0-5**
Prerequisites: MAT 1013 (diploma), MAT 1101, MAT 1111 or MAT 1111 (A.A.S.). This course introduces the student to the basic laws of physics, with specific applications for health science students. Topics include: basic Newtonian mechanics; static and dynamic fluid concepts; heat and temperature; basic principles of waves, light, and sound, basic principles of electricity and magnetism to include electrical safety. (Replaces AHS 156 eff 200903). 09242008

AHS 1127 - Health Sciences Chemistry **4-2-5**
Prerequisite: Program admission level math achievement. 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; liquid mixtures; organic chemistry; and biochemistry. (Replaces AHS 157 eff 200903). 09242008

AMF 103 - Manufacturing Processes Survey 3-3-4
Familiarizes students with the production processes a flexible manufacturing system may perform. Topics include: modern manufacturing concepts; product manufacturing stages; manufacturing specifications and quality control; industrial materials; materials testing; casting and molding processes; materials cutting, removal, and forming processes; welding and joining processes; and parts assembly.

AMF 104 - Intro to Computer Programming for Flexible Mfg. Systems 3-2-3
Develops basic microcomputer skills for solving engineering technology and production problems found in flexible manufacturing system environments. Topics include: computer programming, computer hardware and software, BASIC or other structured language programming, and computer operating systems.

AMF 106 - Introduction to Robotics 3-4-4
Explores basic robotic concepts. Studies robots in typical application environments. Topics include: robot history and fundamentals, robot classification, power sources, robot applications in the workplace, robot control techniques, path control, end of arm tooling, robot operation and robot controllers, controller architecture in a system, robotic language programming, and human interface issues.

AMF 107 Machine Tool Numerical Control Theory and Practice 2-4-3
Prerequisite: AMF 103. Provides an overview of machine tool technology. Topics include: bench work operations, CNC fundamentals, CNC mill programming and operation, and CNC lathe programming and operation.

AMF 108 - Applied Hydraulics, Pneumatics and Mechanisms 2-3-3
Prerequisite: PSC 150 (diploma), or PHY 1111 (A.A.S.). Emphasizes mechanical techniques for maintaining, troubleshooting, installing, and repairing drives, conveyor systems, and valves. Topics include: gas laws; pressure and force calculations; hydraulic systems vs. pneumatic systems; cylinders, pressure controls, and system controls; hydraulic and pneumatic symbology; hydraulic and pneumatic system layout; interfacing hydraulic or pneumatic systems with other systems; applied mechanisms; belt, chain, and gear drives; drive train components; valves; and conveyor systems.

AMF 109 Analog Circuits 4-2-5
Prerequisite: AMF 110. Studies linear integrated circuits. Topics include: linear I.C. devices, differential amplifiers, I.C. operational amplifiers, active filter fundamentals, I.C. timers, special linear I.C. devices/circuits, power supply regulation, single supply circuits, solid state control devices/circuits, switches and relays, transducers, final control elements and servo amplifiers, servo-mechanisms, interfacing and signal conditioning, digital to analog conversion, analog to digital conversion, D/A and A/D converters with microprocessors, and industrial timing.

AMF 110 - Introduction to Active Devices/Circuit 3-3-4
Prerequisites: IFC 102; ENG 1010 (diploma), or ENG 1101 (A.A.S.). Explores active device basic principles, including low frequency applications and troubleshooting. Topics include: semiconductor fundamentals, diode applications, BJT characteristics, bipolar transistor circuits, and unipolar devices.

AMF 111 - Introduction to Digital Logic 3-4-4
Prerequisite: IFC 102. Explores digital electronic system mathematics and circuits. Focuses on binary arithmetic, Boolean algebra, and electronic logic circuitry. Topics include: digital systems, number systems, logic gates and truth tables, logic simplification, flip-flops, counters, shift registers, conversion circuits, display devices, switching and digital signals, multi-vibrator troubleshooting, digital arithmetic circuits, logic families and specifications, A/D and D/A conversions, and computer and microprocessor concepts.

AMF 113 - Programmable Controllers I 3-4-4
Prerequisite: IFC 102. Studies basic programmable controller application skills and techniques as well as programmable controllers in typical environs and as an element of a complex manufacturing cell. Topics include: CRT hardware; power-up and initialization; CRT capabilities and mode selection; rack addressing; basic ladder programming; ladder editing and display; time scan, data entry, monitoring, forcing, and cross referencing using the CRT as a terminal; and printer operation and printout routines.

AMF 115 - Manufacturing Control and Work Cell Interfacing 4-2-5
Prerequisites: AMF 110; PSC 150 (diploma), or PHY 1111 (degree). Studies open and closed loop controls and cell level interfacing. Emphasizes human factors related to automated systems. Topics include: process control; sensors and interfacing; fluid pressure and level measurement; fluid flow instrument; instruments for temperature measurement; instruments for mechanical measurement; pneumatic controls; cell level interfacing; automatic control systems application; and human interface issues of operator training, acceptance, and safety.

AMF 152 - Manufacturing Organizational Principles 0-2.5-2
Introduces the learners to the manufacturing industry by providing them with an overview of the functional and structural composition of organizations. Topics include supply and demand, product flow, types of manufacturing process, structure of manufacturing organizations, manufacturing business principles, employee impact on the bottom line, and workplace ethics.

AMF 154 - Manufacturing Workforce Skills **0-2-2**
This course provides the personal and interpersonal effectiveness skills required to succeed in the manufacturing environment. Topics include listening, communication, team skills, personal wellness, managing change, and creating a positive image.

AMF 156 - Manufacturing Production Requirements **0-2-2**
This course provides learners with the knowledge and skills associated with quality and productivity in the manufacturing environment.

AMF 158 - Automated Manufacturing Skills **0-4.5-3**
This course provides learners with an introduction into computerized process control and the operational requirements associated with automated machines in the manufacturing environment.

AMF 160 - Representative Manufacturing Skills **0-5-6**
This course provides learners with an introduction to representative manufacturing skills and associated safety requirements. Topics include plant safety, materials movement equipment, and precision measurements for manufacturing and blueprint reading.

AMF 206 - Work Cell Design Laboratory **1-4-3**
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.

AMF 207 - Flexible Manufacturing Systems I **2-4-4**
Reviews flexible system electrical, electronic, and mechanical principles. Provides opportunities to plan and prepare for constructing and operating an actual flexible automated system. Topics include: electrical, electronic, and mechanical systems; and flexible manufacturing system planning and preparation.

AMF 208 - Flexible Manufacturing Systems II **2-4-4**
Continues studying flexible manufacturing systems. Students will employ planning documentation skills developed in AMF 207 to install an automated system, produce a first run product, and operate the system. Topics include: system installation to produce a first run product and automated system operation.

AMF 209 - Flexible Manufacturing Systems Project **0-4-2**
Provides an opportunity for students to use the flexible characteristics of the automated system developed in AMF 208. Emphasizes changing the function or product produced by the automated system to adapt the automated system to function as a flexible system. Topics include: adaptation of automated systems for flexible manufacturing.

AMF 214 - Programmable Controllers II **1-9-4**
Continues the hand-on development of programming, operation and maintenance of industrial PLC systems. Instruction in advanced programming techniques for industrial control systems and automated industrial equipment will enhance the students' knowledge and understanding of the PLC's in an industrial plant. Topics include: Data manipulation instructions, math functions, program control instructions, communicating to external devices, and troubleshooting discrete I/O devices.

AMT 100 - Aviation Mathematics **3-0-3**
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.

AMT 101 - Aircraft Maintenance Regulations **2-3-3**
Prerequisite: SCT 100. 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.

AMT 102 - Aircraft Applied Sciences **10-10-13**
Pre/Corequisite: AMT 100 (diploma) or MAT 1111 or MAT 1111 (degree). Provides students with the fundamentals of aircraft servicing methods and ground operations. Topics include: aircraft drawings, aircraft weight and balance, fluid lines and fittings, materials and processes, ground operations and servicing, and aircraft cleaning and corrosion control.

AMT 103 - Aircraft Electricity and Electronics 5-5-7
Pre/Corequisite: AMT 100 (diploma) or MAT 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.

AMT 121 - Aviation Physics 3-0-3
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.

AMT 201 - Aircraft Airframe Structures 2-3-3
This course presents a survey of aircraft airframe structures used in aircraft. Topics include: wood structures, aircraft covering, and aircraft finishes.

AMT 202 - Airframe Sheet Metal and Non-Metallic Structures 5-7-7
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.

AMT 203 Airframe Welding 1-3-2
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.

AMT 204 - Airframe Assembly and Rigging 2-3-3
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.

AMT 205 - Airframe Inspection 3-7-5
This course provides for performing airframe inspections with emphasis on developing the skills related to conformity and airworthiness evaluations. Topics include: perform airframe conformity inspection, and perform airframe airworthiness inspection.

AMT 206 - Aircraft Hydraulic and Pneumatic Systems 2-3-3
Prerequisite: AMT 103. 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.

AMT 207 - Aircraft Landing Gear Systems 3-5-4
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.

AMT 208 - Aircraft Environmental Control Systems 8-7-10
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; inspect, check, troubleshoot, service, and repair fire protection systems; inspect, check, troubleshoot, service, and repair aircraft fuel systems; and inspect, check, troubleshoot, service, and repair aircraft instrument systems.

AMT 209 - Aircraft Electrical, Communication, and Navigation Systems 7-8-9
Prerequisite: AMT 103. This course provides a study of aircraft electrical, communication, and navigation 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; 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; inspect and repair antenna and electronic equipment installations; and inspect, check, and troubleshoot constant speed and integrated speed drive generators.

AMT 221 - Reciprocating Engine Powerplants I 5-0-5
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.

AMT 222 - Reciprocating Engine Powerplants II 3-12-7
Prerequisites: AMT 221, AMT 226. 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.

AMT 223 - Gas Turbine Powerplants I 5-0-5
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.

AMT 224 - Gas Turbine Powerplants II 3-7-5
Prerequisites: AMT 223, AMT 226. 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.

AMT 225 - Aircraft Engine Inspection 2-1-2
Prerequisites: AMT 222 or AMT 224. This course provides students with the knowledge and skills to perform aircraft engine inspections. Topics include: perform an aircraft powerplant conformity and airworthiness inspection.

AMT 226 - Aircraft Engine Fuel and Fuel Metering Systems 5-7-7
Prerequisites: AMT 221, AMT 223. 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.

AMT 227 - Aircraft Engine Electrical, Ignition, and Starting Systems 8-7-10
Prerequisite: AMT 103. This course provides a study of aircraft engine 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; repair engine electrical system components; overhaul magneto and ignition harness; inspect, service, troubleshoot, and repair reciprocating and turbine engine ignition systems and components; inspect, service, troubleshoot, and repair turbine engine electrical starting systems; and inspect, service, and troubleshoot turbine engine pneumatic starting systems.

AMT 228 - Aircraft Powerplant Accessory Systems 7-8-9
Prerequisites: AMT 221, AMT 223. This course provides a study of aircraft powerplant accessory systems. Topics include: inspect and maintain aircraft engine lubrication systems; propeller theory and fundamentals; inspect and maintain propellers; install, troubleshoot, and remove propellers; inspect and maintain aircraft engine induction systems; inspect and maintain aircraft engine cooling systems; and inspect and maintain aircraft engine exhaust systems.

ART 1101 – Art Appreciation **5-0-5**
Prerequisite: ENG 1101. Explores the analysis of well-known works of visual arts, their composition, and the relationship to their periods through writing. Students practice various modes of writing, ranging from exposition to argumentation and persuasion. The course includes a brief review of standard grammatical and stylistic usage in proofreading and editing. An introduction to locating, acquiring, and documenting information resources lays the foundation for research to include: the re-creative critical process, the themes of art, the formal elements of design, and the placing of art in the historical context, writing analysis, practice, revision, and research about a work of visual arts. Topics include: historical and cultural development represented in visual arts; contributions in visual arts; and communication skills.

AUT 120 - Introduction to Automotive Technology **2-3-3**
Introduces basic concepts and practices necessary for safe and effective automotive shop operation. Topics include: safety procedures; legal/ethical responsibilities; measurement; machining; hand tools; shop organization, management and work flow systems.

AUT 122 - Electrical and Electronic Systems **4-6-6**
Prerequisite: AUT 120. Introduces automotive electricity. Topics include: general electrical system diagnosis; lighting system diagnosis and repair; gauges, warning devices, and driver information system diagnosis and repair; horn and wiper/washer diagnosis and repair; accessories diagnosis and repair.

AUT 124 - Battery Starting and Charging Systems **2-6-4**
Prerequisite: AUT 122. Emphasizes the basic principles, diagnosis, and service/repair of batteries, starting systems, starting system components, alternators, and regulators. Topics include: battery diagnosis and service; starting system diagnosis and repair; charging system diagnosis and repair.

AUT 126 - Engine Principles of Operation and Repair **3-9-6**
Prerequisite: AUT 120. Introduces automotive engine theory and repair, placing emphasis on inspection, testing, and diagnostic techniques. Topics include: general diagnosis; removal and reinstallation; cylinder heads and valve trains diagnosis and repair; engine blocks assembly diagnosis and repair; lubrication and cooling systems diagnosis and repair.

AUT 128 - Fuel, Ignition and Emission Systems **5-6-7**
Prerequisites: AUT 122, 124, and 126. Introduces fuel, ignition, and exhaust systems theory, diagnosis, repair, and service for vehicles with carburetion and fuel injection systems. Topics include: general engine diagnosis; ignition system diagnosis and repair; fuel, air induction, and exhaust systems diagnosis and repair; positive crankcase ventilation; exhaust gas recirculation; engine related service.

AUT 130 - Automotive Brake Systems **3-3-4**
Prerequisite: AUT 122. Introduces Brake systems theory and its application to automotive systems. Topics include: hydraulic system diagnosis and repair; drum brake diagnosis and repair; disc brake diagnosis and repair; power assist units diagnosis and repair; miscellaneous (wheel bearings, parking brakes, electrical, etc.) diagnosis and repair.

AUT 132 - Suspension and Steering Systems **3-3-4**
Prerequisite: AUT 122. Introduces students to principles of steering, suspension, wheel alignment, electronic steering, and electronic active suspension. Topics include: steering systems diagnosis and repair; suspension systems diagnosis and repair; wheel alignment diagnosis, adjustment and repair; wheel and tire diagnosis and repair.

AUT 134 - Drivelines **2-6-4**
Prerequisite: AUT 122. Introduces basics of rear-wheel drive, front-wheel drive, and four-wheel drive driveline related operation, diagnosis, service and related electronic controls. Topics include: drive shaft and half shaft, universal and constant-velocity (cv) joint diagnosis and repair; ring and pinion gears and differential case assembly; limited slip differential; drive axle shaft; four-wheel drive/all-wheel drive component diagnosis and repair.

AUT 138 - Manual Transmission/Transaxle **3-3-4**
Prerequisite: AUT 122. Introduces basics of front and rear-wheel drive. Clutch operation, diagnosis and service is included. Electronic controls related to transmission/transaxle operation are discussed. Topics include: clutch diagnosis and repair; transmission/transaxle diagnosis and repair.

AUT 140 - Electronic Engine Control Systems **6-3-7**
Prerequisite: AUT 128. Introduces concept of electronic engine control. Topics include: computerized engine controls diagnosis and repair; intake air temperature controls; early fuel evaporation (intake manifold temperature) controls; evaporative emissions controls.

AUT 142 - Climate Control Systems 5-3-6
Prerequisite: AUT 122. Introduces the theory and operation of automotive heating and air conditioning systems. Students attain proficiency in inspection, testing, service, and repair of heating and air conditioning systems and related components. Topics include: a/c system diagnosis and repair; refrigeration system component diagnosis and repair; heating, ventilation, and engine cooling systems diagnosis and repair; operating systems and related controls diagnosis and repair; refrigerant recovery, recycling, and handling.

AUT 144 - Introduction to Automatic Transmissions 3-3-4
Prerequisite: AUT 122. Introduces students to basic transmission/transaxle theory, inspection, and service procedures. Focuses on minor in-car adjustments, replacements, and repair. Topics include: general transmission and transaxle diagnosis; transmission and transaxle maintenance and adjustment; in-vehicle transmission and transaxle repair.

AUT 210 - Automatic Transmission Repair 5-6-7
Prerequisite: AUT 144. Introduces automatic transmission hydraulic/mechanical operations, transmission repair, and automatic transmission hydraulic/mechanical diagnosis. Topics include: removal, disassembly, and reinstallation; oil pump and converter; gear train, shafts, bushings and case; friction and reaction units.

AUT 212 - Advanced Electronic Transmission Diagnosis 2-3-3
Prerequisite: AUT 210. Introduces automatic transmission hydraulic/mechanical, and electronic diagnosis and repair. Topics include: electronically controlled automatic transmission, automatic transmission electrical and electronic problem diagnosis and repair.

AUT 214 - Advanced Electronic Controlled Brake System Diagnosis 3-3-4
Prerequisite: AUT 130. Introduces anti-lock Brake system (ABS) to include ABS components and ABS operation, testing, and diagnosis. Topics include: general Brake and anti-lock brake systems diagnosis and testing, light truck rear anti-lock brake system, four-wheel anti-lock brake system locations, components, and operation.

AUT 216 - Advanced Electronic Controlled Suspension and Steering Systems 3-3-4
Prerequisite: AUT 132. Introduces principles of electronic suspension, electronic steering, and electronic active suspension. Topics include: electronic steering systems diagnosis and adjustment/repair, and diagnosis of electrical and electronic controlled steering and suspension systems.

AUT 218 - Advanced Electronic Engine Control Systems 3-3-4
Prerequisite: AUT 140. Introduces On-Board Diagnostics II (OBD II), California Air Research Board (CARB) requirements and monitoring technology, diagnostic trouble code definitions, and essentials of advanced drivability diagnosis and data interpretation using a scanner. Topics include: OBD II standards; monitoring capabilities; OBD II diagnostics; OBD II terms.

AUT 220 - Automotive Technology Internship 0-18-6
Prerequisite: AUT 128. Provides student work experience in the occupational environment. Topics include: application of automotive technology knowledge and skills, appropriate employability skills, problem solving, adaptability to job setting, progressive productivity, and acceptable job performance.

AVT 101 – Basic Electronics 4-5-6
Prerequisites: MAT 1013 (diploma), or MAT 1111 (degree); *Corequisites:* MAT 1017 (diploma), or MAT 1112 (degree). 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.

AVT 102 – Avionics Maintenance Practices 3-6-5
Prerequisite: AVT 101. 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.

AVT 103 – Advanced Electronics 4-5-6
Prerequisite: AVT 101. 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.

AVT 104 – Digital Electronics 4-5-6
Prerequisite: AVT 101. 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. 10142003

AVT 106 – Aircraft Logic Systems 4-5-6
Prerequisite: AVT 104. Focuses on microprocessor based computers used in avionics systems. Topics include: memory, mass storage, computer systems, data bases, and logic systems repair procedures.

AVT 107 – Aircraft Communication Systems **5-5-7**
Prerequisite: AVT 104. Continues the study of avionics maintenance practices with emphasis on aircraft communication systems. Topics include: component operation, component location, integration, analysis, maintenance, and ACARS.

AVT 108 – Navigation Systems **5-5-7**
Prerequisite: AVT 104. Continues the study of avionics maintenance practices with emphasis on aircraft navigational systems. Topics include: bridges and monitors, synchros, gyros, and navigation systems.

AVT 109 – Flight Director and Autopilot Systems **5-5-7**
Prerequisite: AVT 108. 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.

BAF 100 Introduction to Banking and Finance **5-0-5**
Prerequisite: Program Admission Introduces the student to the history, documents, and operational functions of the banking industry. Topics include: history, documents, operations, specialized services and electronic banking.

BIO 1111 - Biology I **4-3-5**
Provides an introduction to basic biological concepts with a focus on living cells. Topics include: chemical principles related to cells; cell structure and function; energy and metabolism; cell division; protein synthesis; genetics; biotechnology; and use of basic laboratory techniques and equipment. (Replaces BIO 191 eff 200903). 09242008

BIO 1112 - Biology II **4-3-5**
Prerequisite: BIO 1111. This a second part of a ten hour sequence. This course provides an introduction to basic evolutionary concepts. Also, the course emphasizes animal and plant diversity, structure and function including reproduction and development. As well as, 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. Laboratory experience supports classroom learning. (Replaces BIO 192 eff 200903). 09242008

BIO 2113 - Anatomy and Physiology I **4-3-5**
Introduces the anatomy and physiology of the human body. Emphasis is placed on the development of a systemic perspective of anatomical structures and physiological processes. Topics include: body organization; cell structure and functions; tissue classifications; the integumentary system; the skeletal system; the muscular system; the nervous and sensory systems. Laboratory experience supports classroom learning. (Replaces BIO 193 eff 200903). 10012008

BIO 2114 - Anatomy and Physiology II **4-3-5**
Prerequisite: BIO 2113. Continues the study of the anatomy and physiology of the human body. Topics include: the endocrine system; cardiovascular system; the blood and lymphatic system; immune system; respiratory system; digestive system; urinary system; and reproductive system. Laboratory experience supports classroom learning. (Replaces BIO 194 eff 200903). 10012008

BIO 2117 - Introductory Microbiology **4-3-5**
Prerequisite: BIO 1111 or BIO 2113. Provides students with a foundation in basic microbiology with emphasis on infectious diseases. Topics include: microbial diversity; microbial cell biology; microbial genetics; interactions and impact of microorganisms and humans; microorganisms and human disease; and laboratory skills.

BUS 1100 - Introduction to Keyboarding **1-4-3**
This course introduces the touch system of keyboarding placing emphasis on correct techniques. Topics include: computer hardware, computer software, file management, learning the alphabetic keyboard, the numeric keyboard and keypad, building speed and accuracy, and proofreading. Students attain a minimum of 25 GWAM (gross words a minute) on 3-minute timings with no more than 3 errors. (Replaces BUS 100 eff 200903). 05122008

BUS 1120 - Business Document Proofreading and Editing **1-4-3**
Prerequisites: BUS 1130, ENG1010 or ENG 1101 Emphasizes proper proofreading and editing as applied to business documents. Topics include: applying proofreading techniques and proofreader's marks with business documents; proper content, clarity, and conciseness in business documents; and business document formatting. (Replaces BUS 148 eff 200903). 05132008

BUS 1130 - Document Processing **2-8-6**
Prerequisite: Ability to key at least 25 wpm or BUS 1100; Corequisite: SCT 100. 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. (Replaces BUS 101 eff 200903). 05122008

BUS 1140 - Word Processing **2-6-5**
Prerequisites: SCT 100, BUS 1130. Emphasizes an intensive use of word processing software to create and revise business documents. Topics include: creating, organizing, and formatting content; collaborating on documents; formatting and managing documents. (Replaces BUS 108 eff 200903). 05132008

BUS 1150 - Database Applications **1-4-3**
Prerequisite: SCT 100. Emphasizes use of database management software packages to access, manipulate, and create file data. Topics include: database concepts structuring databases, entering data, organizing data, and managing databases. (Replaces BUS 105 eff 200903). 05122008

BUS 1160 - Desktop Publishing **1-4-3**
Prerequisites: SCT 100. Emphasizes intensive use of desktop publishing (DTP) software to create publications such as letterheads, resumes, fliers, posters, brochures, reports, newsletters, and business cards. Topics include: DTP concepts, operation of DTP software, publication page layout, basic graphic design, and practical applications. (Replaces BUS 161 eff 200903). 05142008

BUS 1170 - Electronic Communication Applications **2-6-5**
Prerequisites: SCT 100. Provides an overview of electronic communications as used in an office setting. Topics include: email fundamentals and management, using the Internet, system user security, and wireless/mobile computing and emerging technologies. (Replaces BUS 160 eff 200903). 05132008

BUS 1200 - Machine Transcription **1-4-3**
Prerequisites: BUS 1130, ENG 1010, SCT 100. Emphasizes transcribing mailable documents from dictation using word processing software. Topics include: equipment and supplies maintenance and usage, work area management, transcription techniques, productivity and accuracy, proofreading, and language arts skills. (Replaces BUS 107 eff 200903). 05122008

BUS 1210 - Electronic Calculators **1-4-3**
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. (Replaces BUS 157 eff 200903). 05132008

BUS 1240 - Office Procedures **2-6-5**
Prerequisites: SCT 100, Corequisite: BUS 1130 Emphasizes essential skills required for the business office. Topics include: office protocol, time management, telecommunications and telephone techniques, office equipment, workplace mail, records management, travel/meeting arrangements, electronic mail, and workplace documents. (Replaces BUS 106 eff 200903). 05122008

BUS 1300 - Introduction to Business **5-0-5**
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. (Replaces BUS 151 eff 200903). 05132008

BUS 2110 - Advanced Word Processing **2-6-5**
Prerequisites: BUS 1140 Course provides instruction in advanced word processing. Topics include: advanced features of formatting and organizing content, advanced features of collaborating on documents and customizing word processing software. (Replaces BUS 201 eff 200903). 07312008

BUS 2120 - Spreadsheet Applications **1-4-3**
Prerequisites: SCT 100. Provides instruction in the use of electronic spreadsheet software in business applications. Students become proficient in creating and modifying spreadsheets in a business environment and in printing files that meet business standards. Topics include: spreadsheet concepts, data entry and modification, analyzing data, charts and graphs, formatting data and content and managing workbooks. (Replaces BUS 202 eff 200903). 05142008

BUS 2130 - Advanced Spreadsheet Applications **1-4-3**
Prerequisites: BUS 2120. Provides a study of the advanced features of creating and modifying electronic spreadsheets. Topics include integration with other applications, using templates, printing workbooks, working with named ranges, working with toolbars, using macros, auditing a worksheet, formatting data, using analysis tools, and collaborating with workgroups. (Replaces BUS 260 eff 200903). 05152008

BUS 2140 - Advanced Database **1-4-3**
Prerequisites: BUS 1150. Provides advanced instruction in database software. Topics include advanced database software applications, such as advanced queries, forms and reports, data access, data manipulation, database creation, external databases, macro and module creation, and integrating with other applications. (Replaces BUS 252 eff 200903).

BUS 2150 - Presentation Applications 1-4-3
Prerequisite: SCT 100. This course provides a study of creating, modifying and delivering presentations. Topics include: creating a presentation, formatting content, collaborating with others, managing a presentation, creating output and delivering a presentation. (Replaces BUS 261 eff 200903). 05192008

BUS 2160 - Electronic Mail Applications 1-4-3
Prerequisite: SCT 100. 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 Usage, Tasks Usage, Notes Usage, Journal Usage, and Security and Privacy. (Replaces BUS 263 eff 200903). 05192008

BUS 2200 – Office Accounting 4-4-6
Introduces fundamental concepts of accounting. Topics include: accounting equation, debits, credits, journalizing, posting and proving ledger, accounts receivable, accounts payable, cash control, and payroll.

BUS 2210 - Applied Office Procedures 2-6-5
Prerequisites: BUS1130, BUS1140, BUS1240, BUS2120, SCT100 *Corequisites:* BUS2200 or ACC1101, BUS1120, BUS1170 This course focuses on applying knowledge and skills learned in all 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. (Replaces BUS 109 eff 200903). 05132008

BUS 2240 - Business Administrative Assistant Internship I 0-18-6
Prerequisites: Successful completion of all required coursework 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. (Replaces BUS 204 eff 200903). 05142008

BUS 2250 - Business Administrative Assistant Internship II 0-36-12
Prerequisites: Must be in last quarter. Provides student work experience in an off-campus business office. 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. (Replaces BUS 224 eff 200903). 05152008

BUS 2300 – Medical Terminology 2-2-3
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. 03142009

BUS 2310 – Anatomy and Terminology for the Medical Admin. Assistant 5-0-5
Prerequisite: BUS 2300 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

BUS 2320 - Medical Document Processing/Transcription 1-9-5
Prerequisites: BUS 1130, ENG 1010,AHS 109 or BUS 2300, AHS 1011 or BUS 2310. 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. (Replaces BUS 213 eff 200903). 07312008

BUS 2330 - Advanced Medical Document Processing/Transcription 1-9-5
Prerequisites: BUS 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. (Replaces BUS 214 eff 200903). 05152008

BUS 2340 - Medical Administrative Procedures 3-5-5
Prerequisites: BUS 1130, AHS 1011 or BUS 2310, AHS 109 or BUS 2300, SCT 100. 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. (Replaces BUS 216 eff 200903). 080808

BUS 2350 - Computerized Medical Office Skills 1-4-3
Prerequisite: AHS 109 or BUS 2300; AHS 1010 or AHS 101 or BUS 2310; BUS 1130; SCT 100 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.

BUS 2360 – Acute Care Medical Transcription 1-9-5
Prerequisites: BUS 1130; ENG 1010; AHS 1010 or AHS 101 or BUS 2310; AHS 109 or BUS 2300; BUS 2320 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.

BUS 2370 - Medical Office Billing/Coding/Insurance 3-5-5
Prerequisites: BUS 1130, AHS 1011 or BUS 2310; AHS 109 or BUS 2300; BUS 1130. 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. (Replaces BUS 226 eff 200903). 05152008

BUS 2380 - Medical Administrative Assistant Internship I 0-18-6
Prerequisite: Must be in last quarter of program. With advisor approval, may take concurrently with last quarter 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. (Replaces BUS 205 eff 200903). 03142009

BUS 2390 - Medical Administrative Assistant Internship II 0-36-12
Prerequisite: Must be in last quarter of program. With advisor approval, may take concurrently with last quarter courses. Provides student work experience in an off-campus medical 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. (Replaces BUS 215 eff 200903). 03142009

CAB 108 - Cabinet Design and Layout 2-5-4
Prerequisites: MAT 1012, CAB 106. 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.

CAB 110 Wood Joints 2-6-3
Prerequisite: CAB 108. Introduces the fundamentals of wood joint identification, layout, cutting, and assembly. Emphasis will be placed on the safe construction of wood joints used in cabinetmaking. Topics include: wood joint identification and application, wood joint design and layout, and wood joint fabrication.

CAB 112 Fastening Methods 2-6-4
Prerequisites/Corequisites: CFC 100, CAR 101, and MAT 1012. Introduces the variety of fastening methods used in Cabinetmaking. Both metal and adhesive fastening methods will be covered. Topics include: fastening tool safety, nail type identification, screw type identification, staples and stapling equipment, special metal fastener identification, adhesives identification, metal and adhesive fastening application, and RTA fasteners.

CAB 114 Cutting Cabinet Components **1-5-3**
Prerequisite: MAT 1012. 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.

CAB 116 - Cabinet Assembly I **1-9-5**
Prerequisites: CFC 100, CAR 101. Provides instruction in the fundamental procedures used for assembly of cabinet bases, wall units, and face frames. Topics include: clamping device use, tool use safety, cabinet base assembly, wall unit assembly, face frame assembly, material estimation, and European style construction.

CAB 118 - Door, Drawer, and Hardware Installation **1-6-3**
Prerequisites: CAB 110, CAB 112. 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. 12212006

CAB 120 - Plastic Laminates and Wood Veneers **1-6-3**
Prerequisites: CFC 100, CAR 101. 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. 12212006

CAB 122 - Cabinet Finishing and Installation **2-8-5**
Prerequisite/Corequisite: CAB 110. 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. 12212006

CAB 130 - Cabinet Assembly II **1-9-5**
Prerequisites: CAB 110. CAB 112. Provides instruction in the assembly of cabinet components emphasizing drawer and door assembly. Industry standards for safety, quality, and production will be goals in this course. Topics include: drawer assembly and door fabrication.

CAB 131 - Cabinet Assembly III **1-9-5**
Prerequisites: CAB 110, CAB 112. Provides further instruction in the assembly of base cabinets and wall cabinets. Industry standards for quality, safety, and production will be emphasized. Topics include: ends assembly, back assembly, bracing, and joint assembly.

CAR 101 - Safe Use of Hand and Power Tools **2-4-3**
Provides instruction in the use of hand and power tools. Emphasis will be placed on the safe use of each tool covered. Topics include: layout and measuring tools, sawing tools, shaping and cutting tools, fastening tools, drilling and boring tools, and finishing tools.

CAR 103 - Materials **3-0-3**
Introduces the fundamental array of building materials used in residential and commercial construction. Topics include: fasteners, wood products, finishing materials, and manufactured products.

CAR 105 - Print Reading **5-0-5**
Prerequisite: MAT 1012. Introduces the reading and interpretation of prints and architectural drawings. Topics include: types of plans, scales, specifications, conventions, and schedules.

CAR 107 - Site Layout, Footings, and Foundations **4-3-5**
Prerequisite: CAR 105. 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 levels, squaring methods, footings, plot plan interpretation, materials estimation, foundation types, foundation forms, edge forms, waterproofing, and soil testing and excavation.

CAR 110 - Floor Framing **2-3-3**
Prerequisites: CAR 101, CAR 103, CAR 105. Introduces materials identification, materials estimation, and installation procedures of floor and sill framing members. On-site construction procedures will be emphasized. Topics include: size selection of girders and joists, materials estimation, and layout and installation procedures.

CAR 111 - Wall Framing **2-3-3**
Prerequisites: CAR 101, CAR 103, CAR 105. Provides instruction in identification, materials estimation, and framing production of wall and partition members. Emphasis will be placed on practical application of competencies. Topics include: estimation and computation procedures, rough opening layouts, construction and erection of wall members, and sheathing installation.

CAR 112 - Ceiling and Roof Framing **4-6-6**
Prerequisites: CAR 101, CAR 103, CAR 105. Introduces terminology, concepts, and procedures used in identification, estimation, layout, and installation of ceiling and roof framing systems. Topics include: identification of ceiling systems, ceiling system materials estimation, ceiling system layout procedures, scaffolding and ladder safety, ceiling system installation procedures, roof system terminology, roof system estimation and layout, roof system installation and decking, and vent systems.

CAR 114 - Roof Coverings **1-3-2**
Prerequisites: CAR 101, CAR 103. Introduces identification, estimation, and installation of roof covering materials. Topics include: materials identification, estimation, layout procedures, installation, and safety precautions. 12272006

CAR 115 - Exterior Finishes and Trim **2-8-5**
Prerequisites: CAR 101, CAR 103, CAR 105. 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.

CAR 117 - Interior Finishes I **1-9-4**
Introduces procedures for identification, estimation, and installation of interior trim. Topics include: insulation methods identification, insulation material handling, insulation application methods, thermal and sound control, wall and ceiling materials estimation, gypsum wallboard installation and finishing procedures, wall and ceiling materials identification, paneling installation and acoustical ceiling tile.

CAR 118 - Interior Finishes II **1-9-4**
Introduces procedures for identification, estimation and installation of interior trim. The course also introduces various interior door units, door locks, trim, and installation procedures. Topics include: trim terminology, materials identification, materials estimation, installation procedures, door frame installation, door hanging procedures, split jamb pre-hung unit installation, and solid jamb pre-hung unit installation procedures.

CAR 119 - Interior Finishes III **1-6-3**
Prerequisites: CFC 100, CFC 101, CAR 101, CAR 103, CAR 105. 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.

CAR 121 - Cornice and Soffit **1-2-2**
Prerequisites: CAR 101, CAR 103, CAR 105. 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. 12272006

CAR 126 - Stairs **2-3-3**
Prerequisites: CAR 101, CAR 103, CAR 105. 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 layout, and fabrication and installation procedures.

CAR 127 - Residential Carpentry Internship or Practicum **0-12-4**
Prerequisite: All non-elective courses required for completion of the Residential Carpentry Specialization. Provides students with occupation-based instruction that applies learned skills to actual work experience. Emphasizes students' opportunities to practice finish work as learned in class and lab as part of the residential carpentry specialization courses. Topics include: application of residential carpentry skills, appropriate employability skills, problem solving, adaptability to job equipment and technology, progressive productivity, and acceptable job performance.

CAR 130 - Doors and Door Hardware **1-4-3**
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. 12272006

CET 130 - Civil Computer Aided Drafting (CAD) **2-8-5**
Prerequisite/Corequisite: MAT 1015. Introduces basic concepts, terminology, CAD commands, basic entities, and basic CAD applications.

CET 190 - Construction Materials **4-3-5**
This course covers the fundamental construction materials and their engineering properties. Material properties as aggregates, asphalt, Portland cement concrete, steel and masonry are covered. Topics include: material properties, Introduction to materials testing and materials selection and use

CFC 100 - Safety **2-0-2**
Provides a review of general safety rules and practices and provides students with information about state and federal regulations including OSHA Hazard Communication Standard and Material Safety Data Sheets (MSDS). Emphasis is placed on electrical, fire, lifting, and ladder and scaffolding hazards. Topics include: overview of safety rules and regulations; personal protective equipment; signs, signals, and barricades; flammable materials; electrical hazards; ladders and scaffolds; safety in trenches and excavations; and introduction to rigging. 03132007

CFC 101 - Introduction to Construction **2-0-2**
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: introduction to the construction trades and the building process; workplace expectations, quality of work, professional ethical standards, proper practices, fundamentals of measurement, working in teams, learning for success and life skills. 03132007

CFC 102 - Professional Tool Use and Safety **2-5-4**
The course provides instruction in the use of professional tools for the construction trades. Emphasis will be placed on the safe use of each tool covered. Topics include: layout and measuring tools, sawing tools, shaping and cutting tools, fastening tools, drilling and boring tools, finishing tools, job site setup and shop tool use. 03132007

CFC 103 - Materials and Fasteners **3-0-3**
Introduces the fundamental array of building materials used in residential and commercial construction. Topics include: concrete products, masonry materials, plumbing materials, fasteners, wood products, finishing materials, manufactured products for Construction and an introduction to estimation of products and services. 03132007

CFC 105 - Construction Print Reading Fundamentals **5-0-5**
Introduces the reading and interpretation of prints and architectural drawings for all the Construction Trades. Topics include: types of plans, scales, specifications, conventions, and schedules. 03132007

CHM 1111 - Chemistry I **4-3-5**
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; stoichiometry and gas laws; basic laboratory skills and lab safety procedures. (Replaces CHM 191 eff 200903). 10012008

CHM 1112 - Chemistry II **4-3-5**
Prerequisite: CHM 1111. Continues the exploration of basic chemical principles and concepts. Topics include: equilibrium theory; kinetics; thermodynamics; solution chemistry; acid-base theory; and nuclear chemistry.

CHM 1213 – Survey of Inorganic Chemistry **4-3-5**
Prerequisite: MAT 1111. 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; nuclear chemistry; basic laboratory skills and safety procedures.

CHM 1214. – Survey of Organic Chemistry and Biochemistry **4-3-5**
Prerequisite: CHM 1112 or CHM 1213. Provides an introduction to organic chemistry and biochemistry. This survey will include an overview of the properties, structure, nomenclature, reactions of: hydrocarbons; alcohols, phenols, ethers, halides, aldehydes, ketones, carboxylic acids, esters, amines, amides; the properties, structure, and function of carbohydrates, lipids, proteins, and enzymes, as well as, intermediary metabolism. Topics include: basic principles; hydrocarbons; hydrocarbon derivatives; heterocyclic rings and alkaloids; carbohydrates; lipids and fats; proteins; nucleic acids; and intermediary metabolism. Laboratory experience supports classroom learning.

CIS 101 - Keyboarding **1-4-3**
Provides an introduction to the effective and efficient use of electronic machine keyboards. Topics include: touch-typing skills, and text formatting and manipulation. Manual dexterity is developed using Manual dexterity is developed using microcomputers and machine driven exercises.

CIS 103 – Operating Systems Concepts **4-4-6**
Prerequisite: SCT 100 Provides an overview of operating systems functions and commands that are necessary in a computer working environment. Topics include: multiprogramming, single and multi-user systems, resource management, command languages, and operating system utilities, file system utilization and multiple operating systems.

CIS 105 – Program Design and Development 5-0-5
Prerequisite: CIS106. Provides an emphasis on business problem identification and solution through systems of computer programs using such tools as structure charts, flowcharts, and pseudo code. Topics include: problem solving process, fundamentals of structured programming, program development building blocks, fundamentals of file and report structure, and business application structure.

CIS 106 – Computer Concepts 5-0-5
Prerequisite: Program admission Provides an overview of computers and information processing. Topics include: computer history and terminology, data representation, data storage concepts, fundamentals of information processing, fundamentals of hardware operation, fundamentals of communications and networking, structured programming concepts, program development methodology, system development methodology, and computer number systems.

CIS 111 – Computer Center Operations 6-4-8
Prerequisite: CIS 102, ENG 1011, MAT 1011. Provides a comprehensive study in computer hardware, software, documentation, and personnel. Topics include: role and organization of computer center, management of computer center, data entry functions, library functions, data control functions, computer operations: peripheral and console, data communication, backup and disaster recovery, and computer security. 03142009

CIS 112 - System Analysis and Design 4-4-6
Prerequisite: CIS 105. Provides a review of and an application of systems life cycle development methodologies implemented by project team. Topics include: initial investigation, feasibility study, systems analysis, systems design, technical design, program specifications, and implementation planning.

CIS 113 - COBOL I 4-6-7
Prerequisite: CIS 105. Provides a study of the COBOL programming language to solve business applications. Topics include: divisions, input/output operations, arithmetic operations, sequence verbs, conditional control, editing input, and single level control breaks.

CIS 122 - Microcomputer Installation and Maintenance 4-6-7
Prerequisites: SCT 100, CIS 103, CIS 106. Provides an introduction to the fundamentals of installing and maintaining microcomputers. Topics include: identifying components, safety, installing internal options and memory chips, installing external peripherals such as printers and T-switches, troubleshooting techniques, repairing minor system problems, preventive maintenance, and software customization concepts.

CIS 124 - Microcomputer Database Programming 4-6-7
Provides a study of database programming using microcomputer database management systems (DBMS) software packages. Topics include: development of systems, structured programming techniques, data editing, and output design.

CIS 127 - Comprehensive Word Processing and Presentation Graphics 4-4-6
Prerequisite: SCT 100. Provides a study of word processing and desktop publishing. Topics include: word processing fundamentals, desktop publishing fundamentals, advanced word processing concepts, development of macros, and presentation graphics fundamentals.

CIS 155 – Working with Microsoft Windows Software 1-4-3
Provides students with the interface concepts of Microsoft Windows software and the opportunity to develop software application skills in a wide range of business situations. Topics include: getting started with Microsoft Windows, managing programs and files with Microsoft Windows, using Microsoft Windows write and paintbrush features, data transfer with Microsoft Windows, printing with Microsoft Windows, and customizing with Microsoft Windows

CIS 157 - Intro to Windows Programming Using Microsoft Visual BASIC 4-6-7
Prerequisite/Corequisite: CIS 105. Introduces Microsoft Windows event-driven programming. Along with this new method of programming, common elements of Windows applications will be discussed. These elements will be created and manipulated using Microsoft's Visual BASIC development environment. Topics include: Windows applications, user interface design, capturing and validating input, event-driven programming design, conditional processing, file processing, and incorporating graphics.

CIS 173 - PC Operating Systems Concepts 4-4-6
Prerequisite/Corequisite: CIS 106. Provides a study of underlying command prompt functions in personal computer (PC) operating systems in terms of its functions and structure, for managing files and directories, and running programs. It also includes navigating through the operating system from command line prompts and procedures for accessing and retrieving information. Provides a study of installing, configuring and upgrading PC operating systems. This includes a study of system boot sequences and minimum hardware requirements. Provides a study of diagnosing and troubleshooting common problems relating to PC Operating systems. This includes understanding normal operation and symptoms relating to common problems. Provides a study of network capabilities of PC operating systems and how to connect to networks on the client side, including what the Internet is about, its capabilities, basic concepts relating to Internet access and generic procedures for system setup. The scope of this topic is only what is needed on the client side to connect to a network.

CIS 222 - Advanced Microsoft Excel 2-3-3
Prerequisite: CIS – Advanced Spreadsheet Techniques Provide the fundamental, intermediate and advanced Microsoft Excel competencies to provide user with the skills necessary to obtain the expert user certification. Topics include spreadsheet creation, financial statements, forecast, amortization schedules, workgroup editing and advanced features such as macros, using charts, importing and exporting data, HTML creation, formulas, Web queries, built-in function, templates, and trends and relationships.

CIS 224 - Microsoft Office Specialist Certification - PowerPoint 2-3-3
Prerequisite: CIS 127. Provides the fundamental, intermediate, and advanced Microsoft PowerPoint competencies to provide the user with the skills necessary to obtain expert user certification. Topics include presentation creation, presentation views, slide shows, templates, animations, HTML creation, navigation, and presentation transition.

CIS 225 - Microsoft Office Specialist Certification - Outlook 2-3-3
Prerequisite: SCT 100. Provides the fundamental, intermediate, and advanced Microsoft Outlook competencies to provide the user with the skills necessary to obtain expert user certification. Topics include using Outlook 2000 Mail to communicate with others inside and outside your company, to manage your mail, navigating through Outlook, using calendar, using task, and using contacts and notes. Integrate Office applications and other applications with Outlook 2000 components.

CIS 250 – Intro to RPG Programming 4-6-7
Prerequisite: CIS 105. Introduces programming business applications using the RPG programming language. Topics include: introduction to RPG programming, input and output processing, arithmetic operations, edit codes/words, selection operations, control breaks, multiple control breaks, do loops, exception output, external files - physical and logical, and sequential file access methods.

CIS 252 – Intro to JAVA Programming 4-6-7
Prerequisite: CIS 105. Course designed to teach the basic concepts and methods of objected-oriented design and Java programming. Use practical problems to illustrate Java application building techniques and concepts. Develop an understanding of Java vocabulary. Create an understanding of where Java fits in the application development landscape. Create an understanding of the Java Development Kit and how to develop, debug, and run Java applications using the JDK and Notepad as an editor. Continue to develop student's programming logic skills. Topics include: understand object oriented design terminology and impact on JAVA development, creation of simple JAVA programs using JDK and Notepad, ability to use JAVA data types, define JAVA variables, ability to develop programs using control structures, ability to create output for JAVA programs, ability to create new JAVA classes, ability to import JAVA classes, ability to debug basic JAVA programs, and ability to use the JAVA AWT toolkit.

CIS 255 - Introduction to "C" Programming 4-6-7
Prerequisite: CIS 105. Provides opportunity to gain a working knowledge of "C" programming. Includes creating, editing, executing, and debugging "C" programs of moderate difficulty. Topics include: basic "C" concepts, simple I/O and expressions, I/O and control statements, and managing data and developing programs.

CIS 276 - Advanced Routers and Switches 4-4-6
Prerequisite: CIS 2322. Introduces LAN design, LAN switching and switch segmentation, advanced routing, and multiple protocols. Topics include: a review of semesters I and II, local area network (LAN) switching, virtual local area networks (VLANS), local area network (LAN) design, interior gateway routing protocols (IGRP), access control lists, and Novell IPX.

CIS 277 - WAN Design 4-4-6
Prerequisite: CIS 276. Emphasizes WAN design utilizing point-to-point protocol (PPP), integrated services digital network (ISDN), and frame relay. Topics include: a review of semesters I II and III, wide area network, wide area network design, point-to-point protocol, integrated services digital network (ISDN), and frame relay.

CIS 282 – Introduction to C++ Programming 4-6-7
Prerequisite: CIS 105. Develops skills for the programmer to write programs using the language of C++. Emphasis is placed on utilizing the added feature of C++, which will be added to the skills mastered in Programming with C. Topics include functions, objects, classes, inheritance, overloading, polymorphism, streams, and containers.

CIS 286 - A+ Preparation 4-6-7
Prerequisite: CIS 122. Provides the student with the fundamentals of configuring, installing, diagnosing, repairing, upgrading, and maintaining computers and their peripherals. To fundamentally prepare the student for the A+ certification examination. Topics include: PC hardware and configuration, Peripherals, Preventive Maintenance, Customer Interaction, Virus protection, Safety and Electrostatic Discharge, and Networks. 09252008

CIS 1104 — Web Graphics using Adobe Photoshop 3-2-4
Prerequisite: Program Admission. This course covers the creation and editing of digital photographs and images using Adobe Photoshop. Topics covered include understand file types, file compression, and download capabilities, creating digital images in different file types, setting and using color codes, adjusting digital images with lighting, filtering, cropping, and resizing, creating transparent digital images, digital image web page positioning techniques, and using other digital image special effects.

CIS 1106 - Introduction to Web Programming using C# .NET 3-2-4
Prerequisite: CIS 105, CIS 2202. This course provides an introduction to Web Programming using Microsoft C#. Topics include advanced HTML, CSS basics, object oriented language requirements, defining variables, If conditional statements and loops, modularization, accessing and displaying data on the web, understanding the XML data format, and cookies and security. 03142009

CIS 1107—Introduction to Web Programming using Perl 3-2-4
Prerequisite: CIS 105 and CIS 2201 or CIS 2202. This course provides an introduction to Web Programming using Perl. Topics include advanced HTML, CSS basics, object oriented language requirements, defining variables, If conditional statements and loops, modularization, accessing and displaying data on the web, understanding the XML data format, and cookies and security

CIS 1108—Web Graphics using JASC Paint Shop 3-2-4
Prerequisite: Program Admission. This course covers the creation and editing of digital photographs and images using JASC Paint Shop. Topics covered include understand file types, file compression, and download capabilities, creating digital images in different file types, setting and using color codes, adjusting digital images with lighting, filtering, cropping, and resizing, creating transparent digital images, digital image web page positioning techniques, and using other digital image special effects

CIS 1109 —Introduction to Web Programming using VB .NET 3-2-4
Prerequisite: CIS 105 and CIS 2201 or CIS 2202. This course provides an introduction to Web Programming using Microsoft Visual Basic .NET. Topics include advanced HTML, CSS basics, object oriented language requirements, defining variables, If conditional statements and loops, modularization, accessing and displaying data on the web, understanding the XML data format, and cookies and security

CIS 1110—Introduction to Web Programming using PHP 3-2-4
Prerequisite: CIS 105 and CIS 2201 or CIS 2202. This course provides an introduction to Web Programming using PHP. Topics include advanced HTML, CSS basics, object oriented language requirements, defining variables, IF conditional statements and loops, modularization, accessing and displaying data on the web, understanding the XML data format, and cookies and security.

CIS 1111—Introduction to Web Programming using Python 3-2-4
Prerequisite: CIS 105 and CIS 2201 or CIS 2202. This course provides an introduction to Web Programming using Python. Topics include advanced HTML, CSS basics, object oriented language requirements, defining variables, If conditional statements and loops, modularization, accessing and displaying data on the web, understanding the XML data format, and cookies and security.

CIS 1115 - Information Security Fundamentals 5-0-5
Prerequisite: [(CIS 1140 or CIS 2321) and an operating system class} or advisor approval 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. Topics include: define key terms in Information Security terminology, state the reasons for Information Security, identify the legal, ethical, and professional issues in Information Security, identify the steps in risk identification, assessment and control, state the justification of having a security policy and security procedures, state major components in the design of information security, and identify positions and credentials available to individuals entering the information security profession.

CIS 1116 – Security Policies and Procedures 5-0-5
Prerequisite: CIS 1140 or CIS 2321 and an operating systems class (or advisory approval). 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. Topics include discuss the ethical issues in information security, discuss the legal issues in information security, discuss the steps in determining security needs, identify the various layers of security needed in an organization, identify the components of a security plan, identify the steps to implement and maintain a security plan, develop an Information Security Policy, and develop an Acceptable Use Policy. 03142009

CIS 1117 - Implementing Operation Systems Security 4-4-6
Prerequisites: CIS 1115 and (CIS 2153 or CIS 276 or CIS 2556) or advisor approval. 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 security for the network environment. Topics include: identify steps to secure workstations, identify steps to secure servers, identify steps to secure information infrastructure, demonstrate securing a network using at least two common server platforms.

CIS 1120 – Computer Forensics 4-4-6
Prerequisites: CIS 1116, CIS 1117. This course serves as a capstone course for the information security specialist. The course will include implementing a plan to detect intruders, determine the damage caused, and discuss what precautions to use to avoid disasters

CIS 1121 - Visual Basic.NET I 4-6-7
Prerequisite: CIS 105/Corequisite, CIS 124 or CIS 2128. Introduces Microsoft Windows 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, validating input with strings and functions, repetition and multiple forms, test files, arrays, lists and common dialog controls.

CIS 1122 - Visual Basic.NET II 4-6-7
Prerequisite: CIS 1121, CIS 124 or CIS 2128. Advanced Visual Basic.NET teaches client-server systems, n-tier development environments, relational databases, use of SQL to access data, the use of ADO.NET objects, methods and properties to access and update relational and XML databases. Advanced features of Visual Basic are explored.

CIS 1123—Web Graphics and Animation using Adobe Flash 4-4-6
Prerequisite: CIS 1104 or CIS 1108. This course covers the creation and manipulation of images and animation using Adobe Flash and 3D creation software. Topics covered include 3D Digital Image tools, file types, download and image plug-in requirements., a systematic approach to creating images, creating 3D Objects, selecting and grouping objects, object transformation, object shading, lighting, filtering, and coloring, animation tools, file types, compression techniques, plug-in and download requirements, and creating 2D and 3D animations

CIS 1124—Web Graphics and Anim. usg Adobe Illustrator and Live Motion 4-4-6
Prerequisite: CIS 1104 or CIS 1108. This course covers the creation and manipulation of images and animation using Adobe Illustrator and Adobe Live Motion. Topics covered include 3D Digital Image tools, file types, download and 3D image plug-in requirements, a systematic approach to creating images, creating 3D Objects, selecting and grouping objects, object transformation, object shading, lighting, filtering, and coloring, animation tools, file types, compression techniques, plug-in and download requirements, and creating 2D and 3D animation

CIS 1131 – Help Desk Concepts 4-4-6
Prerequisite: CIS 103, CIS 122, SCT 100. The purpose of the Help Desk Concepts course is to prepare students to work in positions that provide customer and technical support through analysis and problem solving. Students will master the role of a help desk analysis, navigate the help desk environment, and learn crucial problem solving skills. In addition, students will learn to troubleshoot hardware problems, printer problems, OS problems, application problems, and user problems.

CIS 1132 – Customer Service Skills for IT Professionals 4-4-6
This course is designed to focus on new business topics such as trend analysis, root cause analysis, cost benefit analysis, and measuring return on investment. With less of a focus on technology and more of a focus on "soft" and self-management skills, this book will help students succeed as help desk professionals. The course emphasizes customer satisfaction and listening techniques that can be used in the work environment. This course explored a number of topics and skill required to provide effective customer support and provides proven techniques for implementing the concepts. This course is very "how to" oriented, it also describes the "bigger picture" benefits of acquiring and demonstrating business skills, soft skills, and self-management skills in today's competitive workplace.

CIS 1140 - Networking Fundamentals 4-4-6
Prerequisites: SCT 100, CIS 106 or advisor approval. Introduces networking technologies and prepares students to pass CompTIA's broad-based, vendor independent networking certification exam, Network +. Covers a wide range of material about networking, from careers in networking to local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems, and implementing the installation of networks. It reviews cabling, connection schemes, and the fundamentals of the LAN and WAN technologies, TCP-IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting.

CIS 1151—CIS Internship 0/12-18/4-6
Prerequisite: All non-elective courses. This course provides the student with real hands-on experience in the IT industry. Students will be provided the opportunity to gain experience in the area of their concentration. Topics include application of classroom knowledge and skills and practical work experience.

CIS 2005 - Advanced Web Graphics using Adobe Photoshop 4-4-6
Prerequisite: CIS 1104. This course covers the creation and editing of digital photographs and images using Adobe Photoshop. Topics covered include curves and adjustment layers, retouching techniques, color correction, color balancing, element replacement and restoration, typography and interpolation, and advanced techniques and special effects.

CIS 2102—Advanced Web Graphics and Multimedia using Adobe Premiere 4-4-6
Prerequisite: CIS 1124 or CIS 1123. This course covers advanced web graphics techniques, and multimedia for the web including sound, music, and digital video using Adobe Premiere. Topics covered include digital video editing, basic editing, adding audio, applying video and audio effects, morphing tools, and advanced topics.

CIS 2104—Advanced Web Graphics and Multimedia using Adobe Director 4-4-6
Prerequisite: CIS 2102 or CIS 1123. This course covers advanced web graphics techniques, and multimedia for the web including sound, music, and digital video using Adobe Director. Topics include digital video editing, basic editing, adding audio, applying video and audio effects, morphing tools and advanced topics.,

CIS 2105 Advanced Web Graphics using Adobe Flash 4-4-6
Prerequisite: CIS 1123. This course covers additional techniques used in the creation and manipulation of vector images and animation using Adobe Flash. Topics covered include (but not limited to) Advanced Animation Techniques, ActionScript Fundamentals, Advanced ActionScript Techniques, Third Party Languages, Optimizing and Publishing Flash movies.

CIS 2149 - Implementing Microsoft Windows Professional 4-4-6
Prerequisite: CIS xxx, an operating system course and CIS 1140 or CIS 2321; or advisor approval. Provides the ability to implement, administrator, and troubleshoot Windows Professional as a desktop operating system in any network environment.

CIS 2150 - Implementing Microsoft Windows Server 4-4-6
Prerequisite: CIS 2149. Provides the ability to implement, administer, and troubleshoot Windows 2000 Server as a member server of a domain in an Active Directory.

CIS 2153 - Implementing Microsoft Windows Networking Infrastructure 4-4-6
Prerequisite: CIS 2150. Provides students with knowledge and skills necessary for new-to-product support professionals who will be responsible for installing, configuring, managing, and supporting a network infrastructure that uses the Microsoft Windows server family of products.

CIS 2154 - Implementing Microsoft Windows Network Directory Services 4-4-6
Prerequisite: CIS 2153. Provides students with knowledge and skills necessary to install, configure, and administer the Microsoft Windows Active Directory™ service. The course also focuses on implementing Group Policy and understanding the Group Policy tasks required to centrally manage users and computers.

CIS 2156 – Designing a Secure Windows Network 4-4-6
Prerequisite: CIS 2154. Provides students with the knowledge and skills necessary to design a security framework for small, medium, and enterprise networks by using Microsoft Windows technologies.

CIS 2158 – Designing a Windows Network Infrastructure 4-4-6
Prerequisite: CIS 2154. Provides the ability to analyze the business requirements for a network infrastructure and design a network infrastructure that meets business requirements.

CIS 2161 – Structured Query Language (SQL) 4-6-7
Prerequisites: SCT 100, CIS 105, and an operating systems course. A course designed to allow the student to solve common database retrieval problems through the use of the SQL Language that supports common databases such as SQL/Server, Oracle, DB2, ACCESS and other database systems. Topics include: Understanding database vocabulary, understanding object and relational database concepts, understanding and implementing SQL statements that retrieve, insert, update and delete data in a database, ability to implement aggregate and group SQL functions, create, edit and drop database tables, query data from multiple databases, design queries and sub queries, develop an understanding of union, and join operations, understand how to execute and implement database triggers.

CIS 2162 – Administering Microsoft® SQL Server 4-4-6
Prerequisite: CIS 2149 and CIS 2150 This course provides instruction on how to administer a Microsoft SQL Server. Topics include: Planning, Installation and Configuration, Configuring and Managing Security, Managing and Maintaining Data, Monitoring and Optimization, and Troubleshooting.

CIS 2163 – Designing and Implementing Databases w/ MS® SQL Server 4-4-6
Prerequisite: CIS 2149 and CIS 2150 This course provides instruction on how to design and implement a database solution by using Microsoft SQL Server. Topics include: developing a logical data model, deriving the physical design, creating data services, creating a physical database, and maintaining a database.

CIS 2191 – Internet Business Fundamentals 3-2-4
Prerequisite: Program admission Internet Business Fundamentals teaches students how to access the Internet and the World Wide Web using a Web Browser as a general-purpose Internet application. Students will learn to use the Internet for e-mail, the World Wide Web, news-groups, Instant Messaging, File Transfer Protocol (FTP) and Telnet. Student will gain experience using and configuring both Netscape Navigator and Microsoft Internet Explorer to access rich multimedia data and objects as well as Java, Shockwave, and Active X content. A variety of Web-based search engines will be used to conduct advanced searches and learn the basics of project leadership, security, and e-business solutions. Students will also learn about business on the Internet, and how business research can help gain market intelligence. Topics include overview of the Internet, browsing the World Wide Web, electronic mail (E-Mail), using file transfer, TELNET, and Instant Messaging, search engines, searching to gain market intelligence, Internet technology, advanced Web concepts and browser customization, security and the Web, advanced search techniques, accessing business resources on the Internet, objects, plug-Ins, and viewers, and electronic commerce fundamentals.

CIS 2201 - HTML Fundamentals 2-3-3
Prerequisite: Provisional admission. HTML Fundamentals is designed to teach basic through intermediate concepts in Hypertext Markup Language (HTML) authoring, including forms, complex table design, graphic elements, and client-side image maps. Students will design inter-linking pages that incorporate, in practical applications, a wide range of HTML tags and attributes. Topics include introduction to HTML, creating HTML pages, incorporating graphical elements, create hyperlinks, create HTML tables, create HTML forms and image maps. HTML tags.

CIS 2202 – XHTML Fundamentals 2-3-5
Prerequisite: Program admission. XHTML Fundamentals is designed to teach basic through intermediate concepts in Hypertext Markup Language (HTML) authoring, including forms, complex table design, graphic elements, and client-side image maps. Students will design inter-linking pages that incorporate, design, graphic elements, and client-side image maps. Students will design inter-linking pages that incorporate, in practical applications, a wide range of HTML tags and attributes. Student will allow learn how to use Cascading Style Sheets (CSS), XML, and XHTML. All HTML, CSS, XHTML, and XML development will follow the current standards set by the World Wide Web Consortium (W3C). Topics include introduction to HTML, CSS, XHTML, and XML, creating pages using HTML, CSS, XHTML, and XML, incorporating graphical elements, create hyperlinks, create HTML tables, create HTML forms, and image maps.

CIS 2211 – Web Site Design Tools 4-4-6
Prerequisite: CIS 2202 and CIS (1104 or 1108) Web Site Design Tools teaches an understanding of how to create and manage impressive s using the sizeable amounts of new technology available on the Web. Students will learn to create web sites using various web tools such as (but not limited to) Microsoft FrontPage, Macromedia Dreamweaver, Adobe GoLive, XHTML. XML, Dynamic HTML, and various multimedia and CSS standards. Topics include compare and contrast different web site design tools, design web pages using FrontPage, NetObjects, and Image Composer web site design tools, develop basic layout skills, create shared borders, tables, hyperlinks, and forms, utilize advanced image techniques, connect a web site to a database, publish and manage a web site.

CIS 2228 - Comprehensive Spreadsheet Techniques 4-4-6
Prerequisite: SCT 100. Provides a study of spreadsheets. Topics include: advanced spreadsheet concepts, development of macros, data integration concepts, troubleshooting spreadsheets.

CIS 2229 - Comprehensive Database Techniques 4-4-6
Prerequisite: SCT 100. Provides a study of databases. Topics include: advanced database management concepts, development of macros, data integration concepts, development of user interfaces, relational database concepts, troubleshooting databases.

CIS 2231 – Design Methodology **4-4-6**
Prerequisite: CIS (2201 or 2202), and CIS (1104 or 1108). Design Methodology teaches students how to design and manage Web sites using design development life cycle. Students will also implement the latest strategies to develop third generation Web site, evaluate design tools, discuss future technology standards, and explore the incompatibility issues surrounding current browsers. The course focuses on theory, design and Web construction, along with information architecture concepts, Web project management, and scenario development and performance evaluations. Students will gain an understanding of layout techniques, typography, color theory, proper use of white space, accessibility and usability issues and standards. The student may use a web site development tool (such as Microsoft FrontPage or Macromedia Dreamweaver), a scripting language (such as JavaScript, Perl, PHP) and/or a web programming language (such as Microsoft VB, Microsoft C#, or Sun Java) for web page development within this course. However, the main focus of this course is on the actual design process used to develop the web site itself. Topics include overview of the Web Site Design Process, web site project team, layout and accessibility design techniques, and web site project.

CIS 2241 – Internet Systems Management **5-0-5**
Prerequisites: CIS 140, CIS 2191. Internet Systems Management provides the student with an understanding of TCP/IP operation, Domain Name System (DNS) name service, Dynamic Host Configuration Protocol (DHCP) automation, File Transfer Protocol (FTP) services, security, and the auditing activities related to Web services and firewalls. Students will also perform an in depth analysis of IP packets on the network.

CIS 2261 - JavaScript Fundamentals **3-2-4**
Prerequisite: CIS 105, CIS (2200 or 2201 or CIS 2202). Corequisite: CIS (2102 or 2104 or 2105 or 2005). JavaScript Fundamentals teaches developers how to use the features of the JavaScript language and the Netscape Navigator browser. Students learn how to write JavaScript programs that can be plugged into Web pages or customized, and examine advanced issues such as debugging techniques and JavaScript security. Topics include introduction to JavaScript, working with variables and data, functions, methods, and events, developing interactive forms, controlling program flow, JavaScript object model, JavaScript Language objects, cookies and JavaScript security, controlling frames in JavaScript, client-side JavaScript, and custom JavaScript options.

CIS 2271 - Fundamentals of CGI Using PERL **3-2-4**
Prerequisite: CIS (2201 or 2202). Fundamentals of CGI Programming using PERL and server-Side Scripting teach students how to use Common Gateway Interface (CGI) PERL programs and scripts on a Web server. Students will learn how to write print-to-screen scripts, customize Web page hit counters, create and use business forms that interface with text files, manipulate data in a database, work with a relations database via Open Database Connectivity (ODBC), and explore Web server security issues related to CGI. A survey of other products such as Microsoft Active Server Pages, Netscape LiveWire, and Cold Fusion by Allaire will be discussed. Security issues using server-side scripting will also be studied, and students will learn how to add security elements to their scripts.

CIS 2281 - Database Connectivity **4-6-7**
Prerequisite: CIS (2201 or 2202), CIS 105 and CIS (2211 or 2261). Database Connectivity teaches students how to manipulate data in a database, work with relational databases via Open Database Connectivity (ODBC) and learn how to work with different database systems. Students will learn to install and configure Cold Fusion, or equivalent software, and use the system to develop forms and applications to interact with file systems, e-mail and database servers.

CIS 2291 - Network Security **4-4-6**
Prerequisite: CIS 1140 or CIS 2321. Network Security introduces students to network security, firewalls, Windows NT network security, UNIX and TCP/IP network security, security auditing, attacks, and threat analysis. Topics include: elements of security, TCP/IP, operating system security. router security, firewalls, security basics, user and group security, file system security, securing the registry, account security, security auditing fundamentals, and additional security measures.

CIS 2321 Introduction to LAN and WAN **4-4-6**
Prerequisite: CIS 106 or advisor approval Provides students with classroom and laboratory experience in current and emerging network technology. Topics include safety, networking, network terminology and protocols, network standards, local-area networks (LANs), wide-area networks (WANs), Open System Interconnection (OSI) models, cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing, and network standards. Particular emphasis is given to the use of decision-making and problem-solving techniques in applying science, mathematics, communication, and social-studies concepts to solve networking problems. In addition, instruction and training are provided in the proper care, maintenance, and use of networking software, tools, and equipment and all local, state, and federal safety, building and environmental codes and regulations. Topics include computer basics, OSI model, Local Area Networks (LANs), Layer 1 - electronics and signals; media, connections, and collisions, Layer 2 - concepts and technologies, basic network design and documentation, structured cabling, Layer 3 - routing and addressing; Protocols, Layer 4 - the transport layer, Layer 5 - the session layer, Layer 6 - the presentation layer, and Layer 7 - the application layer.

CIS 2322 - Introduction to WANs and Routing **4-4-6**
Prerequisite: CIS 2321. This course provides instruction on performing basic router configuration and troubleshooting.

CIS 2451 – Introduction to PHP Programming **4-6-7**
Prerequisites: CIS 105, CIS 2202. Students will learn how to create dynamic web sites using the PHP programming language. Topics include: introduction to PHP, web server, and database environments; embedding PHP in HTML documents; variables; arithmetic operations; functions; forms; conditional statements; iterative statements; arrays; text files; and creating, populating, retrieving, and updating database tables via PHP applications.

CIS 2511 – Introduction to Python Programming **4-6-7**
Prerequisite: CIS 105. Provides a study of the Python programming language to solve applications. Topics include: Computing with numbers, Computing with strings, Objects and Graphics, Defining Functions, Decision Functions, Loop Structures and Booleans, Game Simulations and Design, Defining Classes, Data Collections, Object-Oriented Design, and Recursion.

CIS 2554 – Introduction to Linux/UNIX **4-4-6**
Prerequisite: CIS 106 and SCT 100. This course introduces the Linux/UNIX operating system skills necessary to perform entry-level user functions. Topics include: History of Linux/UNIX, 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, Linux/UNIX manual help pages, using the Linux/UNIX 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. 03102009

CIS 2555 – Linux/UNIX Administration **4-4-6**
Prerequisite: CIS 2554. Covers Linux/UNIX operating system administration skills necessary to perform administrative functions. Topics include: Installing Linux/UNIX, 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. 03102009

CIS 2556 – Linux/UNIX Advanced Administration **4-4-6**
Prerequisite: CIS 2555. Covers Linux/UNIX operating system advanced administration skills necessary to perform advanced administrative functions. Topics include: understanding Linux/UNIX networking, managing network printing, configuring and troubleshooting TCP/IP on Linux/UNIX, 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. 03102009

CIS 2557 – Linux/UNIX Shell Script Programming **4-4-6**
Prerequisite: CIS 2556. Course covers Linux/UNIX shell programming techniques necessary for Linux/UNIX System Administrators to understand and create shell script programs in a Linux/UNIX environment Topics include: Shell variables, running shell script program, conditional processing, looping structures, arrays, functions, 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. 03102009

CIS 2570 - Advanced Visual BASIC Programming **4-6-7**
Prerequisites: CIS 157 or CIS 1121. Advanced Visual BASIC teaches developers random file access, database programming techniques, and programming from the Web in client-server environment. Emphasis is placed on Active-X Data Objects (ADO), incorporating SQL into programs, Open Database Connectivity (ODBC), Remote Data Objects (RDO), creating Web based database applications, and security considerations.

CMT 201 – Residential Estimating Review **4-0-4**
Prerequisites: Completion of the Carpentry program or successful completion of advanced placement procedures. Covers the complete estimating process from excavation to completed residence. Topics include: sequence of construction, materials calculation, blueprint interpretation, methods of construction, working with subcontractors, and final estimate assembly.

CMT 202 - Construction Drafting I **1-5-4**
Prerequisites: CAR 105, SCT 100. 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 dimensional drafting and dimensioning.

CMT 204 - Construction Scheduling **2-0-2**
Prerequisite: Completion of the Carpentry program or successful completion of advanced placement procedures. A study of scheduling techniques available to builders to plan, organize, and monitor the construction process. Topics include: bar charts, arrow diagrams, precedence networks, and CPM.

CMT 205 - Residential Code Review **5-0-5**
Prerequisite: Completion of the Carpentry program or successful completion of advanced placement procedures. Covers building codes as they apply to typical residential applications. Topics include: standard building code, CABO code, working with building inspectors, permits and inspections, and site visits.

CMT 211 - Computerized Construction Estimating **2-3-3**
Prerequisites/Corequisites: SCT 100, CMT 201. Provides a study of the use of spreadsheet and database software as applied to construction estimating. Topics include: producing an estimate using both item and work package take-off methods, copying or modifying an existing estimate, repricing an estimate, and printing reports. Use of up-to-date construction estimation software is emphasized in this course.

CMT 213 - Computerized Construction Scheduling **3-2-4**
Prerequisite/Corequisite: CMT 204. Provides instruction in the use of application software for scheduling construction work. The use of contemporary construction scheduling and management software is emphasized in the course. Topics include: software overview, scheduling methods and requirements, and computerized scheduling of a simulated construction job.

CMT 217 - Construction Contracting **5-0-5**
Prerequisite/Corequisite: CMT 201. 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.

CNA 100 - Patient Care Fundamentals **5-6-8**
Prerequisites/Corequisites: AHS 103, AHS 109, EMP 100. Introduces student to the occupation of Certified Nurse Assistant. Emphasis is placed on human anatomy and physiology, cardiac pulmonary resuscitation, and nutrition and diet therapy. Topics include: role and responsibilities of the Certified Nurse Assistant; topography, structure, and function of body systems; legal and safety requirements in the patient care field; equipment use and care; and performance skills standards and procedures.

COL 100 - College Success **3-0-3**
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.

COS 100 - Introduction to Cosmetology Theory **5-0-5**
Prerequisite: Program admission. Introduces the fundamental theory and practices of the cosmetology profession. Emphasis will be placed on professional practices and safety. Topics include: state and local laws, rules, and regulations; professional image; bacteriology; decontamination and infection control, chemistry fundamentals, safety, Hazardous Duty Standards Act compliance, anatomy and physiology and types of equipment. 09082007

COS 101 - Introduction to Permanent Waving and Relaxing **3-2-4**
Prerequisite: COS 100. Introduces the chemistry and chemical reactions of permanent wave solutions and relaxers. Topics include: permanent wave techniques, chemical relaxer techniques, chemistry, physical and chemical change, safety procedures, and permanent wave, chemical relaxer application procedures on manikins, hair analysis, and scalp analysis. 10082007

COS 103 - Basic Creative Treatment of Hair, Scalp, and Skin **2-2-3**
Prerequisite: COS 100. Introduces the theory, procedures, and products used in the care and treatment of the skin, scalp, and hair. Topics include: basic corrective hair and scalp treatments, plain facial, products and supplies, diseases and disorders, and safety precautions. 03102009

COS 105 - Introduction to Shampooing and Styling **2-4-4**
Prerequisite: COS 100. Introduces the fundamental theory and skills required to shampoo and create shapings, pin curls, finger waves, roller placement, and comb outs. Laboratory training includes styling training to total 20 hours on mannequins and 25 hours on live models without compensation. Topics include: shampoo chemistry, shampoo procedures, styling principles, pin curls, roller placement, fingerwaves, comb out techniques, skipwaves, ridge curls, and safety precautions.

COS 106 - Introduction to Haircutting **2-2-3**
Prerequisite: COS 100. Introduces the theory and skills necessary to apply haircutting techniques. Safe use of haircutting implements will be stressed. Topics include: haircutting terminology, safety, decontamination, and precautions, cutting implements, and haircutting techniques. 03102009

COS 107 - Advanced Haircutting **0-5-2**
Prerequisite: COS 106. Continues the theory and application of haircutting techniques. Topics include: client consultation, head, hair, and body analysis, style cutting, haircutting techniques, and client consultations/head/hair/body analysis. 03102009

COS 108 - Permanent Waving and Relaxing **2-2-3**
Prerequisites: COS 101. Provides instruction in the application of permanent waves and relaxers. Precautions and special problems involved in applying permanent waves and relaxers will be emphasized. Application of perms and relaxers on live models is included. Topics include: timed permanent wave, timed relaxer application, safety precautions, and Hazardous Duty Standards Act compliance.

COS 109 - Hair Color **4-4-6**
Prerequisites: COS 100, COS 101, COS 103, COS 105, COS 106, COS 108. Presents the application of temporary, semi-permanent, and permanent hair coloring products. Topics include: basic color concepts, classifications of color, safety precautions, consultation, communication and record and release forms, product knowledge, special problems in hair color and corrective coloring, and Special Effects.

COS 110 - Skin, Scalp, and Hair **2-2-3**
Prerequisites: COS 100, COS 101, COS 103, COS 105, COS 106, COS 108, COS 109. Provides instruction on and application of techniques and theory in the treatment of the skin, scalp, and hair. Emphasis will be placed on work with live models. Topics include: implements, products and supplies, diseases and disorders, corrective hair and scalp treatments, facial procedures and manipulations, safety precautions and treatment theory, electricity and light therapy, and chemistry of cosmetics.

COS 111 - Styling **1-4-3**
Prerequisites/: COS 105/Corequisite COS 110 110. Continues the theory and application of hairstyling and introduces thermal techniques. Topics include: blow dry styling, thermal curling, thermal pressing, thermal waving, advanced cutting and styling, safety precautions, and artificial hair and augmentation. 10082007

COS 112 - Manicuring and Pedicuring **2-2-3**
Prerequisite: COS 100. Provides manicuring and pedicuring experience on live models. 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). 10082007

COS 113 - Cosmetology Practicum I **1-12-5**
Prerequisites: COS 111, COS 112. Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is prescribed by the Georgia State Board of Cosmetology. This course includes a portion of the hours required for licensure. Topics include: permanent waving and relaxers; hair color and bleaching; skin, scalp, and hair treatments; haircutting; styling; dispensary; manicure/ pedicure/ advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance. 10082007

COS 114 - Cosmetology Practicum II **4-12-8**
Prerequisite: COS 113. Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is prescribed by the Georgia State Board of Cosmetology. This course includes a portion of the hours required for licensure. Topics include: permanent waving and relaxers; hair color and bleaching; skin, scalp, and hair treatments; haircutting; styling; dispensary; manicure/pedicure/advanced nail techniques; reception; safety precautions/decontamination; Hazardous Duty Standards Act compliance; advanced styling and shaping; industry concepts; and surviving in the salon (transition from class to employment). 03102009

COS 115 - Cosmetology Practicum III **1-12-5**
Prerequisites: COS 114. Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The appropriate number of applications for completion of state board service credit requirements for this course may be met in a laboratory setting. Topics include: permanent waving and relaxers; hair color and bleaching; skin, scalp, and hair treatment; haircutting; styling; dispensary; manicure/pedicure/ advanced nail techniques; reception; safety precautions/decontamination; and Hazardous Duty Standards Act compliance. 03102009

COS 116 - Cosmetology Practicum IV **1-12-5**
Corequisite: COS 115. Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The requirements for this course may be met in a laboratory setting. 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. 03102009

COS 117 - Salon Management **3-2-4**
Prerequisite: COS 112. Emphasizes the steps involved in opening and operating a privately owned salon. Topics include: planning a salon, business management, retailing, public relations, sales skills, career development, and client retention. 03102009

COS 118 - Nail Care I **0-21-7**
Prerequisites: COS 100, COS 112. 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, advanced and new techniques, and safety/sanitation. 03102009

COS 119 - Nail Care II **4-15-9**
Prerequisite/Corequisite: COS 117, COS 118. 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/pedicure, nail repair, artificial nails, electric file, advanced/new techniques, HIV and OSHA updates, nail art, receptionist/dispensary, state board licensure preparation, and safety/sanitation. 03102009

COS 152 - State Board Preparation for Cosmetology **1-3-2**
Corequisite: COS 115, COS 116. Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The appropriate number of applications for completion of state board service credit requirements for this course may be met in a laboratory setting or classroom. Topics include: permanent waving and relaxers; hair color and pre-lightening; skin, scalp, hair treatments, and disorders; haircutting; hair styling; manicure/pedicure/advanced nail techniques; safety precautions/decontamination; Hazardous Duty Standards Act compliance; analysis of license preparation, and theory review. 03102009

CRJ 101 - Introduction to Criminal Justice Technology **5-0-5**
Prerequisite: Provisional admission. Examines the emergence, progress, and problems of the Criminal Justice system in the United States. Topics include: the American Criminal Justice system, constitutional limitations, organization of enforcement, adjudication, corrections, and career opportunities and requirements.

CRJ 103 - Corrections **5-0-5**
Prerequisite: Provisional admission. Provides an overview of all phases and practices of the American correctional system, including its history, procedures, and objectives. Topics include: history and evolution of correctional facilities, legal and administrative problems, institutional facilities and procedures, probation/parole/prerelease programs, alternative sentencing, rehabilitation, community involvement, and staffing.

CRJ 104 - Principles of Law Enforcement **5-0-5**
Prerequisite: Provisional admission. Examines the principles of organization and administration and the duties of local and state law enforcement agencies with emphasis on police departments. Topics include: history and philosophy of law enforcement, evaluation of administrative practices, problems in American law enforcement agencies, emerging concepts, professionalism, and community crime prevention programs.

CRJ 105 - Criminal Procedure **4-2-5**
Prerequisite: CRJ 101. Introduces the substantive law of major crimes against persons and property. Attention is given to observation of courtroom trials. Topics include: laws of arrest, search and seizure, procedures governing arrest, trial, administration of criminal sanctions, rules of evidence, general court procedures, rights and duties of officers and citizens, and Supreme Court rulings that apply to Criminal Justice/overview of Constitutional Law.

CRJ 121 - Introduction to Private Security **5-0-5**
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, security systems at work: putting it all together, and challenges facing the security profession in the 1990's and beyond.

CRJ 122 - Retail Security and Shortage Protection **5-0-5**
Prerequisite: CRJ 121. This course provides an orientation that focuses on security and shortage protection for small retail businesses with an emphasis placed on vulnerabilities, losses, and practical retail business measures. Topics include: retailing and security, legal aspects of retail security, protection at the point of sale, internal losses and countermeasures, shoplifting and countermeasures, investigation of internal losses and shoplifting, store design, and physical security and risk management.

CRJ 123 - Computer Security/Corporate Fraud 5-0-5
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.

CRJ 150 - Police Patrol Operations 5-0-5
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, electronic communications, and police reports. Topics include: foundations, policing skills and communication skills.

CRJ 152 – Police Administration 5-0-5
Prerequisite: Program admission. This course explores the managerial aspects of effective and efficient police administration. Emphasis is directed towards increasing organizational skills and overcoming interdepartmental and inter-agency non-communication. Topics include: environmental management, human resources, and organizational concerns.

CRJ 154 – Police Officer Survival 5-0-5
Prerequisite: Program admission. This course examines the critical issues involved in the survival of a police officer. Emphasis is placed on conducting enforcement raids, managing hostage situations, controlling hazardous materials spills, search techniques, mechanics of arrest, and levels of force. Topics include: hazardous duty, public safety, and self-protection.

CRJ 156 – Police Traffic Control and Accident Investigation 5-0-5
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.

CRJ 158 - Fundamental Issues in Policing 5-0-5
Prerequisite: Program admission. This course examines the fundamental issues within the occupation of policing. Emphasis is placed on ethics and professionalism, civil liability, interpersonal communications, mental health, substance abuse, health and wellness, equipment preparation, vehicle pullovers, and emergency vehicle operations. Topics include: occupational standards, health related hazards, and daily preparedness.

CRJ 160 - Private and Industrial Security Services 5-0-5
This course will provide an overview of the private and industrial security as it relates to the protection of industry, the community, and as helping hand to law enforcement agencies and organizations. Emphasis is placed on the role of watchman, guards, and patrolmen. Topics include: industry concerns, and occupational techniques.

CRJ 162 – Methods of Criminal Investigation 5-0-5
Prerequisite: Program admission. Presents the fundamental principles of criminal investigation. Emphasis is placed on legal requirements stated in Georgia Criminal Law, definition of felony crimes stated in the Georgia Code and fundamentals of, investigative procedures, crime scene searches, identification and collection of evidence, note-taking and report writing, surveillance, identification of witnesses and suspects, interviews and interrogation, and preparation and presentation of evidence in court. Topics include: Georgia Criminal Law, common investigative techniques, and procedures used for investigating various crimes.

CRJ 163 - Investigation and Presentation of Evidence 1-4-3
Prerequisite: CRJ 162. This course presents students with practical exercises dealing with investigations and gathering of evidence. Emphasis is placed on crime scene search, fingerprinting, cast molding, and practical exercises. Topics include: crime scene management, specialized investigation techniques, and homicide and suicide investigation.

CRJ 165 - Community-Oriented Policing 5-0-5
Prerequisite: CRJ 104. Presents the fundamentals for the community-oriented policing philosophy. Topics include: 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; organizational mental and physical restructuring; creation of partnerships with community organizations, businesses, private security, other governmental agencies, and special interest groups, and police problem-solving methodologies.

CRJ 167 - First Responder **4-2-5**
Prerequisite: Provisional admission. This is a course in advanced first aid procedures. The course will focus on the duties and responsibilities of first responders as well as the development of the skills necessary to respond to a medical emergency. Traditional CPR is also part of the course.

CRJ 168- Criminal Law **5-0-5**
Prerequisite: Program admission. This course emphasizes the historical development of criminal law in the United States and the current status of Georgia criminal law. The main focus of the course will be the statutory contents of the Official Code of Georgia Annotated (O.C.G.A), with primary emphasis on the criminal and traffic codes.

CRJ 175 - Incident and Report Writing **1-0-1**
This course is designed to provide skills training in the critical area of report writing as it pertains to the front line security officer. In this course, students will learn why accurate reports are necessary, how to write basic reports and how to communicate those reports. Students will be introduced to the Georgia Private and Security Detective and Security Agencies Act Rules and Regulations.

CRJ 180 - Hospital Security **4-0-4**
This course will provide an overview of the safety and security issues relating to the modern medical facility. Topics include: hospital environment, security operations, special operations and concerns, workplace violence, CPR/First Aid training, alcohol and drugs, infant abduction and basic firearms safety. Students will be introduced to OHSA regulations and blood borne pathogens training.

CRJ 182 - Defensive Tactics I **1-4-3**
Prerequisite: Provisional admission. This is a course in basic defensive tactics. The course focuses on the physical and mental skills that are necessary in a use of force situation. Students will be proficient in basic techniques as well as the one-step sparring and self-defense drills that are necessary for achieving the ranks of both eighth grade orange belt and seventh grade yellow belt. The laws concerning the use of force and the use of force continuum are also emphasized.

CRJ 183 - Defensive Tactics II **1-4-3**
Prerequisite/Corequisite: CRJ 182. This is a course in defensive tactics. The course focuses on the physical and mental skills that are necessary in a use of force situation. Students will be proficient in basic techniques as well as the one-step sparring, sparring, and self-defense drills that are necessary for achieving the ranks of both sixth grade camo belt and fifth grade green belt.

CRJ 184 - Defensive Tactics III **1-4-3**
Prerequisite/Corequisite: CRJ 183. This is a course in defensive tactics. The course focuses on the physical and mental skills that are necessary in a use of force situation. Students will be proficient in basic techniques of sparring and self-defense drills that are necessary for achieving the ranks of both fourth grade purple belt and third grade blue belt. Students will also learn the methods used to break boards.

CRJ 185 - Defensive Tactics IV **1-4-3**
Prerequisite/Corequisite: CRJ 184. This is a course in defensive tactics. The course focuses on the physical and mental skills that are necessary in a use of force situation. Students will be proficient in basic techniques of sparring and self-defense drills that are necessary for achieving the ranks of both second grade brown belt and first grade red belt. Students will also learn the methods used to break boards.

CRJ 186 - Defensive Tactics V **1-4-3**
Prerequisite/Corequisite: CRJ 185. This is a course in defensive tactics. The course focuses on the physical and mental skills that are necessary in a use of force situation. Students will be proficient in basic techniques of sparring and self-defense drills that are necessary for achieving the ranks of both first degree black belt recommended and decided. Students will also learn the methods used to break boards.

CRJ 202 - Constitutional Law **5-0-5**
Prerequisite: CRJ 101. Emphasizes those provisions of the Bill of Rights which pertain to criminal justice. Topics include: characteristics and powers of the three branches of government, principles governing the operation of the Constitution, and Bill of Rights and the Constitutional Amendments.

CRJ 206 - Criminology **5-0-5**
Prerequisite: CRJ 104. Introduces the nature, extent, and factors related to criminal behavior, and the etiology of criminal offenses and offenders. Topics include: scope and varieties of crime; sociological, psychological, and biological causes of crime; criminal subculture and society's reaction; prevention of criminal behavior; behavior of criminals in penal and correctional institutions; and problems of rehabilitating the convicted criminal.

CRJ 207 - Juvenile Justice **5-0-5**
Prerequisite: CRJ 101. Analyzes the nature, extent, and causes of juvenile delinquency, and examines processes in the field of juvenile justice. Topics include: survey of juvenile law, comparative analysis of adult and juvenile justice systems, and prevention and treatment of juvenile delinquency.

CRJ 209 - Criminal Justice Technology Practicum/Internship 0-15-5
Prerequisite: Completion of all required course work. Provides experiences necessary for further professional development and exposure to related agencies in the law enforcement field. The student will either pursue a study project directed by the instructor within the institution, or an internship in a related agency supervised by the instructor subject to the availability of an approved site. Topics include: observation and/or participation in law enforcement activities, law enforcement theory applications, and independent study project.

CRJ 212- Ethics in Criminal Justice 5-0-5
Prerequisite: Program admission. This course provides an exploration of the field of criminal justice ethics, which broadly encompasses the history of justice and theories of morality and ethics. It includes the study of ethics from both the individual perspective and the organizational standpoint. Special attention will be given to concrete ethical issues and dilemmas which are encountered regularly by participants in the major components of the criminal justice system. Four areas of ethical decision making opportunities are therefore studied in this course, including: law enforcement ethics; correctional ethics; legal profession ethics; and policymaking ethics.

CRJ 1010 – Basic Law Enforcement Health and Life Safety 2-2-3
Prerequisite: Admission to Basic Law Enforcement Academy. Introduces law enforcement students 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. 03142009

CRJ 1012 – Ethics and Liability for Basic Law Enforcement 2-0-2
Prerequisite: Admission to Basic Law Enforcement Academy. This course 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. 03142009

CRJ 1014 – Firearms Training for Basic Law Enforcement 2-6-5
Prerequisites: Admission to the Basic Law Enforcement Academy, CRJ 105, CRJ 168. This course provides the student 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. 03142009

CRJ 1016 – Emergency Vehicle Operations 2-6-5
Prerequisites: Admission to the Basic Law Enforcement Academy, CRJ 104, CRJ 168. This course provides the student 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. 03142009

CRJ 1018 – Defensive Tactics 1-6-4
Prerequisite: Admission to the Basic Law Enforcement Academy, CRJ 104. This course provides students 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. 03142009

CSP 101 - Central Sterile Processing Technician 4-5-6
Prerequisite: Program admission; Corequisite: AHS 109, SCT 100, EMP 1000. 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 Material Management (IAHCSMM) certification exam.

CSP 102 - Central Sterile Processing Practicum 10 C.Hrs.
Prerequisites: MAT 1012, SUR 108, CSP 101. Introduces the student to the scope of the Central Sterile Profession while performing in a Central Sterile Department at area hospitals. Topics include introduction to the Central Service Department; medical asepsis; relation of instrumentation to human anatomy and microbiology to infection control; instrument identification, decontamination, and preparation and packaging of sterile items; all sterilization processes and monitor controls used in health care facilities; sterile supply storage, distribution and inventory control practices.

CTD 101 - Fundamentals of Commercial Truck Driving 5-0-5
Fundamentals of Commercial Truck Driving introduces students to the trucking industry, federal and state regulations, records and forms, industrial relations, and other non-driving activities. This course provides an emphasis on safety that will continue throughout the program.

CTD 102 - Basic Operations of Commercial Truck Driving 3-5-5
Corequisite: CTD 101. This course focuses on familiarizing students with truck instruments and controls and on performing basic maneuvers required to drive safely in a controlled environment and on the Driving Range. Each student must receive at least twelve (12) hours behind-the-wheel (BTW) instructional time in range operations- operating a tractor trailer through clearance maneuvers, backing, turning, parallel parking, and coupling and uncoupling.

CTD 103 - Advanced Operations of Commercial Truck Driving 1-13-5
Corequisite: CTD 102. Advanced Operations focuses on developing driving skills under actual road conditions. The classroom part of the course stresses following safe operating practices. On the road, safe operating practices are integrated into the development of driving skills. Each student must receive at least twelve (12) hours behind-the-wheel (BTW) instructional time on the street/road. In addition, the student must have a minimum program total of 44 (forty four) hours BTW instructional time in any combination (with CTD 102) of range and street/road driving. Note: State law requires that, whenever a vehicle is operated on public roads, an instructor must be present in the truck while a student is driving.

CTD 104 - Internship 0-15-5
Corequisite: CTD 102. The internship provides the opportunity for an individual to complete his or her training with a company. The internship takes the place of CTD 103- Advanced Operations. Working closely with the school, a company provides the advanced training which focuses on developing driving skills. Each student must receive at least twelve (12) hours behind-the-wheel (BTW) instructional time on the street/road. In addition, the student must have a minimum program total of 44 (forty four) hours BTW instructional time in any combination (with CTD 102) 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 a student is driving.

CUL 100 - Professionalism in Culinary Arts 3-0-3
Prerequisite: Program admission. The Professionalism in Culinary Arts course provides an overview of the professionalism in culinary arts and culinary career opportunities. Chef history, pride, and espirit d corp are taught. Topics include: cuisine, food service organizations, career opportunities, food service styles, basic culinary management techniques, professionalism, and culinary work ethics. 06092008

CUL 110 - Food Service Safety and Sanitation 2-4-3
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. 09292008

CUL 112 - Principles of Cooking 2-11-6
Prerequisite: Provisional admission. The Principles of Cooking 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. 06092008

CUL 114 - American Regional Cuisine 2-8-5
Prerequisite: CUL 110. The American regional cuisine course emphasis is on terms, concepts, and methods necessary to American Cuisine food preparation. Course content reflects American Culinary Federation Educational Institute apprenticeship training objectives. Topics include: kitchen aromatics, regional cooking principles and history, methods of American regional food preparation, and nutrition. Laboratory demonstrations and student experimentation parallel class work. 06092008

CUL 116 - Food Service Purchasing and Control 2-2-3
Prerequisite: MAT 1012. Introduces principles and practices necessary to food, supply, and equipment selection, procurement, receiving, storage, and distribution. Topics include: quality factors, food tests, pricing procedures, cost determination and control, selection, procurement, receiving, storage, and distribution. Laboratory demonstration and student experimentation parallel class work. 06092008

CUL 117 - Introduction to Culinary Nutrition 5-0-5
This course is an orientation for school nutrition employees that will introduce students to proper sanitation and food handling, equipment safety, first aid, meal pattern requirements, quantity food production, merchandising, communication, and basic nutrition knowledge. The course will help school nutrition employees develop skills that will result in improved nutrition programs and service to customers. Basic nutrition concepts will focus on Iron, Fats, Saturated Fat and Cholesterol, Protein, Fiber, Sugar and Sodium, Calories, Calcium, Vitamin A, and Vitamin C. 03222006

CUL 121 - Baking Principles I **2-8-5**
Prerequisites: CUL 110/Corequisite: CUL 112. Baking Principles I presents the fundamental terms, concepts, and methods involved in preparation of yeast and quick breads. Emphasis is placed on conformance of sanitation and hygienic work habits with health laws. Course content reflects American Culinary Federation Educational Institute cook and pastry apprenticeship training objectives, along with Retail Bakery Association training program. Topics include: baking principles, Science and use of baking ingredients for breads, weights, measures, and conversions, preparation of baked goods, baking sanitation and hygiene, and baking supplies and equipment. Laboratory demonstrations and student experimentation parallel class work. 06102008

CUL 122 - Baking Principles II **2-8-5**
Prerequisites: CUL 121. Baking Principles II course presents the fundamental terms, concepts, and methods involved in preparation of baked products. Emphasis is placed on conformance of sanitation and hygienic work habits with health laws. Course content reflects American Culinary Federation Educational Institute cook and pastry apprenticeship training objectives, along with Retail Bakery Association training program. Topics include: baking principles, Science and use of baking ingredients for desserts, cakes, and pastries, weights, measures, and conversions, preparation of baked goods, baking sanitation and hygiene, and baking supplies and equipment. Laboratory demonstrations and student experimentation parallel class work. 06102008

CUL 124 - Restaurant and Hotel Baking **3-8-6**
Prerequisites: CUL 121, CUL 122. Provides in-depth experience in preparing many types of baked goods commonly found in restaurants and hotels. Course content reflects American Culinary Federation and Retail Bakery Association training objectives and provides background for those aspiring to become pastry chefs or bakery supervisors. Topics include: breads, pies, cakes, pastry dough, puff pastry, icing, filling, and candy. Laboratory practice parallels class work. 12052005

CUL 127 - Banquet Preparation and Presentation **1-8-4**
Prerequisites: CUL 112. Provides experience in preparation of a wide variety of quantity foods. Course content reflects American Culinary Federation Educational Institute apprenticeship training objectives. Topics include: kitchen operational procedures, equipment use, banquet planning, recipe conversion, food decorating, safety and sanitation, and production of quantity food. Laboratory practice is provided. 04082008

CUL 129 - Front of the House Service **2-3-3**
Prerequisite: Provisional admission. The front of the house service course introduces the fundamentals of dining and beverage service. Topics include: dining service/guest service, dining service positions and functions, international dining services, restaurant business laws, preparation and setup, table side service, and Beverage Service and Setup. Laboratory practice parallels class work. 06102008

CUL 130 - Pantry, Hors D' Oeuvres and Canapés **2-8-5**
Prerequisites: CUL 114. Introduces basic pantry manger principles, utilization, preparation, and integration into other kitchen operations. Course content reflects American Culinary Federation Educational Institute apprenticeship pantry, garnishing, and presentation training objectives. Topics include: pantry functions, basic garnishes, breakfast preparation, buffet presentation, cold preparations, cold sandwiches, salads and dressings, molds, garnishes, and cold hors d'oeuvres. Laboratory practice parallels class work. 06102008

CUL 132 - Garde Manger **2-8-5**
Prerequisites: CUL 114. Emphasizes basic garde manger utilization and preparation of appetizers, condiments, and hors d'oeuvres. Topics include: hot and cold hors d'oeuvres; salads, dressings, and relishes; sandwiches; patés and terrines; chaudfroids, gelees, and molds; canapés; and garnishing, carving, and decorating. Laboratory practice parallels class work. 06102008

CUL 133 - Food Service Leadership and Decision Making **5-0-5**
Prerequisite: Provisional admission. The Food Service Leadership and Decision Making Course familiarize the student with the principles and methods of sound leadership and decision making in the hospitality industry. Topics include: basic leadership principles and how to use them to solicit cooperation, use of leadership to develop the best possible senior subordinate relationships, the various decision making processes, the ability to make sound and timely decisions, leadership within the framework of the major functions of management, and delegation of authority and responsibility in the hospitality industry. 06112008

CUL 137 - Nutrition and Menu Development **1-6-3**
Prerequisites: CUL 100, CUL 110, and CUL 112. The nutritional food and menu management 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. 06112008

CUL 215 - Contemporary Cuisine I **2-8-5**
Prerequisites: CUL 100, CUL 110, CUL 114. The contemporary cuisine I 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, and nutrition. Laboratory demonstration and student experimentation parallel class work. 06102008

CUL 216 - Practicum/Internship I **1-30-11**
Prerequisites: CUL 114, CUL 116, CUL 127. The Practicum/Internship I course provides the student with the opportunity to gain management/supervision experience in an actual job setting. Students will be placed in an appropriate restaurant, catering, or other food service business for four days per week throughout the quarter. On-the-job training topics include: restaurant management/on-off premise catering/food service business, supervisory training, and management training, on-off premise catering, hotel kitchen organization, kitchen management, restaurant kitchen systems, institutional food systems, kitchen departmental responsibilities, and kitchen productivity. 06112008

CUL 220 - Contemporary Cuisine II **2-8-5**
Prerequisite: CUL 112/Corequisite: CUL 215. The Contemporary Cuisine II course emphasizes supervision, and management concepts, knowledge, and skills necessary to restaurants serving contemporary cuisine. Topics include: menu selection, layout and design, on/off premise catering, entrepreneurship, small business management and nutrition. Laboratory demonstrations and student experimentation parallel class work. 06112008

CUL 224 - International Cuisine **3-8-6**
Prerequisites/Corequisites: CUL 100, CUL 110, CUL 114. The International Cuisine I 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. 06112008

CVT 101 - Pharmaceutical Basics **3 C.Hrs.**
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.

CVT 102 - Medical Physics **3 C.Hrs.**
Prerequisite: ENG 1101, MAT 1111, PSY 1101, BIO 2113,, BUS 2310, or AHS 109, AHS 102, PHY 1110 *Corequisites:* CVT 103, CVT 107, CVT 109 Continuation of Fundamentals of Medical Physics with stress placed on the physics of medicine. The student is introduced to the theory of physics found in cardiovascular science Electricity and magnetism, electrical and radiation safety, and medical imaging equipment are discussed. Performance of laboratory procedures is used to reinforce understanding of biomedical applications of physics and proper safety techniques.

CVT 103 - Electrophysiology and Cardiac Anatomy **2-4-4**
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, heart layers, physical heart defects, electrocardiograph, preparation for various electrocardiographic and sonographic examinations, and physical principles and pathophysiology of heart sounds. Laboratory experiences will be provided. 03142009

CVT 104 - Electrophysiology II **1-2-2**
Prerequisite: CVT 103. Introduces the concepts essential in the performance and interpretation of cardiac exercise tolerance testing and Holter monitoring. Topics include: exercise physiology, stress testing, Holter monitoring, cardiac pacemakers, and cardiac rehabilitation programs. 03142009

CVT 107 - Cardiovascular I **3 C.Hrs.**
Prerequisites: Program Admission; *Corequisites:* CVT 102, CVT 103, CVT 109 Provides an overview of cardiovascular technology and the role of the cardiovascular technologist. The importance of professionalism, ethical behavior, and communication is stressed. Topics include medical terminology, basic life support skills, ethics, legal aspects, communication, and professionalism.

CVT 108 - Cardiovascular Advanced Hemodynamics **3-0-3**
Prerequisites: CVT 110, CVT 111; Corequisite: CVT 104. 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. Topics include: hemodynamics, aseptic technique, and infection control. 03142009

CVT 109 - Cardiovascular Pathophysiology **3-0-3**
Prerequisites: CVT 103, CVT 110, CVT 111; Corequisite: CVT 104, CVT 108. An overview of cardiovascular physiology and pathophysiology. Topics include: biochemistry of the cardiac muscle, conduction system, electrocardiogram, pathophysiology of acquired diseases, embryological development, and pathophysiology of congenital diseases. 03142009

CVT 110 – Non-invasive Cardiovascular Fundamentals 3-2-4
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. 03142009

CVT 111 - Invasive Cardiovascular Fundamentals 3-2-4
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. 03142009

CVT 120 - Cardiac Catheterization I 4 C.Hrs.
Prerequisites: CVT 104, CVT 108, CVT 110, CVT 111; Corequisite: CVT 102. Orients the student to the cardiac catheterization procedures and skills necessary to assist with the left heart catheterization and angiogram. Topics include orientation of catheterization procedures; equipment/ catheterization equipment and the Seldinger technique.

CVT 121 - Cardiac Catheterization II 9 C.Hrs.
Prerequisites: CVT 120, CVT 124; *Corequisites:* CVT 125. 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 insertion and coronary angioplasty. Also to include Angiographic Data and Special Techniques. Basic competencies are developed in hemodynamic calculations such as Quantitative LV volumes, Valve areas and pressure waveforms. Additional competencies developed in emergency life support and cardiac pharmacology.

CVT 122 - Cardiac Catheterization III 9 C.Hrs.
Prerequisites: CVT 121, CVT 125; Corequisite: CVT 126. Offers an intensive study of the role of the cardiac catheterization technologist in advanced cardiovascular procedures related to the catheterization lab and to open heart surgery. Topics include electrophysiology, pacemaker and implantable defibrillators, pediatric heart catheterization, blood gases, cardiac output, shunt determination, heart lung machine, cardiac assist devices, and the intra-aortic balloon pump.

CVT 123 - Cardiac Catheterization Clinical IV 12 C.Hrs.
Prerequisites: CVT 122, CVT 126. Develops clinical skills by active participation in a cardiac catheterization laboratory. Topics include cardiac catheterization lab, special radiologic procedures, pacemakers, coronary angioplasty, computer operations and calculation, and surgical specialty procedures.

CVT 124 - Cardiac Catheterization Clinical 5 C.Hrs.
Prerequisites: CVT 104, CVT 108, CVT 110, CVT 111; Corequisite: CVT 120. Develops basic catheterization skills by observation and participation in cardiovascular procedures. Topics include role of the invasive cardiovascular technologist, cardiovascular procedures, professional conduct, and ethics.

CVT 125 - Cardiac Catheterization Clinical II 3 C.Hrs.
Prerequisites: CVT 120, CVT 124; Corequisite: CVT 121. Provides hands-on experiences in performing invasive cardiovascular procedures. Emphasis will be placed on development of clinical skills. Topics include policies and procedures, cardiac catheterization equipment, participating in sterile surgical procedures, and patient preparation.

CVT 126 - Cardiac Catheterization Clinical III 3 C.Hrs.
Prerequisites: CVT 121, CVT 125; Corequisite: CVT 122. Emphasizes the latest modalities and specialties of invasive cardiac catheterization. Topics include study skills and clinical rotation in electrophysiology, pacemaker, pediatric heart catheterization, stent and balloon angioplasty procedures.

CVT 131 - Echocardiography I 4 C.Hrs.
Prerequisites: CVT 104, CVT 108, CVT 110, CVT 111; Corequisite: CVT 132. Develops basic imaging skills by imaging normal hearts in the echocardiography lab. Topics include role of the noninvasive cardiovascular technologist, echocardiographic examination, basic quantification calculations, professional conduct, and ethics.

CVT 132 - Echocardiography Clinical I 5 C.Hrs.
Prerequisites: CVT 104, CVT 108, CVT 110, CVT 111; Corequisite: CVT 131. Introduces the clinical environment by assisting the technologist in the echocardiography lab in patient preparation and imaging and in acquiring electrocardiograms, Holter monitors, stress testing, and pacemaker checks. Topics include clinical environment, recording medical information, patient preparation for noninvasive cardiovascular treatment, and medical ethics.

CVT 133 - Echocardiography Clinical II **3 C.Hrs.**
Prerequisites: CVT 131, CVT 132; *Corequisites:* CVT 135. Provides hands-on experiences in performing noninvasive cardiovascular procedures. Emphasis will be placed on instrumentation and development of clinical techniques. Topics include policies and procedures, echocardiographic instrumentation, recording patient information, patient preparation, and performing echocardiographic examinations.

CVT 134 - Echocardiography Clinical III **3 C.Hrs.**
Prerequisites: CVT 133, CVT 135; Corequisite: CVT 136. Provides hands-on experiences in the clinical setting with an emphasis placed on the development of clinical techniques employed to obtain meaningful data. Topics include echocardiographic instrumentation, logging and reporting information, preparation for echocardiographic examinations, medical ethics, and performing echocardiographic procedures.

CVT 135 - Echocardiography II **9 C.Hrs.**
Prerequisites: CVT 131, CVT 133; *Corequisites:* CVT 133. Utilizes the fundamentals to evaluate acquired disease states. Incorporates all forms of noninvasive cardiovascular evaluation with emphasis placed on performance and interpretation of M-mode, 2-dimensional and Doppler echocardiography. Topics include cardiac chamber studies, hemodynamic correlates, valvular heart disease, coronary heart disease, cardiomyopathies, pericardial diseases, cardiac masses, and diseases of the aorta.

CVT 136 - Echocardiography III **9 C.Hrs.**
Prerequisites: CVT 133, CVT 135; *Corequisites:* CVT 134. Emphasizes the latest modalities and specialties of noninvasive cardiac diagnostic study. Topics include Doppler color flow imaging, congenital abnormalities, research methods, statistics, and quality improvement.

CVT 137 - Echocardiography Clinical IV **12 C.Hrs.**
Prerequisites: CVT 134, CVT 136. Provides clinical internship in noninvasive cardiovascular technology. Topics include independent performance of clinical skills, current literature, professionalism and ethical behavior.

CVT 140 - Vascular I **4 C.Hrs.**
Prerequisites: CVT 104, CVT 108, CVT 110, CVT 111 ; Corequisite: CVT 143. Introduces and develops imaging skills in the area of extracranial and intracranial cerebrovascular sonography. Topics include history taking, protocol, calculations, preliminary reports, and interaction with physicians. Adult and pediatric cerebrovascular topics included and ICD-9 coding.

CVT 141 - Vascular II **9 C.Hrs.**
Prerequisites: CVT 140, CVT 143; *Corequisites:* CVT 144. Introduces and develops imaging skills in the area of abdominal and peripheral arterial noninvasive diagnostic procedures. Topics include duplex, segmental pressures and plethysmography of upper and lower extremities. Duplex of abdominal arteries. History taking, protocol, calculation, preliminary reports, and interaction with physicians.

CVT 142 - Vascular III **9 C.Hrs.**
Prerequisites: CVT 141; *Corequisites:* CVT 145. Introduces and develops imaging skills in the area of abdominal and peripheral venous noninvasive diagnostic procedures. Topics include duplex of abdominal, upper, and lower extremity veins, history taking, protocol, calculations, preliminary reports, and interaction with physicians. ICAVL Accreditation.

CVT 143 - Vascular Clinical I **5 C.Hrs.**
Prerequisites: CVT 104, CVT 108, CVT 110, CVT 111; *Corequisites:* CVT 104. Introduces the clinical environment by assisting technologist in the vascular lab in patient preparation, history taking, and basic imaging. Topics include role of the vascular technologist, professional conduct, medical ethics, patient preparation, introduction to imaging.

CVT 144 - Vascular Clinical II **3 C.Hrs.**
Prerequisites: CVT 140, CVT 143; *Corequisites:* CVT 141. Provides hands-on experience in performing noninvasive vascular procedures. Emphasis will be placed on instrumentation and development of clinical technique. Topics include policy and procedure, vascular instrumentation, writing preliminary reports, patient preparation, and performing noninvasive vascular testing.

CVT 145 - Vascular Clinical III **3 C.Hrs.**
Prerequisites: CVT 141, CVT 144; Corequisite: CVT 142. Provides hands-on experience in the clinical setting with an emphasis placed on further development of clinical skills. Topics include vascular instrumentation and exam performance, recording and documenting vascular findings, interacting with patients, and interacting withphysicians2008-2009 219

CVT 146 - Vascular Clinical IV **12 C.Hrs.**
Prerequisites: CVT 142, CVT 145 Provides clinical internship in noninvasive vascular technology. Topics include independent performance of clinical skills, current literature, professionalism and ethical behavior.

DDF 100 - Drafting Fundamentals **2-8-6**
Prerequisite: Provisional admission. Introduces fundamental concepts and operations necessary to utilize microcomputers for developing fundamental drafting techniques. Emphasis is placed on the basic concepts, terminology, and techniques necessary for CAD applications. Topics include: history of drafting, safety practices, geometric terms/media sizes, hardware and software care and use, basic entities, CAD commands, line relationships, basic CAD applications, and geometric construction. 03142009

DDF 101 - Introduction to Drafting **2-8-6**
Prerequisite: Provisional admission. Emphasizes the development of fundamental drafting techniques. Topics include: safety practices, terminology, drafting equipment care and use, lettering, line relationships, and geometric construction.

DDF 102 - Size and Shape Description I **1-9-5**
Prerequisite/Corequisite: DDF 101. Provides multiview and dimensioning techniques necessary to develop views that completely describe machine parts for manufacture. Topics include: multiview drawing, basic dimensioning practices, tolerances and fits, sketching, and precision measurement.

DDF 103 - Size and Shape Description II **1-9-5**
Prerequisite/Corequisite: DDF 102. Continues dimensioning skill development and introduces sectional views. Topics include: advanced dimensioning practices and section views.

DDF 105 - Auxiliary Views **1-4-3**
Prerequisite/Corequisite: DDF 103. Introduces techniques necessary for auxiliary view drawings. Topics include: primary auxiliary views and secondary auxiliary views.

DDF 106 - Fasteners **3-6-6**
Prerequisite/Corequisite: DDF 105. Provides knowledge and skills necessary to draw and specify fasteners. Topics include: utilization of technical reference sources, types of threads, representation of threads, specifying threads, fasteners, and welding symbols.

DDF 107 - Introduction to CAD **2-8-6**
Prerequisites/Corequisites: DDF 102, SCT 100. Introduces basic concepts, terminology, and techniques necessary for CAD applications. Topics include: terminology, CAD commands, basic entities, and basic CAD applications.

DDF 108 - Intersections and Development **1-9-5**
Prerequisite/Corequisite: DDF 103, MAT 104. Introduces the graphic description of objects represented by the intersection of geometric components. Topics include: surface development, establishment of true length, and intersection of surfaces.

DDF 109 - Assembly Drawings I **1-9-5**
Prerequisite/Corequisite: DDF 108. Provides knowledge and skills necessary to make working drawings. Topics include: detail drawings, orthographic assembly drawings, pictorial assembly drawings, and utilization of technical reference source.

DDF 111 - Intermediate CAD **2-8-6**
Prerequisite/Corequisite: DDF 107, MAT 1015. Continues developing CAD utilization skills in discipline-specific applications. Topics include: intermediate CAD commands, entity management, advanced line construction, block construction and management, command reference customization, advanced entity manipulation, and system variables.

DDF 112 - 3D Drawing and Modeling **2-8-6**
Prerequisite: DDF 111. Continues developing CAD utilization skills in discipline-specific applications. Topics include: advanced CAD commands, CAD applications, macro utilization, application utilization, 3D modeling, rendering, advanced application utilization, and pictorial drawings.

DDS 191 - Engineering Graphics I **1-6-3**
Prerequisite: Program admission. Introduces engineering drawing. Surveys various styles of engineering sketching and computer-aided drafting (CAD) techniques. Additionally, the student prepares sample engineering working drawings. Topics include: freehand sketching, computer-aided drafting (CAD) fundamentals, and working drawings. Laboratory work parallels class work.

DDS 201 - Strength of Materials **5-0-5**
Prerequisite: ENG 1010, MAT 1015. Provides a non-calculus based overview of materials when subjected to different loadings and restraints and the prediction of materials behavior in different situations. Topics include: concepts of stress, concepts of strain, tension, moments of inertia, and beam bending.

DDS 202 - Advanced CAD **2-8-6**
Prerequisite: DDF 107, MAT 1015. Continues development of CAD utilization skills in discipline specific applications. Topics include: DOS usage, advanced CAD commands, list 'P' line, advanced 3D, discipline oriented CAD application, macro utilization, and application customization.

DDS 203 - Surveying I **1-4-3**
Prerequisite: DDF 107, MAT 1015. Introduces fundamental plane surveying concepts, instruments, and techniques. Topics include: linear measurements; instrument use; and angles, bearings, and directions.

DDS 204 – Estimating **2-3-3**
Prerequisite: ENG 1010, MAT 1015. Introduces the essential skills necessary for assessing the expected materials, labor requirements and costs for given structures or products. Topics include: blue print reading, material take-offs, price extension and utilization of reference sources

DDS 205 - Residential Architectural Drawing I **2-8-6**
Prerequisites: DDF 111, DDF 112, DDS 201, ENG 1010, MAT 1015. Introduces architectural drawing skills necessary to produce a complete set of construction drawings given floor plan information. Topics include: footing, foundation, and floor plans; interior and exterior elevations; sections and details; window, door, and finish schedules; site plans; and specifications.

DDS 206 - Materials, Codes and Specifications **8-2-9**
Prerequisites: DDF 110, ENG 1010, MAT 1015. Introduces materials, codes, and specifications as they apply to architectural design. Topics include: specification formats, reference source utilization, building codes and industry standards, and material selection and specification.

DDS 207 - Mechanical Systems for Architecture **1-4-3**
Prerequisites: DDS 205, DDS 206, PHY 221. Reinforces technical knowledge and skills required to develop accurate mechanical and electrical plans. Topics include: heating, ventilation, and air conditioning calculations and plans; electrical calculations and plans; and plumbing calculations and plans.

DDS 208 - Residential Architectural Drawing II **2-8-6**
Prerequisite: DDS 205. Continues in-depth architectural drawing practice and develops architectural design skills. Plans are designed to meet applicable codes. Topics include: footing, foundation, and floor plans; interior and exterior elevations; sections and details; window, door, and finish schedules; site plans; specifications; and mechanical and electrical systems.

DDS 209 - Structural Steel Detailing **2-8-6**
Prerequisite: DDF 110. Develops knowledge and skills required for structural steel detailing and connections design utilized for commercial construction. Topics include: office practices; steel shapes; beam reactions; framed connections; seated connections; and columns, base plates, and splices.

DDS 210 - Commercial Architectural Drawing **2-8-6**
Prerequisites: DDS 208; DDS 209 or DDS 241. 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.

DDS 211 - Commercial Architectural Drawing II **2-8-6**
Prerequisites: DDS 210 or DDS 242; PHY 222. Provides in-depth commercial architectural drawing practice and develops commercial architectural design skills. Plans are designed to meet applicable codes. Topics include: structural steel detailing, reflected ceiling plans, rebar detailing, complete sets of commercial construction drawings, mechanical and electrical systems, and site plans.

DDS 215 - Legal Principles of Surveying **5-0-5**
Prerequisite: DDS 203. Investigates written and physical evidence to locate property boundaries in accordance with Georgia plat law and technical standards. Topics include: evidence and preservation of evidence, transfer of ownership, adverse rights and eminent domain, location of written title boundaries, Georgia plat law and technical standards, and written legal descriptions.

DDS 216 - Surveying II **4-6-7**
Prerequisite: DDS 215. Continues developing surveying concepts and skills with emphasis on advanced surveying technology and techniques. Topics include: area calculation, boundary surveys, EDM equipment utilization, differential leveling, photogrammetry, and topographical planning.

DDS 217 - Civil Drafting I **1-9-5**
Prerequisites: DDF 111, DDF 112, DDS 203. Emphasizes drawing assignments related to the most common mapping and civil site planning design problems. Topics include: loan and boundary surveys, as-builts, plan and profile drawings, cross-sections, earth-work determination, and grade determination.

DDS 218 - Civil Drafting II **2-8-6**
Prerequisites: DDS 201, DDS 217. Pertains to site planning and subdivision design. Students have an opportunity to develop a major design project. Topics include: landscape architecture, construction layout, street design, sewerage systems, county codes, and flood control methods.

DDS 219 - Route Location and Design **4-6-7**
Prerequisite: DDS 218. 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.

DDS 220 - Concrete Detailing **2-8-6**
Prerequisites: DDF 110, DDS 201, PHY 221. Introduces reinforced concrete detailing concepts and techniques required to prepare fabrication drawings given specific design parameters. Topics include: beams, slabs, and columns; steel reinforcing; concrete design properties; and concrete design manual use.

DDS 225 - Principles of Metallurgy **4-1-4**
Prerequisites: ENG 1010, MAT 1015. Introduces the fundamental physical properties of metals. Topics include: materials properties and limitations, materials processing techniques, treating materials, testing materials, and microstructural characteristics.

DDS 226 - Manufacturing Processes **4-1-4**
Prerequisites: ENG 1010, MAT 1015. Introduces basic industrial manufacturing processes. Topics include: measuring processes, gauging and inspecting processes, cold working processes, hot working processes, cold processes, and finishing processes.

DDS 227 - Jig, Fixture, and Die Drawing **2-8-6**
Prerequisites: DDF 111, DDF 112, DDS 225. Introduces detailing of jigs, fixtures, and dies to meet industrial standards given required specifications. Topics include: multiview working drawing, tolerances, precision measurement and dimensioning practices, quality control, standard parts, and reference source utilization.

DDS 228 - Jig, Fixture, and Die Design **1-9-5**
Prerequisites: DDS 225, DDS 227. Emphasizes design of jigs, fixtures, and dies to meet industrial standards given a practical application problem. Topics include: custom jigs, fixtures, and dies; multiview working drawing; tolerances; precision measurement and dimensioning practices; quality control; standard parts; and reference source utilization.

DDS 229 - Gears and Cams **3-7-6**
Prerequisites: DDS 201, DDS 226, MAT 1015. Emphasizes calculation, specification development, and drawing of gear and cam systems to produce desired results. Topics include: reference source utilization, solution for two unknowns, standard gear applications, standard cam applications, and gear ratios.

DDS 230 - Mechanisms I **4-6-7**
Prerequisite: DDS 229. Emphasizes familiarization with and utilization of common linkage types. Students apply linkage concepts to specific problems. Topics include: direct linkages, multi-linkages, standardized gear boxes, and fundamental robotics concepts.

DDS 231 - Mechanisms II **4-6-7**
Prerequisite: DDS 230. Emphasizes in-depth utilization of a variety of linkage types. Students apply linkage design skills to specified problems. Topics include: advanced applications of direct linkages, advanced applications of multi-linkages, advanced applications of gear boxes, robotics concepts, and robotics applications.

DDS 232 - Mechanical Power Transmission **2-8-6**
Prerequisite: DDS 230. Provides opportunities for design utilization of multiple power transmission methodology. Topics include: belts and pulleys, clutches and brakes, sprockets and chains, gear boxes, hydraulics, and pneumatics.

DDS 235 PC Board Layout And Drawing **1-4-3**
Prerequisite: ELC 105 Builds on theoretical PC board design background and applies it to the layout, basic drafting, and artwork required for two-sided PC board production. Topics include: component location, sizing, routing, basic PC drafting, and PC artwork.

DDS 243 – Mechanical Power Transmission O.B.I. **0-18-6**
Prerequisite: DDS 230. Provides opportunities for design utilization of multiple power transmission methodology in an actual job setting or practicum experience. Topics include: belts and pulleys, clutches and brakes, sprockets and chains, gear boxes, hydraulics, pneumatics, use of proper interpersonal skills, and adaptability to the job setting.

DEN 1010 - Basic Human Biology 2-0-2
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.

DEN 1020 - Head and Neck Anatomy 2-0-2
Prerequisite/Corequisite: DEN 1010. Focuses on normal head and neck anatomy. Topics include: osteology of the skull, muscles of mastication and facial expression, temporal mandibular joint, blood lymphatic and nerve supply of the head, and salivary glands and related structures. (Replaces DEN 102 eff 201003) 03102009

DEN 1030 - Preventive Dentistry 2-2-3
Prerequisites/Corequisites: DEN 1060, DEN 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. (Replaces DEN 103 eff 201003) 03102009

DEN 1050 – Microbiology and Infection Control 2-2-3
Prerequisite: Program admission. Introduces fundamental microbiology and infection control techniques. Topics include: classification, structure, and behavior of pathogenic microbes; mode of disease transmission; body's defense and immunity; infectious diseases; and infection control procedures in accordance with CDC recommendations and OSHA guidelines. (Replaces DEN 105 eff 201003). 03102009

DEN 1060 - Oral Anatomy 5-0-5
Prerequisite: Program admission. Focuses on the development and functions of oral anatomy. Topics include: dental anatomy, oral histology, and oral embryology. (Replaces DEN 106 eff 201003) 03102009

DEN 1070 - Oral Pathology and Therapeutics 3-0-3
Prerequisites: DEN 1010, DEN 1060. 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 principles of pharmacology, drugs prescribed by the dental profession, drugs that may contraindicate treatment, and applied pharmacology (regulations, dosage, and application). (Replaces DEN 107 eff 201003) 03102009

DEN 1090 - Dental Assisting National Board Examination Preparation 2-0-2
Prerequisite: Successful completion of all dental assisting didactic courses or two years of full-time work experience (3,500 hours) as a dental assistant. 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. (Replaces DEN 109 eff 201003) 03102009

DEN 1340 - Dental Assisting I 3-6-6
Prerequisites: Program admission; *Prerequisites/Corequisites:* AHS 104, DEN 1050, DEN 1060. Introduces students to chairside assisting with diagnostic and operative procedures. Topics include: four-handed dentistry techniques, clinical data collection techniques, introduction to operative dentistry, dental material basics, and infection control procedures in the dental environment with emphasis on CDC and ADA guidelines. (Replaces DEN 134 eff 201003) 03102009

DEN 1350 - Dental Assisting II 3-6-6
Prerequisite: DEN 1340. Focuses on chairside assisting with operative and nonsurgical specialty procedures. Topics include: operative dentistry, prosthodontic procedures (fixed and removable), orthodontics, and pediatric dentistry. (Replaces DEN 135 eff 201003) 03102009

DEN 1360 - Dental Assisting III 3-2-4
Prerequisite: DEN 1350. Focuses on chairside assisting in surgical specialties. Topics include: periodontic procedures, oral and maxillofacial surgery procedures, endodontic procedures, management of dental office emergencies, and medically compromised patients. (Replaces DEN 136 eff 201003) 03102009

DEN 1370 - Dental Assisting Expanded Functions 3-2-4
Prerequisite: DEN 1340, DEN 1350; Corequisite: DEN 1360. Focuses on expanded duties of dental auxiliary personnel approved by the Georgia Board of Dentistry. Topics include: expanded functions approved by law for performance by dental assistants in the state of Georgia. (Replaces DEN 137 eff 201003) 03102009

DEN 1380 – Scopes of Professional Practice 1-0-1
Prerequisite: Program admission. Focuses on ethics, jurisprudence, and employability skills for the dental assistant. Students will relate integration of didactic and laboratory instruction with clinical experiences. Topics include: ethics and jurisprudence related to the dental office and employability skills. (Replaces DEN 138 eff 201003) 03102009

DEN 1390 - Dental Radiology **4-2-5**
Prerequisites/Corequisites: DEN 1020, DEN 1060. After completion of the course the student will be able to provide radiation safety for patient and self, expose x-rays, process x-rays, and prepare dental films for the dental office. Topics include: fundamentals of radiology and radiation safety, radiographic anatomy and interpretation, intraoral and extraoral radiographic techniques, and quality assurance techniques. (Replaces DEN 139 eff 201003) 03102009

DEN 1400 - Dental Practice Management **3-2-4**
Prerequisite: DEN 1340; *Prerequisite/Corequisite*: SCT 100. 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, 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. (Replaces DEN 140 eff 201003) 03102009

DEN 1460 - Dental Practicum I **0-6-2**
Prerequisites: AHS 104, DEN 1050, DEN 1340;Corequisite: DEN 1350, DEN 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. (Replaces DEN 146 eff 201003) 03102009

DEN 1470 – Dental Practicum II **0-6-2**
Prerequisite/Corequisite: DEN 1460. Practicum focuses on advanced general dentistry procedures and chairside assisting in dental specialties with special emphasis on nonsurgical specialties. Topics include: advanced general dentistry and specialties. (Replaces DEN 147 eff 201003) 03102009

DEN 1480 – Dental Practicum III **0-24-8**
Prerequisite/Corequisite: DEN 1370, 1380, DEN 1460, DEN 1470. Practicum continues to focus on assisting chairside with advanced general dentistry procedures with emphasis on dental office management, preventative dentistry and expanded functions. Topics include: advanced general dentistry procedures, preventive dentistry, dental office management, expanded functions, chairside in specialties, and management of dental office emergencies. (Replaces DEN 148 eff 201003) 03102009

DIS 150 - Directed Individual Study **1-12 C.Hrs.**
Provides the instructor and student an opportunity to develop special learning environments. Instruction is delivered through occupational work experiences, practicums, advanced projects, industry sponsored workshops, seminars, or specialized and/or innovative learning arrangements. Topics include: application of occupational/technical skills, adaptability to the work environment, and problem solving. Each course should be documented with a written agreement between the instructor and the student detailing expected requirements. This course is offered with variable credit ranging from one quarter hour credit minimum to 12 quarter hour credit maximum. Credit hours are to be computed on the basis of: 30 hours of student required work = 1 credit hour.

DMS 131 – Foundations of Sonography **3-5-5**
Prerequisite: Program admission. This course introduces the student to the field of sonography. Course work also includes information concerning medical ethics and legal issues affecting the patient, student, school and clinical site. Provides the student with an overview of diagnostic medical sonography, its history and development Emphasis is placed on learning methods, patient care techniques and issues related to sonography, introduction to ultrasound procedures, sonographic terminology, patient interviews, elementary principles of sound waves, sonographic imaging techniques, communication and cultural diversity skills, ethic and professionalism, development of critical thinking skills, legal issues, and issues concerning the clinical environment. Topics include hospital and departmental organization and proper body mechanics when scanning, safety procedures and bloodborne pathogens. 09052007

DMS 132 – Sonographic Appearance of Normal Anatomy **3-3-4**
Prerequisite: Program admission. This course introduces the student to the normal sonographic appearance of abdominal anatomy, female and male pelvic anatomy, and the vascular system in the abdomen and pelvis. Topics include: normal anatomy of the liver, biliary system, pancreas, urinary tract, spleen, prevertebral vessels, peritoneal cavity, retroperitoneum, gastrointestinal tract, non-cardiac chest, and male and female pelvic anatomy; history and physical examination; related imaging, laboratory results, and functional testing procedures; role of ultrasound in patient management; sonographic appearance and sonographic patterns of structures in the abdomen, female pelvis, male pelvis, and vascularity related to each area.

DMS 133 – Cross Sectional Anatomy 3-3-4
Prerequisite: Program admission. This course introduces detailed normal anatomy in various planes used during sonographic examinations. Information is weighted toward normal structures which are sonographically visible. Structures are described according to relative location and proportionality. Anatomy is identified in both cadaver and sonographic modes. Structures include the brain, neck, chest, abdomen, pelvis, and extremities. Emphasis is placed on sonographically identifying normal cross sectional anatomy based on echogenicity, the position of other relative anatomy and proportionality of size. Topics include: normal sectional anatomy of the neck: vascular and thyroid; normal sectional anatomy of the adult chest; normal sectional anatomy of the abdomen in adults; normal sectional anatomy of the male and female pelvis; and normal sectional anatomy of the extremities: muscles.

DMS 134 – Pelvic Sonography and Pathology 1-3-2
Prerequisite: DMS 131, DMS 132. Introduces gynecology physiology, pathology, and procedures for diagnostic medical sonography. Emphasis is on female and male pelvic anatomy, physiology and anomalies, pathology complications, gynecology, and patient care/preparation. Topics include: physiology of pelvis; history and physical examination; contraceptive devices and infertility procedures; sonographic appearance of gynecologic disease processes, pathology, pathophysiology and abnormal sonographic patterns of iatrogenic, degenerative, inflammatory, traumatic, neoplastic, infectious, obstructive, congenital, metabolic, and immunologic diseases; Doppler applications; differential diagnosis; scanning of the prostate in the male pelvis; and related imaging, laboratory, and functional testing procedures.

DMS 135 – Abdominal Sonography Pathology 4-3-5
Prerequisite: DMS 131, DMS 132, DMS 133. Introduces abdominal anatomy, sonographic appearance and procedures, and pathology, for diagnostic medical sonography. Topics include: anatomy, pathology and diagnostic procedures of the liver, gallbladder and biliary tree, pancreas, urinary tract, adrenal glands, spleen, abdominal vasculature, peritoneal cavity, retro-peritoneum, GI tract, and non-cardiac chest; scanning protocol based on sonographic findings and differential diagnosis; history and physical examination; related imaging, laboratory, and functional testing procedures; clinical differential diagnosis; role of ultrasound in patient management; and sonographic appearance of disease processes, pathology, pathophysiology and abnormal sonographic patterns of iatrogenic, degenerative, inflammatory, traumatic, neoplastic, infectious, obstructive, congenital, metabolic, and immunologic diseases.

DMS 136 – Sonographic Physics I 3-0-3
Prerequisite: Program admission. Introduces concepts for the factors involved with diagnostic ultrasound principles and instruments. Emphasis will be placed on basic ultrasound physics, transducer construction, operation and characteristics, artifacts and adjustable physics parameters. Topics include: sound properties, sound units, sound measurements, ultrasound transducers, imaging instruments, ultrasound machine adjustable parameters, and display modes.

DMS 137 - Clinical Sonography I 0-24-8
Prerequisite: DMS 131, DMS 132, DMS 136. Provides students with an introduction into the hospital/clinic setting work experience. Students perform procedures introduced in Foundations of Sonography and manipulate equipment based on information from Sonographic Appearance and Normal Anatomy. Emphasis is placed on performing those procedures presented in Pelvic Sonography and Pathology and Abdominal Sonography and Pathology and learning to identify normal anatomy presented in Cross Sectional Anatomy. Control of the physical parameters of the sonography unit and application of sonographic physics as it relates to image quality are covered. Topics include: equipment manipulation for optimum image resolution; scanning procedures for abdominal sonography; normal anatomy and pathologic conditions of the abdomen; normal female pelvic anatomy; female pelvic pathology, including uterine fibroids and bicornate uterus; scanning of the female pelvis trans-abdominally, trans-vaginally and trans-perineally; normal and abnormal prostate in males; ectopic pregnancies; patient care issues: patient preparation, fundamentals of patient history taking, confidentiality, pertinent clinical laboratory values, and communication; and pathology versus normal abdominal anatomy. Sonographic examinations are conducted under direct and indirect supervision.

DMS 201 – Normal Obstetric Sonography 2-3-3
Prerequisite: DMS 134; Corequisite: DMS 202. Introduces normal anatomy and development for obstetric evaluation utilizing diagnostic medical sonography. Emphasis is placed on normal embryonic and fetal anatomy and development throughout all three trimesters. Topics include: guidelines for antepartum obstetric sonographic evaluation, the safety of ultrasound and Doppler for the obstetric patient, laboratory values in early pregnancy, embryonic development, sonographic evaluation of the early gestation, obstetrical measurements and gestational age, multiple gestations, fetal development, normal umbilical cord, normal placenta, normal amniotic fluid and biophysical profile.

DMS 202 – Sonographic Physics II 2-0-2
Prerequisite: DMS 136. Introduces concepts for the factors involved with diagnostic ultrasound principles and instruments. Topics include: Doppler instruments, performance and safety, and artifacts.

DMS 203 – High Resolution Imaging 1-3-2
Prerequisite: DMS 131, DMS 132, DMS 133, DMS 136 . Introduces anatomy, pathology and procedures for diagnostic medical sonography. Topics include: anatomy, thyroid, breast, scrotum, anterior abdominal wall, muscles, and other superficial structures.

DMS 204 – Clinical Sonography II 0-24-8
Prerequisite: DMS 131, DMS 132, DMS 136; Corequisite: DMS 202. This course provides students with continued work experience in a hospital or clinic setting. Students improve skills in performing procedures introduced concurrently with didactic and laboratory hours of Normal Obstetric Sonography and High Resolution Imaging. Emphasis is placed on improving students' scanning abilities as related to competencies in Pelvic Sonography and Pathology and Abdominal Sonography and Pathology. Concurrently, students will competently perform procedures included in Normal Obstetric Sonography. Topics include equipment manipulation for optimal image resolution, demonstrating advanced techniques being presented in Physics II; the manipulation of equipment to minimize biologic effects; conditions of the superficial structures to include differentiation of cystic and solid breast masses, sonographic classification of thyroid masses, scrotal hernias, testicular torsion, testicular tumors, epididymal cysts, anterior abdominal wall, muscles, and extremities; normal maternal/fetal development through three trimesters, including placental grading, placental location, and fetal growth with HCG levels; gestational sac size; performance of biophysical profiles; fetal heart rated determination; obtaining measurements of fetal anatomy including, crown-rump length, bi-parietal diameter, head circumference; documenting normal fetal anatomy; demonstrating the ability to effectively deal with patient care issues including patient preparation, patient history taking, and patient confidentiality; pertinent clinical laboratory values; and communication. Students conduct sonographic examinations under direct and indirect supervision.

DMS 205 – Interventional Sonography 0-2-1
Prerequisite: DMS 133, DMS 134, DMS 135, DMS 201. This course provides instruction in sonographic procedures which are considered invasive and/or require sterile procedures. Opening sterile trays, creating and maintaining a sterile field, and sterilizing ultrasound transducers are included, as well as sonography in the operating suite and performance of sonographic biopsy guidance. Issues concerning patient consent are reviewed from Foundations of Sonography. Topics include: sterile techniques; amniocentesis; scanning of the uterus via sonohysterography; drainage and fluid recovery procedures to include thoracentesis, paracentesis, and amniocentesis; free hand and attachment guided biopsy, such as breast biopsy and prostate biopsy; and ultrasound guidance procedures, such as nephrostomy/biliary drainage procedures

DMS 206 – Pediatric Sonography 2-0-2
Prerequisite: DMS 132, DMS 133, DMS 134, DMS 135. Provides the sonography student with specialized imaging procedures for the pediatric patient, including normal anatomy, pathology and pathophysiology. Emphasis is on the pediatric abdomen, surgical abdominal conditions, pediatric hip, and the necessary skills and special considerations of the pediatric patient in terms of patient care, presenting symptoms, pathologic processes, diagnosis, and technique. Neonatal neurosonography is also presented. Topics include: normal anatomy of the abdomen in pediatric patients and associated anomalies; normal anatomy of the neonatal brain and head and associated anomalies; anatomy of pediatric hip joint and imaging techniques and associated anomalies; normal pelvic anatomy in pediatric patients and associated anomalies; procedure, indication, and protocol for pyloric stenosis and associated pathology; normal spine anatomy and associated anomalies; history and physical examination; related imaging, laboratory, and functional testing procedures; differential diagnosis; and role of

DMS 207 - Abnormal Obstetric Sonography 3-0-3
Prerequisite: DMS 201. Introduces the knowledge of fetal anatomy, pathology and procedures for diagnostic medical sonography. Emphasis is placed on fetal anomalies and maternal complications throughout all three trimesters. Topics include: first trimester sonographic abnormalities including: diagnosis of embryonic abnormalities, placental hematomas, associated pelvic masses, and other sonographic findings; second and third trimester sonographic abnormalities including: hydrops, various trisomies, cranial and facial altering abnormalities, vertebral column abnormalities, thoracic cavity abnormalities, abdominal wall abnormalities, urinary tract abnormalities, extremity abnormalities, umbilical cord abnormalities, amniotic fluid volumes, and other miscellaneous congenital abnormalities; history and physical examination; related imaging, laboratory, and functional testing procedures; differential diagnosis; role of ultrasound in patient management; viability; and fetal therapy.03102009

DMS 208 - Introduction to Vascular Sonography 1-3-2
Prerequisites: DMS 133, DMS 202, DMS 203. 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. For these areas much greater depth will be reached. The field of vascular sonography is much wider and encompassing than these three areas. The broader field of vascular sonography will be introduced but not studied at length or in depth. 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. 09052007

DMS 209 - Clinical Sonography III 0-24-8
Prerequisite: DMS 204. This course provides students with continued work experience in a hospital or clinic setting. Students improve skills in performing procedures introduced during previous didactic and clinical courses. Instructors emphasize the identification of normal and pathologic conditions learned concurrently in didactic and laboratory hours in Interventional Sonography, Pediatric Sonography, Abnormal Obstetric Sonography, and Introduction to Vascular Sonography as well as refining the scanning ability of students in procedures previously presented in Pelvic Sonography and Pathology, Abdominal Sonography and Pathology, Normal Obstetric Sonography, and High Resolution Sonography. Topics include equipment manipulation for optimum image resolution; sterile techniques; drainage and fluid recovery procedures, including thoracentesis, paracentesis, and amniocentesis; freehand and attachment guided biopsy, including breast biopsy and prostate biopsy; pathology and abnormal conditions in obstetrics, including the gamut of pathology in the neonate, such as intra-cranial bleeds, masses, and duodenal atresia, organ malformations, maternal conditions affecting pregnancy; ectopic pregnancies; patient care issues: patient preparation, fundamentals of patient history taking, confidentiality, pertinent clinical laboratory values and communication. Sonographic examinations are conducted under direct and indirect supervision. 03102009

DMS 210 - Comprehensive Physics Registry Review 2-0-2
Prerequisite: DMS 136, DMS 202. Provides a review of basic 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 physics, patient care, equipment/image manipulation, scanning procedures, bioeffects and safety. Emphasis will be placed on those items/issues/topics which are part of the certification examination. Topics include: propagation of ultrasound through tissues, principles of pulse echo imaging, quality assurance of ultrasound instruments, elementary principles, bioeffects and safety, ultrasound transducers and pulse echo instruments. 03102009

DMS 211 - Clinical Sonography IV 0-33-11
Prerequisite: DMS 209. This course provides students with continued hospital/clinic setting work experience. Students refine scanning techniques, increase speed of exam completion, and develop critical thinking approach to sonographic scanning in performing procedures introduced during previous didactic and clinical courses. Instructors emphasize the identification of normal and pathologic conditions learned in didactic and laboratory hours in Introduction to Vascular Sonography and performance of vascular duplex examinations are emphasized. Equipment utilization, venous structures of the leg, arterial vessels of the neck, and professional development through application of case studies reviews are covered. Sonographic examinations are conducted under direct and indirect supervision. Topics include: manipulation of Doppler signals for venous scanning of the extremities and arterial scanning of the carotid vessels; normal anatomy and pathologic conditions of vascular structures, including deep vein thrombosis and carotid artery occlusion; equipment manipulation for optimum image resolution; and patient care issues: patient preparation, fundamentals of patient history taking, confidentiality, pertinent clinical laboratory values, and communication. 03102009

DMS 212 – Comprehensive Abdomen Registry Review 2-0-2
Prerequisites: DMS 135, DMS 202. Provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations in sonography. Physics, equipment/image manipulation, anatomy, pathology, scanning procedures, sterile procedures, sonographic measurements, and invasive procedures are reviewed along with information concerning test taking skills. Topics include: patient care preparation/technique, laboratory values and indications, parenchymal diseases, masses of the abdomen, normal anatomy and physiology of abdominal organs, and pathology of the abdomen. Emphasis is placed on those items/issues/topics which are part of the certification examination. 09052007

DMS 213 – Comprehensive OB/GYN Registry Review 2-0-2
Prerequisites: DMS 134, DMS 201, DMS 202, DMS 207. Provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations for sonography. Information concerning test taking skills is also reviewed as well as physics, equipment/image manipulation, anatomy, pathology, scanning procedures, sterile procedures, sonographic measurements, fetal growth, and invasive procedures. Emphasis is placed on those items/issues/topics which are part of the certification examination. Topics include: obstetrics; fetal abnormalities; patient care preparation/technique; technique, laboratory values, and indications; pelvic masses and abnormalities; and gynecologic anatomy and physiology. 03102009

DMS 214 - Clinical Sonography V 0-33-11
Prerequisite: DMS 211. Provides a culminating hospital/clinic setting work experience for students to improve skills in performing procedures introduced during prior clinical and didactic classes. Emphasis is placed on refining scanning techniques, increasing speed, developing a critical thinking approach to sonographic scanning, and completing all clinical competencies. Equipment utilization and professional development through application of case studies reviews are included. Sonographic examinations are conducted under direct and indirect supervision. Topics include: refinement of equipment manipulation, techniques and the role of the sonographer in performing interventional/invasive procedures, completion of competencies necessary for graduation, and requirements of an entry-level sonographer. 03102009

ECE 1010 - Introduction to Early Childhood Care and Education 5-0-5
Prerequisite: Provisional admission. This course introduces concepts relating the responsibilities and procedures involved in a variety of early childhood care situations. This course addresses key CDA competency goals and functional areas. Topics include: historical perspectives, professionalism, guidance, assessment and curriculum planning, learning environment, cultural diversity and licensing and accreditation. (Replaces ECE 101 eff 200903) 03102009

ECE 1012 - Curriculum Development 3-2-3
Prerequisites/Corequisites: ECE 1010, ECE 1030 This course assists the student in understanding that play, developmental integration and active learning are critical to achieving meaningful curriculum for young children. The course develops knowledge and skills that will enable the student to establish a learning environment appropriate for young children. Topics include: instructional media, learning environments, curriculum approaches, development of curriculum plans and materials. (Replaces ECE 112 eff 200903) 03102009

ECE 1013 - Art for Children 1-4-3
Prerequisite: Provisional admission. This course introduces the concepts related to creativity in art. This course combines lecture and lab experiences to introduce the many media areas used by children to express themselves. Topics include: concepts of creativity and children's creative development; facilitation of children's creative expression; appreciation of children's art processes and products; and art appreciation. (Replaces ECE 113 eff 200903) 03102009

ECE 1014 - Music and Movement 1-4-3
Prerequisite: Provisional admission. This course introduces the concepts related to creativity in music and movement. This course combines lecture and lab experiences to introduce media, methods, and materials used to foster musical activity and creative movement. Topics include: spontaneous and planned music and movement; media, methods and materials; coordination of movement and music; theoretical foundations; and music appreciation. (Replaces ECE 114 eff 200903) 03102009

ECE 1021 - Early Childhood Care and Education Practicum I 1-6-3
Prerequisite: ECE 1030. Pre/Corequisite: ECE 1050. This course provides the student with the opportunity to gain a supervised experience in an actual or simulated work setting allowing demonstration of techniques obtained from course work. Practicum training topics include: 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. (Replaces ECE 121 eff 200903) 03102009

ECE 1022 - Early Childhood Care and Education Practicum II 1-6-3
Prerequisite: Provisional admission. This course provides the student with the opportunity to gain a supervised experience in an actual or simulated work setting allowing demonstration of techniques obtained from course work. Practicum training topics include: promoting child development and learning; building family and community relationships; observing, documenting, and assessing to support young children and families; teaching and learning; and becoming a professional. (Replaces ECE 122 eff 200903) 03102009

ECE 1025 - Professionalism through CDA Certificate Preparation 2-1-2
Prerequisites: Program admission, ECE 101, ECE 103, ECE 105, 480 clock hours of work experience within last five years with young children and/or ECE 121, ECE 122 and ECE 124. 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. (Replaces ECE 125 eff 200903) 03102009

ECE 1026 - CDA Certificate Assessment Preparation 2-1-2
Prerequisites: Program admission, ECE 101, ECE 103, ECE 105, 480 clock hours of work experience within the last five years with young children or ECE 121, ECE 122 and ECE 224. Corequisite: ECE 125. Provides opportunities to demonstrate and obtain documentation of student competency. Topics include: Professional resource file completion; parent opinion questionnaires; formal observation; oral interview; and written assessment. (Replaces ECE 126 eff 200903) 03102009

ECE 1030 - Human Growth and Development I 5-0-5
Prerequisite: Provisional admission Introduces the student to the physical, social, emotional, and cognitive development of the young child (0 through 5 years of age). 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 providing positive guidance. Topics include: developmental characteristics, observation and recording theory and practice, guidance techniques, developmentally appropriate practice, and introduction to children with special needs. (Replaces ECE 103 eff 200903) 03102009

ECE 1050 - Health, Safety, and Nutrition **5-0-5**
Prerequisite: Provisional admission. The course introduces the theory, practices, and requirements for establishing and maintaining a safe, healthy learning environment. Topics include: CPR and first aid, health issues, safety issues, child abuse and neglect, and nutritional needs of children. (Replaces ECE 105 eff 200903) 03102009

ECE 2010 - Exceptionalities **5-0-5**
Prerequisite: ECE 1030. This course provides for the development of knowledge and skills that will enable the student to understand individuals with special needs and appropriately guide their development. Special emphasis is placed on acquainting the student with programs and community resources that serve families with children with special needs. Topics include inclusion/least restrictive environment (LRE), physical disabilities and health disorders, intellectual exceptionalities, social/emotional disorders, and community resources. (Replaces ECE 201 eff 200903) 03102009

ECE 2020 - Social Issues and Family Involvement **5-0-5**
Prerequisite: Provisional admission. Enables the student to become familiar with the social issues that affect families of today and to develop a plan for coping with these issues as they occur in the occupational environment. Students are introduced to local programs and agencies that offer services to those in need. Topics include: professional responsibilities, family/social issues, community resources, parent education and support, teacher-parent communication, community partnerships, social diversity and anti-bias issues, transitioning the child, and school family activities. (Replaces ECE 202 eff 200903) 03102009

ECE 2030 - Human Growth and Development II **5-0-5**
Prerequisite: ECE 1030. Introduces the student to the physical, social, emotional, and intellectual development covering life span. Provides learning experiences related to the principles of human growth and development and theories of learning and behavior. Topics include: development characteristics, guidance techniques, developmentally appropriate practice, introduction to children with special needs and observation skills. (Replaces ECE 203 eff 200903) 03102009

ECE 2110 - Methods and Materials **05-0-5**
Prerequisite: ECE 1012. This course develops skills to enable the student to work as a paraprofessional in a program for pre-kindergarten through elementary aged children. Topics include: instructional techniques, curriculum, materials for instruction, and learning environments. (Replaces ECE 211 eff 200903) 03102009

ECE 2115 - Language Arts and Literature **5-0-5**
Prerequisite: Provisional admission. This course develops knowledge and skills that will enable the student to plan and implement developmentally appropriate listening, speaking, writing, and reading activities for young children. Topics include: reading readiness, oral communication activities, writing readiness, listening comprehension, literature selection, story presentation, and stages of language acquisition and use of technology in language arts. (Replaces ECE 115 eff 200903) 03102009

ECE 2116 - Math and Science **5-0-5**
Prerequisite: Provisional admission. This course provides the student with the opportunity to gain a supervised experience in an actual or simulated work setting allowing demonstration of techniques obtained from course work. Practicum training topics include: 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. (Replaces ECE 116 eff 200903) 03102009

ECE 2120 - Professional Practices **5-0-5**
Prerequisite: Provisional admission. Develops skills and knowledge of professional practices applicable to programs for pre-kindergarten and school-aged children. Topics include: professional qualifications and professionalism. (Replaces ECE 212 eff 200903) 03102009

ECE 2132 - Infant/Toddler Development **5-0-5**
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. (Replaces ECE 132 eff 200903) 03102009

ECE 2134 - Infant/Toddler Group Care 5-0-5
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. (Replaces ECE 134 eff 200903) 03102009

ECE 2136 - Infant/Toddler Curriculum 4-3-5
Prerequisites: ECE 2132, ECE 2134. Addresses the basic issues of how to translate significant research findings about the relationship of early brain and language development into classroom practices and how to arrange optimal learning experiences/activities at both the individual and group levels. Utilizes the latest findings about the minds of children and how they discover the world as well as developmental profiles and characteristics of children in a specific age range to present materials and strategies that may be used with individual children birth to age three. Examines how to design and implement learning experiences geared to address each child's needs regardless of how typical or atypical that child's development. Addresses strategies to most effectively work with a group of very young children, one or more of which may be significantly challenged in physical, cognitive, language, social, or behavioral development. (Replaces ECE 136 eff 200903) 03102009

ECE 2142 - Family Childcare Program Management 4-3-5
Prerequisite: Provisional admission. Provides the guidelines, responsibilities, and appropriate practices needed for successful management of a Family Child Care Home. Topics include: rules and regulations; professional practices; and program management. (Replaces ECE 142 eff 200903) 03102009

ECE 2144 - Family Childcare Business Management 5-0-5
Prerequisite: Provisional admission. 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. (Replaces ECE 144 eff 200903) 03102009

ECE 2170 – Program Administration 5-0-5
Prerequisite: Provisional admission. Provides training in planning, implementation, and maintenance of an effective early childhood program. Topics include: organization, mission, philosophy, goals and history of a program; types of programs; laws, rules, regulations accreditation and program evaluation; needs assessment; administrative roles and board of directors; marketing, public and community relations, grouping, enrollment and retention; working with parents; professionalism and work ethics; and time and stress management.

ECE 2210 – Facility Management 5-0-5
Prerequisite: Provisional admission. Provides training in early childhood facilities management. Topics include: space management, money management, and program, equipment and supplies management.

ECE 2220 – Personnel Management 5-0-5
Prerequisite: Provisional admission. This course provides training in personnel management in early childhood settings. Topics include: staff records; communication; personnel planning; personnel policies; managing payroll, recruitment, selection, interviewing, hiring, motivating, firing, and staff retention; staff scheduling; staff development; staff supervision; conflict resolution; staff evaluation; and ethical responsibilities to employees.

ECE 2240 - Early Childhood Care and Education Internship 0-36-12
Prerequisite:Pre-requisite: ECE 1010, 1030, 1050 and 1012 *Pre-requisite/Co-requisite:* ECE 1013, 1014, 2115, 2116, and 2020. Provides the student with the opportunity to gain experience in a simulated or actual work setting. Students will be placed in an approved setting(s) throughout the quarter where planning, implementing, observing, and evaluating activities are the focus of their involvement. An evaluation procedure will be used by the designee of the institution and the on-site supervisor to critique the student's performance. Topics include: problem solving, use of proper interpersonal skills, application of developmentally appropriate practice, professional development and resource file (portfolio) development. (Replaces ECE 224 eff 200903) 03102009

ECE 2260 - Characteristics of Young Children with Exceptionalities 5-0-5
Prerequisite: ECE 2010. This course prepares child care providers and paraprofessionals with knowledge and skills in the area of physical and motor impairments, talented and giftedness, 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, and multiple disabilities. (Replaces ECE 260 eff 200903) 03102009

ECE 2262 - Classroom Strategies and Intervention 5-0-5
Prerequisite: ECE 2010. This course prepares child care providers and paraprofessionals with knowledge and skills in the area of coping 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 their family, examining the adaptations and modifications to facilities and environments, reviewing the referral process, implementing inclusion, modifying teaching and instruction to accommodate the child with special needs, and investigating ways to document and chart observations. (Replaces ECE 262 eff 200903) 03102009

ECE 2264 - Exploring Your Role in the Exceptional Environment 3-6-5
Pre/Corequisite: ECE 2010. This course prepares child care providers and paraprofessionals with knowledge and skills in the area of examining the assessments and screenings used for placement, exploring resources, service providers and agencies that may assist the child in the child care or educational environment, examining the adaptations and modifications to environments, reviewing the referral process, implementing inclusion, and modifying teaching and instruction to accommodate the child with special needs. (Replaces ECE 264 eff 200903) 03102009

ECH 131 - Echocardiography I 2-10-6
Prerequisites: CVT 103, CVT 110, CVT 111. Corequisite: ECH 136. This course develops basic imaging skills by imaging normal hearts in the echocardiography lab. Topics include: role of the noninvasive cardiovascular technologist, echocardiographic examination, basic quantification calculations, professional conduct, and ethics. 10102007

ECH 133 – Echocardiography II 2-10-6
Prerequisites: ECH 131 Corequisite ECH 137 Utilizes the fundamentals to evaluate acquired disease states. Incorporates all forms of noninvasive cardiovascular evaluation with emphasis on performance and interpretation of M-mode, 2-dimensional, and Doppler echocardiography. Topics include: cardiac chamber studies, hemodynamic correlates, valvular heart disease, coronary heart disease, cardiomyopathies, pericardial diseases, cardiac masses, and diseases of the aorta. 10012007

ECH 136 - Echocardiography Clinical I 0-24-8
Prerequisites: CVT 103; CVT 110, CVT 111 Introduces the clinical environment by assisting the technologist in the echocardiography lab in patient preparation and imaging while acquiring electrocardiograms, Holter monitors, stress testing, and pacemaker checks. Students will participate and perform (with assistance) procedures in noninvasive cardiology labs and imaging centers. Topics include: clinical environment; recording medical information; patient preparation for noninvasive cardiovascular treatment; medical ethics; performance of basic normal echo under guidance; proper positioning in Doppler, CW and color; and observation of TEE and stress echo. 10102007

ECH 137 - Echocardiography Clinical II 0-24-8
Prerequisite: ECH 136; Corequisite: ECH 133. 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. 10112007

ECH 155 - Professional Development 0-2-1
Prerequisite: AHS 104, CVT 103, CVT 110, CVT 111. 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. 10112007

ECH 230 - Essentials of Vascular Sonography (Non-invasive) 1-3-2
Prerequisite: Program Admission. 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. For these areas much greater depth will be reached. The field of vascular sonography is much wider and encompassing than these three areas. The broader field of vascular sonography will be introduced but not studied at length or in depth. 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. 08102009

ECH 231 – Echocardiography III (Pediatric) 4-8-6
Prerequisites: ECH 133; Corequisite: ECH 236. This course offers an introduction to congenital heart disease with instruction on transducer selection, patient care, surgical repair and palliative procedures. Topics include: cyanotic lesions, shunt lesions, sedation, transducer selection, Doppler color flow imaging, research methods, statistics, and quality improvement. Emphasis is placed on the latest modalities and specialties of noninvasive cardiac diagnostic study 10112007

ECH 236 – Echocardiography Clinical III 0-24-8
Prerequisite: ECH 137. Corequisite: ECH 231. 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. 10112007

ECH 237 - Echocardiography Clinical IV 0-36-12
Prerequisite: ECH 236. Corequisite: ECH 240. 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 courses. Topics include: scanning, documentation of pathologies, patient and equipment skills, current literature, professionalism, and ethical behavior. 10112007

ECH 240 - Comprehensive Registry Review 1-3-2
Prerequisites: CVT 103, CVT 110, CVT 111, ECH 131, ECH 133, ECH 231. Corequisite ECH 237. 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. Topics include: normal and abnormal cardiac anatomy, techniques, pathology, physics/hemodynamics, test validation and measurements, and laboratory values. Emphasis is placed on reviewing information so that the student will successfully pass the ARMDS and/or CCI certification examinations. 10112007

ECO 1101 - Principles of Economics 5-0-5
Prerequisite: Program admission. A description and analysis of economic operations in contemporary society. Emphasis is placed on developing an understanding of economic concepts and policies as they apply to everyday life. Topics include: basic economic principles; economic forces and indicators; capital and labor; price, competition, and monopoly; money and banking; government expenditures, (federal and local); fluctuations in production, employment, and income; and the United States economy in perspective. 10082008

ECO 2105 – Principles of Macroeconomics 5-0-5
Prerequisite: Program admission. Provides a description and analysis of macroeconomic operations in contemporary society. Emphasis is placed on developing an understanding of macroeconomic concepts and policies. Topics include: basic economic principles; macroeconomic principles; macroeconomic theory; macroeconomic policy; money and banking; and United States economy in perspective.

ECO 2106 – Principles of Microeconomics 5-0-5
Prerequisite: Program admission. Provides a description and analysis of microeconomic operations in contemporary society. Emphasis is placed on developing an understanding of microeconomic concepts and theories as they apply to daily life. Topics include: basic economic principles; theory of the corporate firm; market system; market structure, pricing, and government regulation; resource markets; and international trade.

EHO 100 - Horticulture Science 5-0-5
Introduces the fundamentals of plant science and horticulture as a career field. Topics include: industry overview, plant parts, plant functions, environmental factors in horticulture, soil function and components, fertilizer elements and analysis, and propagation techniques.

EHO 101 - Woody Ornamental Plant Identification 5-2-6
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.

EHO 102 - Herbaceous Plant Identification 5-0-5
Emphasizes the taxonomy, identification, and culture requirements of herbaceous plants. Topics include: introduction to herbaceous plants, classification of herbaceous plants, and herbaceous plant identification and culture requirements.

EHO 103 - Greenhouse Operations **2-3-3**
Develops a basic understanding of greenhouse design and construction and the environmental factors affecting plant growth. Topics include: greenhouse construction, greenhouse heating and cooling, greenhouse soil functions and components, irrigation types and effects, fertilizer types and applications, and fall crops for the local area.

EHO 104 - Horticulture Construction **2-3-3**
Develops skills necessary to design and construct landscape features such as retaining walls, walkways, and irrigations systems. Topics include: tool use and safety, retaining walls, drainage, irrigation/water use, low-voltage lighting, and walkways.

EHO 105 - Nursery Production **3-4-4**
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.

EHO 106 - Landscape Design **2-8-5**
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.

EHO 107 - Landscape Installation **2-3-3**
Introduces cultural techniques required for proper landscape installation with emphasis on practical application. Topics include: landscape installation procedures and managerial functions for landscape installers.

EHO 108 - Pest Management **5-0-5**
Provides experience in insect, disease, and weed identification and control with emphasis on safety and legal requirements for state licensure. Topics include: identification of insects, diseases, and weeds; safety regulations; equipment use and care; and regulations for licensure.

EHO 112 - Landscape Management **4-6-5**
Introduces cultural techniques required for proper landscape maintenance with emphasis on practical application and managerial techniques. Topics include: landscape management and administrative functions for landscape management.

EHO 114 - Garden Center Management **2-3-3**
Presents cultural and managerial techniques required for success in the garden center industry. Topics include: garden center establishment, garden center management, and post-production handling and marketing.

EHO 115 - Environmental Horticulture Internship **0-10-3**
Prerequisite: Completion of all essential fundamental courses. 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.

EHO 123 - Greenhouse Production **4-6-6**
Prerequisite/Corequisite: EHO 103 Continues hands-on experience in crop production with emphasis on spring foliage crops and managerial skills. Topics include: light and temperature; insects and diseases; production and scheduling; and winter, spring, and foliage crops for the local area.

EHO 125 - Plant Propagation **3-6-5**
Introduces the student to the basic principles of plant propagation. Focus of the course will be hands-on experience. Topics include: seed germination, rooting cuttings, propagation facilities construction, layering, insect disease and control, and cultural controls for propagation.

EHO 131- Irrigation **3-5-5**
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, and system design and installation.

EHO 133 - Turfgrass Management **3-5-5**
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.

EHO 141 - Soils **3-4-5**
Introduces the basics of soil physics and chemistry and their relationship to plant growth. Topics include: soil structure, soil chemistry, nutrition, fertilization, and soil preparation.

EHO 142 - Golf Course Design, Construction, and Management 4-3-5
Covers basic design principles as well as actual construction activities that occur on a typical golf course. Renovation of various areas of a course will also be included in this class. Topics include: history of golf and golf course design, routing the course, individual hole design, green installation, surveying, and drainage problem solving. Renovation of various areas of a course are also included.

EHO 172 - Floral Design I 2-6-4
Develops skills in the arrangement of flowers and filler materials to form marketable arrangements for special occasions. Topics include: floral materials, design, flower conditioning, arrangements.

EHO 173 - Floral Design II 3-4-5
Continues development of skills in the arranging of flowers and filler materials to form marketable arrangements for special occasions. Topics include: floral materials, floral design principles, and constructing floral arrangements.

EHO 175 - Interiorscaping 4-3-5
Develops the skills involved in designing, installing, and maintaining interior plantings. Topics include: industry overview, environmental requirements, nutrient requirements, maintenance practices, plant disorders, design and installation.

EHO 248 - Floral Design III 4-2-5
Enhances the student's ability to design with cut and dried plant materials. Emphasis will be on party, wedding and funeral work. High style designs will be included in the course. Topics include: plan/design, advanced floral mechanics, fundamentals of naturalized, high style, and international design, and creation of a working portfolio.

EHO 249 - Floral Design IV 4-3-5
Introduces the student to the operation of a floral business. Emphasis will be on both traditional and high style design as a business. Topics include: starting a floral business, establishment of a customer base, wire service capabilities, and high style planning and design.

ELC 104 - Soldering Technology I 1-2-2
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.

ELC 108 - Direct Current Circuits II 3-2-4
Prerequisites: ELC 106 or IFC 101, MAT 1013. Continues direct current (DC) concepts and applications. Topics include: complex series/parallel circuits and DC theorems.

ELC 110 - Alternating Current II 3-2-4
Prerequisite: ELC 109 or IFC 102. Continues development of alternation current (AC) concepts with emphasis on constructing, verifying, and troubleshooting reactive circuits using RLC theory and oscilloscopes. Topics include: reactive components, simple RLC circuits, AC circuit resonance, passive filters, and non-sinusoidal wave forms.

ELC 115 - Solid State Devices II 3-2-4
Prerequisite: ELC 114 or IFC 103. Continues the exploration of the physical characteristics and applications of solid-state devices. Topics include: bipolar junction theory, bipolar junction application, and field effect transistors.

ELC 117 - Linear Integrated Circuits 3-2-4
Prerequisite: ELC 115 Provides in-depth instruction on the characteristics and applications of linear integrated circuits. Topics include: operational amplifiers, timers, and three-terminal voltage regulators.

ELC 118 - Digital Electronics I 3-2-4
Prerequisite: ELC 114 or IFC 103. Introduces the basic building blocks of digital circuits. Topics include: binary arithmetic, logic gates and truth tables, Boolean algebra and minimization techniques, logic families, and digital test equipment.

ELC 119 - Digital Electronics II 1-9-4
Prerequisite: ELC 118. Uses the concepts developed in Digital Electronics I as a foundation for the study of more advanced devices and circuits. Topics include: flip-flops, counters, multiplexers and demultiplexers, encoding and decoding, displays, and analog to digital and digital to analog conversions.

ELC 120 - Microprocessors Fundamentals 3-2-4
Prerequisite: ELC 119. This course is designed to provide the student with a basic understanding of microprocessor and microcontroller operation, programming, interfacing, interrupts, and troubleshooting. The choice of microprocessor and microcontroller used in the lab experiences and illustration of basic operation is not important. The main objective of the course is to give the student a basic understanding of microprocessor operation and applications.

ELC 211 - Process Control **4-4-6**
Prerequisite: ELC 120. Introduces industrial process control applications with an emphasis on sensors and signal conditioning. Topics include: symbology and drawing standards, control techniques, sensors and signal conditioning, and ISA and other relevant standards.

ELC 212 - Motor Controls **4-4-6**
Prerequisite: ELC 115. Introduces the application of motor controls in the industrial environment. Topics include: AC/DC motors, AC/DC drives, MCC and contractors, NEC and NEMA standards, ladder diagrams, and power sources.

ELC 213 - Programmable Controllers **4-3-5**
Prerequisite: ELC 120. Provides the basic skills and techniques used in industrial application of programmable controls. Topics include: controller hardware, programming, PC applications, and troubleshooting.

ELC 214 - Mechanical Devices **2-3-3**
Prerequisite: MAT 1015. Develops knowledge and skills necessary to transmit mechanical power using common industrial linkage types. Emphasis is placed on use of mechanical devices in combination with electronic controls. Topics include: linkages, motion analysis, gear drives, and preventative maintenance.

ELC 215 - Fluid Power **2-3-3**
Prerequisite: MAT 1015. Provides an overview of fluid power operation as applied to industrial electronics. Emphasis is placed on the interfacing of electronic and fluidic systems. Topics include: safety, fluid dynamics, hydraulics, pneumatics, air logic, and electrical interfacing.

ELC 216 - Robotics 1-2-2
Prerequisites: ELC 213, ELC 214, ELC 215. Explores robotic concepts, terminology, and basic applications. Emphasis is placed on programming in robotic languages and robot/human interfacing safety practices. Topics include: safety, terminology, languages, and programming.

ELC 217 - Computer Hardware **4-6-7**
Prerequisite: ELC 120. Provides an introduction to the fundamentals of installing, configuring, upgrading, troubleshooting, and repairing microcomputer systems. Topics include installation, configuration, upgrading, diagnosing, troubleshooting, preventive maintenance, basic hardware, printers, and basic networking.

ELC 218 - Operating Systems Technologies **4-6-7**
Prerequisite: ELC 217. Provides an introduction to the fundamentals of Command Line Prompt, Windows 9x, Windows 2000, and future operating systems. Topics include Operating system fundamentals; installing, configuring, and upgrading; diagnosing and troubleshooting; and networks.

ELC 219 - Networking I **3-3-4**
Prerequisite: ELC 120. Provides an introduction to networking technologies. Covers a wide range of material about networking, from careers in networking to local area networks, wide area networks, protocols, topologies, transmission media, and security. Focuses on operating network management systems and implementing the installation of networks. The course reviews cabling, connection schemes, the fundamentals of LAN and WAN technologies, TCP/IP configuration and troubleshooting, remote connectivity, and network maintenance and troubleshooting. Topics include: media and topologies, protocols and standards, network implementation, and network support.

ELC 229 - Security Systems **3-2-4**
Provides an in-depth study of electronic devices designed to detect environmental changes that indicate a threat to property security. Topics include: sensor theory, low-voltage license regulations, system components, and system installation and service.

ELC 259 - Fiber Optic Systems **3-2-4**
Prerequisite: ELC 119. Introduces the fundamentals of fiber optics and explores the applications of fiber optic transmission systems. Laboratory exercises give students hands-on experience with fiber optic devices and test equipment. Topics includes: fundamentals of fiber optics, types of optical fibers, fiber materials and manufacture, cabling, light sources/transmitters/receivers, connectors, splicing, test measurement, and fiber optic system design.

ELC 260 - Telecommunication and Data Cabling **3-2-4**
Prerequisite: ELC 119. Introduces the basic of cable installation from the initial site survey to splicing cable and making connections. Through laboratory activities, students perform the basic tasks of a cable installer. Topics include: basic standards and practices, cable rating and performance, cable installation and management, testing and troubleshooting, industry standards, pulling cable, and understanding blueprints.

ELC 261 - Telecommunications Systems Installation and Programming **2-3-3**
Prerequisite: ELC 260. Teaches the installation, programming, testing, and repair of simple and complex telephone systems. Laboratory activities give practical hands-on experience with various telephone systems. Topics include multi-line system installation, system programming, peripheral devices, and customer relations.

ELC 262 - Telecommunications and Data Transmission Concepts 2-3-3
Prerequisite/Corequisite: ELC 261. Provides an introduction to basic concepts on telecommunication and data transmission. Topics include introduction to frequency and bandwidth, delineation of signal types and characteristics, methods of modulation and detection, transmission modes, characteristics of transmission media, measuring transmission signals, noise and distortion levels, multiplexing, and emerging technologies.

ELC 286 - CompTIA A+ Certification 5-0-5
Prerequisite: SCT 100. Prepares the student for taking the CompTIA A+ examination by reviewing the A+ core and A+ Operating Systems Objectives. Topics include A+ Core Hardware and A+ Operating System Technologies.

ELT 106 - Electrical Print, Schematics and Symbol 3-2-4
Prerequisites: IFC 100, IFC 101. Introduces electrical symbols and their use in construction blueprints, electrical schematics, and diagrams. Topics include: electrical symbols, component identification, and print reading.

ELT 107 - Commercial Wiring I 4-3-5
Prerequisites: ELT 106, ELT 121. Introduces commercial wiring practices and procedures. Topics include: National Electrical Code, commercial load calculations, and safety.

ELT 108 - Commercial Wiring II 4-3-5
Prerequisite: ELT 107. Presents the study of three-phase power systems, fundamentals of AC motor controls, and the basic transformer connections. Topics include: three-phase power systems, fundamentals of AC motor control transformer connections (single-phase and three-phase step down), and introduction to low voltage systems.

ELT 109 - Commercial Wiring III 4-3-5
Prerequisites: ELT 107, ELT 108. Presents the theory and practical application of conduit installation, system Design n, and related safety requirements. Topics include: conduit installation (EMT, thin wall, and hand bent), system design concepts, and safety procedures.

ELT 111 - Single Phase and Three Phase Motors 4-3-5
Prerequisite: ELT 109. Introduces the fundamental theories and applications of single-phase and three-phase motors. Topics include: motor theory/operating principles, motor terminology, motor identification. National Electrical Manufacturers Association (NEMA) standards, motor efficiencies, preventive maintenance, troubleshooting/ failure analysis, and NEC requirements.

ELT 112 - Variable Speed/Low Voltage Controls 2-3-3
Prerequisite: ELT 111. Introduces types of electric motor control, reduced voltage starting, and applications. Emphasis will be placed on motor types, controller types, and applications. Includes information on wye and delta motor connections; part wind, autotransformer; adjustable frequency drives and other applications; and oscilloscopes and their operation. Topics include: types of reduced voltage starting, reduced voltage motor connections, and adjustable frequency drive.

ELT 113 - Programmable Logic Control I 4-2-4
Prerequisites: ELT 111, ELT 112 (for Industrial Electrical Technology students); Corequisite: ELT 118. *Prerequisites/Corequisites:* IFC 101, IFC 102, IMT 120 (for non-Industrial Electrical Technology students). Introduces operational theory, systems terminology, field wiring/installation, and start-up procedures for programmable logic controls. Emphasis will be placed on PLC programming, connections, installations, and start-up procedures. Topics include: introductory programming, PLC functions and terminology, processor unit and power supply, introductory numbering system, relay/programming logic, and field wiring/installation and start-up.

ELT 114 - Programmable Logic Control II 1-5-2
Prerequisite/Corequisite: ELT 113. Provides for development of operational skills in the use of PLC equipment and peripheral devices. Emphasis is placed on printers and other peripheral devices, PLC hard wiring, program writing, installation procedures, and operation of a PLC program. Topics include: program control information/data manipulation, report generation (outputs), peripheral devices, field wiring/installation, start-up, troubleshooting, and program enhancement/optimization.

ELT 115 - Diagnostic Troubleshooting 1-5-2
Prerequisite: ELT 114. Introduces diagnostic techniques related to electrical malfunctions. Special attention is given to use of safety precautions during troubleshooting. Topics include: problem diagnosis, advanced schematics, and sequential troubleshooting procedures.

ELT 116 - Transformers 3-3-4
Prerequisites: ELT 119, IFC 101. Provides instruction in the theory and operation of specific types of transformers. Emphasis will be placed on National Electrical Code requirements related to the use of transformers. Topics include: transformer theory, types of transformers, National Electrical Code requirements, and safety precautions.

ELT 117 - National Electrical Code Industrial Applications 2-5-4
Prerequisite: ELT 109. Provides instruction in industrial applications of the National Electrical Code. Topics include: rigid conduit installation, systems design concepts, equipment installation (600 volts or less), and safety precautions.

ELT 118 - Electrical Controls 3-5-5
Prerequisites: ELT 108, ELT 111, ELT 112. Introduces line and low voltage switching circuits, manual and automatic controls and devices, and circuits. Emphasis will be placed on switching circuits, manual and automatic controls and devices, line and low voltage switching circuits, 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.

ELT 119 - Electricity Principles II 3-2-4
Prerequisites: ELT 111, ELT 112. Introduces the theory and application of varying sine wave voltages and current. Topics include: magnetism, AC wave generation, AC test equipment, inductance, capacitance, and basic transformers.

ELT 120 - Residential Wiring I 3-5-5
Prerequisites: ELT 106, ELT 119, IFC 100, IFC 101 Introduces residential wiring practices and procedures. Topics include: residential circuits, print reading, National Electrical Code, wiring materials, determining the required number and location of lighting/receptacles and small appliance circuits, wiring methods (size and type conductors, box fill calculations and voltage drop), switch control of luminaries and receptacle installation including bonding, GFCI and AFCI circuits, special purposes outlets- ranges, cook tops, ovens, dryers, water heaters, sump pumps, etc., and sizing OCPD's (circuit breakers and fuses).

ELT 121 - Residential Wiring II 5-3-6
Prerequisite: ELT 120. Provides additional instruction on wiring practices in accordance with the National Electrical Code. Topics include: residential single family service calculations, residential two-family service calculations, load balancing, sub-panels and feeders, residential single-family service installation, residential two-family service installation, concepts of TV and CATV installation, swimming pool installation, remote control of lighting, and intercom installation.

ELT 122 - Industrial PLCs 4-6-6
Prerequisites: ELT 111, ELT 112, ELT 118. Introduces operational theory, systems terminology, PLC installations, and programming procedures for programmable logic controls. Emphasis is placed on plc programming, connections, installations, and start-up procedures. Topics include: PLC hardware and software, PLC functions and terminology, introductory numbering systems, PLC installation and set up, PLC programming basics, relay logic

EMC 110 – Summative Evaluations for the EMT-Basic 2-3-5
Prerequisite: EMC 100, EMC 103; Corequisite: EMC 105, EMC 108. The course serves as the exit point for students taking only the EMT-Basic program. Students continuing on to the EMT-Intermediate portion of the curriculum must pass this course in order to continue. The course will include clinical hours to be spent in both Hospital Emergency Departments and on Ambulance Clinical Rotations. This class will also contain a Comprehensive review of the US DOT EMT-Basic 1994 Curriculum, as well as portions of the NSC EMT-Intermediate 1985 Curriculum that were covered in EMS XX1 and EMS XX2, and a comprehensive written and practical exam that will serve to verify the students competencies before proceeding to the EMT-Intermediate Courses.

EMC 116 - Haz Mat, Vehicle Extrication Process, Patient Assessment/ Initial Management 3-0-3
Prerequisite: EMC 113. This course covers the U.S. Department of Transportation 1985 Emergency Medical Technician - Intermediate Curriculum. Topics include: hazardous material awareness level I (GEMA), patient handling (FTO), vehicle extrication lab (FTO) and general patient assessment and initial management.

EMC 119 - Summative Evaluations for the EMT-Intermediate 0-2-2
Prerequisite: EMC 113; Corequisite: EMC 116. This is the final course for those pursuing EMT-Intermediate Certification. The course will include clinical hours to be spent in both Hospital Emergency Departments and on Ambulance Clinical Rotations. This class will also contain a Comprehensive review of the US DOT EMT-Basic 1994 Curriculum as well as the US DOT EMT-Intermediate 1985 Curriculum. The course will include a comprehensive written and practical exam that will serve to verify the students' competencies before being allowed to sit for the National Registry Intermediate-1985 Exam. Topics will include review of both the EMT-B 1994 and EMT-I 1985 Curricula, Assessment/Management Review for Trauma and Medical and OB/Peds and a NREMT examination review.

EMP 1000 – Interpersonal Relations and Professional Development 3-0-3
Prerequisite: Provisional admission. This course provides a study of human relations and professional development in today's rapidly changing world that prepares students for living and working in a complex society. Topics include: human relations skills; job acquisition skills and communication; job retention skills; job advancement skills; and professional image skills. (Replaces EMP 100)

EMS 120 - Emergency Medical Technology Basic l 6-6-8
Prerequisite: Program admission Introduces the student to the Emergency Medical Technician profession. This course covers the first half of the U.S. Department of Transportation Basic EMT Program. Topics include: introduction to emergency care, EMS systems, well-being of the EMT, medical-legal aspects of emergency care, hazardous materials, blood and airborne pathogens, infectious diseases, ambulance operations and emergency vehicle operations, the human body, patient assessment, communications and documentation, lifting and moving patients, gaining access, airway, basic life support-CPR and automatic external defibrillation.

EMS 121 - Emergency Medical Technology Basic II 7-1-7
Prerequisite: EMS 120. Introduces the student to the Emergency Medical Technician profession. This course covers the second half of the U.S. Department of Transportation Basic EMT Program. Topics include: general pharmacology, respiratory emergencies, cardiology, diabetes, altered mental status, seizures, allergies, poisonings, environmental emergencies, behavioral emergencies, bleeding and shock, PASG, soft tissue injuries, musculoskeletal injuries, head and spinal injuries, OB/GYN, infants and children, and special needs patients.

EMS 122 - Emergency Medical Technology – Intermediate 7-5-9
Prerequisite: EMS 120, EMS 121 or National Registry EMT-Basic Certificate. This course covers the U.S. Department of Transportation 1985 Emergency Medical Technician - Intermediate Curriculum and the U.S. D.O.T. Training Guidelines for Hazardous Material Awareness Level - I. The EMT-I course is designed to provide additional training and increased knowledge and skills in specific aspects of advanced life support. This course is for individuals who have successfully completed the EMT-Basic course as a prerequisite. Topics include: roles and responsibilities, EMS systems, medical legal, communications, documentation, medical terminology, body systems, patient assessment, advanced airway, shock, trauma, shock management, IV administration, intraosseous infusion, medical emergencies I, medical emergencies II, diabetic emergencies and dextrose 50% administration, hazardous material awareness, patient handling, and extrication.

EMS 126 - Introduction to the Paramedic Profession 3-1-3
Prerequisite/Corequisite: AHS 1011. Introduces the student to the paramedic profession. Discussion centers on functions that extend beyond the EMT scope of practice. Topics include: the EMS system/roles and responsibilities, well-being of the paramedic, illness and injury prevention, medical/legal considerations, ethics, ambulance operations, medical incident command, rescue awareness/operations, hazardous materials incidents and crime scene awareness. This course provides instruction on topics in Division 1, Sections 1-5, Division 7, Section 1 and Division 8 sections 1-5 of the USDOT/NHTSA Paramedic National Standard Curriculum. 03142009

EMS 127 - Patient Assessment 3-2-4
Prerequisite/Corequisite: AHS 1011. Introduces the fundamental principles and skills involved in assessing the pre-hospital patient. Emphasis is on the systematic approach to patient assessment, with adaptations for the medical versus the trauma patient. Topics include: therapeutic communications, history taking, techniques of physical exam, patient assessment, clinical decision-making, EMS communications, and documentation. This course provides instruction on topics in Division 1, Section 9 and Division 3, Sections 1-9 of the USDOT/NHTSA Paramedic National Standard Curriculum. 03142009

EMS 128 - Applied Physiology and Pathophysiology 3-0-3
Prerequisite/Corequisite: AHS 1011. This course introduces the concepts of pathophysiology as it correlates to disease processes. This course will enable caregivers to enhance their overall assessment and management skills. Disease-specific pathophysiology is covered in each related section of the curriculum. This course covers a review of cellular composition and function, including cellular environment as it relates to fluid and acid-base balances. Content on genetics and familial diseases are discussed. Hypoperfusion, including various forms of shock, multiple organ dysfunction syndrome and cellular metabolism impairment are integral components of this course. The next portion of this section provides information on the body's self-defense mechanisms, the inflammatory response, and variances in immunity. The last topic covered is stress and disease, which includes stress responses and the interrelationships among stress, coping, and disease. 03142009

EMS 129 – Pharmacology 3-2-4
Prerequisite/Corequisite: MAT 1012. This unit is designed to help the paramedic implement a patient management plan based on principles and applications of pharmacology. Discussion of pharmacology includes: identification of drugs, drug calculations, drug administration techniques and procedures and drug safety and standards. 03142009

EMS 130 - Respiratory Emergencies 4-2-5
Prerequisite: AHS 1011; *Prerequisites/Corequisites:* EMS126, EMS127, EMS128, EMS129. This unit is designed to help the Paramedic assess and treat a wide variety of respiratory related illnesses in the pediatric and adult patient. Topics include a review of anatomy and physiology, pathophysiology of foreign body airway obstruction, recognition of respiratory compromise, use of airway adjunctive equipment and procedures, current therapeutic modalities for bronchial asthma, chronic bronchitis, emphysema, spontaneous pneumothorax, and hyperventilation syndromes. This section also provides expanded information for adult respiratory distress syndrome, pulmonary thromboembolism, neoplasms of the lung, pneumonia, emphysema, pulmonary edema, and respiratory infections. This course provides instruction on topics in Division 2 (Airway), Section 1 (Airway Management and Ventilation) and Division 5 (Medical), Section 1 (Respiratory) of the USDOT/NHTSA Paramedic National Standard Curriculum. 03142009

EMS 131 – Trauma 4-2-5
Prerequisites/Corequisites: EMS 126, EMS 127, EMS 128, EMS 129. This Unit is designed to introduce the student to assessment and management of the trauma patient, to include: systematic approach to the assessment and management of trauma, demonstration of the assessment and management of certain types of trauma patients and bodily injuries. Student should complete the requirements for the Basic Trauma Life Support Course or the Pre-Hospital Trauma Life Support Course. 03142009

EMS 132 - Cardiology I 4-2-5
Prerequisites: EMS 126, EMS 127, EMS 128, EMS 129. Emphasizes the study of the cardiovascular system. Cardiology I will introduce and explore cardiovascular epidemiology, anatomy and physiology, pathophysiology, and electrophysiology. This course will also provide instruction on initial cardiovascular assessment, focused history, detailed physical examination, and electrocardiographic monitoring. Management of the cardiovascular patient will be taught in Cardiology II. At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with cardiovascular disease. This course provides instruction on topics in Division 5 (Medical), Section 2 (Cardiology) of the USDOT/NHTSA Paramedic National Standard Curriculum. 03142009

EMS 133 - Cardiology II 3-2-4
Prerequisites: EMS 126, EMS 127, EMS 128, EMS 129; *Prerequisite/Corequisite*: 132. This course expounds on the objectives in Cardiology I emphasizing advanced patient assessment and management of the cardiac patient. Topics will include advanced cardiovascular assessment, pharmacological intervention, electrical intervention, and emergency resuscitative treatment utilizing the American Heart Association's Advanced Cardiac Life Support (ACLS) Providers course. This course provides instruction on topics in Division 5 (Medical), Section 2 (Cardiology) of the USDOT/NHTSA Paramedic National Standard Curriculum. 03142009

EMS 134 - Medical Emergencies 5-1-5
Prerequisites: EMS 126, EMS 127, EMS 128, EMS 129. Provides an in-depth study of the nervous, endocrine, gastrointestinal, renal, hematopoietic, and immune systems. Topics include epidemiology, pathophysiology, assessment, and management of specific injuries/illnesses. Emphasis is placed on allergies/anaphylaxis, toxicology, environmental emergencies, and infectious and communicable diseases. General/specific pathophysiology assessment and management are discussed in detail for environmental emergencies. Infectious and communicable disease topics include public health principles, public health agencies, infection, pathogenicity, infectious agents, and specific infectious disease processes and their management. This course provides instruction on topics in Division 5 (Medical), Sections 3, 4, 5, 6, 7, 8, 9, 10, and 11 of the USDOT/NHTSA Paramedic National Standard Curriculum. 03142009

EMS 135 – Maternal/Pediatric 4-2-5
Prerequisites: EMS 126, EMS 127, EMS 128, EMS 129. Emphasizes the study of gynecological, obstetrical, pediatric and neonatal emergencies. Maternal/Child combines the unique relationships and situations encountered with mother and child. Provides a detailed understanding of anatomy/physiology, pathophysiology, assessment, and treatment priorities for the OB/GYN patient. Pediatric and neonatal growth and development, anatomy and physiology, pathophysiology, assessment and treatment specifics are covered in detail. Successful completion of a PLS/PALS course is required. This course provides instruction on topics in Division's 5 (Medical), Sections 13 (Obstetrics) and 14 (Gynecology) and 6 (Special Considerations), Sections 1 (Neonatology) and 2 (Pediatrics) of the USDOT/NHTSA Paramedic National Standard Curriculum. 03142009

EMS 136 - Special Patients 2-1-2
Prerequisites: EMS 126, EMS 127, EMS 128, EMS 129. Provides an overview of the assessment and management of behavioral emergencies as they pertain to pre-hospital care. Topics include: communication skills and crisis intervention, assessment and management of the adult and adolescent patient with behavioral emergencies, management of the violent patient, management of the suicidal patient, medical/legal considerations, and stress management. Life span, geriatrics, abuse, special challenges, and chronic care patients are included. 03142009

EMS 150 – Basic Emergency Medical Technician Practicum (Pre-Paramedic Practicum) 0-15-5

Prerequisite: Graduate of a Technical College Basic Emergency Medical Technology program and satisfactory rating on required medical form; *Prerequisite/Corequisite*: Certified as a Georgia Basic Emergency Medical Technician and satisfactorily completed the Introduction to Blood-Borne Pathogen module. Provides the student with an opportunity to refine basic emergency medical technician skills and knowledge while assigned to a supervised emergency medical services environment. Emphasis is placed on providing a practicum experience to prepare the student for admission into the Paramedic Technology level program. Topics include: emergency ambulance services, hospital emergency department services, emergency ambulance patient transportation procedures, hospital emergency department patient assessment procedures, venipuncture techniques, and documentation of emergency medical services.

EMS 201 - Summative Evaluation 4-4-5

Prerequisites: EMS 126, EMS 129, EMS 130, EMS 131, EMS 132, EMS 133, EMS 134, EMS 135, EMS 136, AHS 1011; *Prerequisite/Corequisite*: EMS 200. Provides supervised clinical experience in the hospital and pre-hospital advanced life support settings to include: EMS leadership, summative case evaluations, EKG interpretation and pharmacology. This course also includes a comprehensive paramedic program examination and a board examination review. 03142009

EMS 210 - Clinical Application for EMT-Paramedic I 0-6-2

Prerequisites: Program admission. The course will include clinical hours to be spent in Hospitals, Urgent Care Settings, and Ambulance Clinical Rotations. This course will include all of the EMT-Paramedic Clinical Procedures Requirements With Accompanying Psychomotor Objectives listed under Appendix B (Clinical Objectives) of the Georgia Office of EMS, EMT-Paramedic Curriculum standard. This course will include a minimum of 60 clinical hours, and along with "Clinical Applications for the EMT-Paramedic II", "Clinical Applications for the EMT-Paramedic III", "Clinical Applications for the EMT-Paramedic IV", "Clinical Applications for the EMT-Paramedic V" and "Clinical Applications for the EMT-Paramedic VI", will include a minimum skill set and a minimum number of assessments in various categories.

EMS 211 - Clinical Application for EMT-Paramedic II 0-6-2

Prerequisites: Program admission. The course will include clinical hours to be spent in Hospitals, Urgent Care Settings, and Ambulance Clinical Rotations. This course will include all of the EMT-Paramedic Clinical Procedures Requirements With Accompanying Psychomotor Objectives listed under Appendix B (Clinical Objectives) of the Georgia Office of EMS, EMT-Paramedic Curriculum standard. This course will include a minimum of 60 clinical hours, and along with "Clinical Applications for the EMT-Paramedic I", "Clinical Applications for the EMT-Paramedic III", "Clinical Applications for the EMT-Paramedic IV", "Clinical Applications for the EMT-Paramedic V" and "Clinical Applications for the EMT-Paramedic VI", will include a minimum skill set and a minimum number of assessments in various categories.

EMS 212 - Clinical Application for EMT-Paramedic III 0-6-2

Prerequisites: Program admission. The course will include clinical hours to be spent in Hospitals, Urgent Care Settings, and Ambulance Clinical Rotations. This course will include all of the EMT-Paramedic Clinical Procedures Requirements With Accompanying Psychomotor Objectives listed under Appendix B (Clinical Objectives) of the Georgia Office of EMS, EMT-Paramedic Curriculum standard. This course will include a minimum of 60 clinical hours, and along with "Clinical Applications for the EMT-Paramedic I", "Clinical Applications for the EMT-Paramedic II", "Clinical Applications for the EMT-Paramedic IV", "Clinical Applications for the EMT-Paramedic V" and "Clinical Applications for the EMT-Paramedic VI", will include a minimum skill set and a minimum number of assessments in various categories.

EMS 213 - Clinical Application for EMT-Paramedic IV 0-6-2

Prerequisites: Program admission. The course will include clinical hours to be spent in Hospitals, Urgent Care Settings, and Ambulance Clinical Rotations. This course will include all of the EMT-Paramedic Clinical Procedures Requirements With Accompanying Psychomotor Objectives listed under Appendix B (Clinical Objectives) of the Georgia Office of EMS, EMT-Paramedic Curriculum standard. This course will include a minimum of 60 clinical hours, and along with "Clinical Applications for the EMT-Paramedic I", "Clinical Applications for the EMT-Paramedic III", "Clinical Applications for the EMT-Paramedic IV", "Clinical Applications for the EMT-Paramedic V" and "Clinical Applications for the EMT-Paramedic VI", will include a minimum skill set and a minimum number of assessments in various categories.

EMS 214 - Clinical Application for EMT-Paramedic V 0-6-2

Prerequisites: Program admission. The course will include clinical hours to be spent in Hospitals, Urgent Care Settings, and Ambulance Clinical Rotations. This course will include all of the EMT-Paramedic Clinical Procedures Requirements With Accompanying Psychomotor Objectives listed under Appendix B (Clinical Objectives) of the Georgia Office of EMS, EMT-Paramedic Curriculum standard. This course will include a minimum of 60 clinical hours, and along with "Clinical Applications for the EMT-Paramedic I", "Clinical Applications for the EMT-Paramedic III", "Clinical Applications for the EMT-Paramedic IV", "Clinical Applications for the EMT-Paramedic V" and "Clinical Applications for the EMT-Paramedic VI", will include a minimum skill set and a minimum number of assessments in various categories.

EMS 215 - Clinical Application for EMT-Paramedic VI 0-3-1
Prerequisites: Program admission. The course will include clinical hours to be spent in Hospitals, Urgent Care Settings, and Ambulance Clinical Rotations. This course will include all of the EMT-Paramedic Clinical Procedures Requirements With Accompanying Psychomotor Objectives listed under Appendix B (Clinical Objectives) of the Georgia Office of EMS, EMT-Paramedic Curriculum standard. This course will include a minimum of 60 clinical hours, and along with "Clinical Applications for the EMT-Paramedic I", "Clinical Applications for the EMT-Paramedic II", "Clinical Applications for the EMT-Paramedic III", "Clinical Applications for the EMT-Paramedic IV" and "Clinical Applications for the EMT-Paramedic V", will include a minimum skill set and a minimum number of assessments in various categories.

EMS 1101 - Introduction to the EMT Profession 3-2-4
Prerequisite: Program Admission. The course covers all the components of the National Highway Safety Transportation Administration, National Standard Curriculum, Emergency Medical Technician-Basic, 1994 Standard, Module 1 and Module 7. It also covers Sections 1, 2, 3 and 4 of the NHTSA, National Standard Curriculum, EMT-Intermediate-1985. Topics include: basic cardiopulmonary resuscitation/AED, introduction to emergency medical care, roles and responsibilities of the EMT-Intermediate, EMS Systems for EMT-Intermediates, well being of the EMT– Basic, medical/legal and ethical issues, medical-legal aspects for the EMT-Intermediate, blood and airborne pathogens and infectious diseases, the human body, medical terminology, base line vital signs and SAMPLE history, lifting and moving patients, ambulance operations, gaining access, and overviews of HazMat/MCI.(Replaces EMC 100 eff 201001) 03142009

EMS 1103 – Patient Assessment for the EMT 1-2-2
Prerequisite: Program Admission. The course covers all the components of the National Highway Safety Transportation Administration, National Standard Curriculum, Emergency Medical Technician-Basic, 1994 standard, Module 3. In addition to the NSC-B 1994 standards, this course also includes the NSC EMT-Intermediate 1985 Standard, Section 5 and part of Section 6. Topics include: Scene-Size Up, Initial Assessment, Focused History and Physical Exam for both Medical and Trauma Patients, Detailed Physical Exam, On-Going Assessment, Communications/Documentation, and EMS communications for the EMT-I. (Replaces EMC 103 eff 201001) 03142009

EMS 1105 – Airway Management for the EMT 1-2-2
Prerequisite: Program admission. The course covers all the components of the National Highway Safety Transportation Administration, National Standard Curriculum, Emergency Medical Technician Basic, 1994 standard, Module 2. In addition to the NSC-B 1994 standards, this course also includes the NSC EMT-Intermediate 1985 Standard, Section 7. The 2002 Supplemental Airway Modules for the NSC-B 1994 curriculum will also be used. Topics include: Airway, Advanced Airway and Basic/Advanced Airway Management. (Replaces EMC 105 eff 201001) 03142009

EMS 1107 Medical and Behavioral Emergencies for the EMT 2-2-3
Prerequisite: Program admission. The course covers Lessons 1 through 8, and parts of Lessons 10 and 11 of Module 4 of the National Highway Safety Transportation Administration, National Standard Curriculum, Emergency Medical Technician-Basic, 1994 standard. Topics include general pharmacology, respiratory emergencies, cardiovascular emergencies, diabetic/altered mental status emergencies, allergic reactions, poisoning/overdose emergencies, environmental emergencies, behavioral emergencies, and non-traumatic abdominal emergencies. 03142009

EMS 1109 – Assessment and Management Across the Lifespan for the EMT1-2-2
Prerequisite: Program admission. The course covers Lesson 9, and parts of Lessons 10 and 11 of Module 4 of the National Highway Safety Transportation Administration, National Standard Curriculum, Emergency Medical Technician-Basic, 1994 standard. All of Module 6 of the NSC-B 1994 curriculum is also included. The Georgia Office of EMS specific module for Geriatrics as well as the TCSG specific module for Special Needs Patients is included. Topics include obstetrical/gynecological emergencies, infants and children, geriatrics and patients with special needs. 03142009

EMS 1111 - Trauma Emergencies and WMD Response 3-2-4
Prerequisite: Program admission. The course covers all the components of the National Highway Safety Transportation Administration, National Standard Curriculum, Emergency Medical Technician-Basic, 1994 standard, Module 5. In addition to the NSC-B 1994 standards, this course also includes portions of Section 6 of the NSC EMT-Intermediate 1985 Standard. The Georgia Office of EMS specific module for Emergency Response to Weapons of Mass Destruction is also included. Topics Include: bleeding and shock, soft tissue injuries, musculoskeletal care, injuries to the head/spine, patient access and extrication, and emergency medical response to WMD. (Replaces EMC 108 eff 201001) 03142009

EMS 1113 – Clinical Applications for the EMT-Basic 0-3-1
Prerequisite: Program Admission. The course will include clinical hours to be spent in both Hospital Emergency Departments and on Ambulance Clinical Rotations. This course will include all of the EMT-Basic Clinical Procedures Requirements With Accompanying Psychomotor Objectives listed under Module-C (Clinical) of the Georgia Office of EMS, EMT-Basic Curriculum standard. This course will include a minimum of 30 clinical hours. 03142009

EMS 1115 – Practical Applications for the EMT-Basic 1-2-2
Prerequisite: Program admission. This course will serve as the integration point for the entire National Highway Safety Transportation Administration, National Standard Curriculum, Emergency Medical Technician-Basic, 1994 standard, as well as Sections 1 through 7 of the NSC EMT-Intermediate 1985 Standard, and the Georgia Office of EMS specific modules on CPR, Geriatrics and WMD. This course will focus on critical thinking skills and will enhance the assessment based management skills of EMT students. Topics include: Assessment Based Management for the EMT-Basic.

EMS 1201 - Pharmacology and Shock/Trauma for the EMT-Intermediate 2-2-3
Prerequisite: Program admission. The course covers Section 8 of the National Highway Safety Transportation Administration, National Standard Curriculum, Emergency Medical Technician-Intermediate, 1985 standard. Topics Include: general pharmacology review, IV and IO therapy and shock/trauma assessment and management. (Replaces EMC 113 eff 201001) 03142009

EMS 1203 – Clinical Applications for the EMT-Intermediate I 0-3-1
Prerequisite: Program admission. The course will include clinical hours to be spent in both Hospital Emergency Departments and on Ambulance Clinical Rotations. This course will include all of the EMT-Intermediate Clinical Procedures Requirements With Accompanying Psychomotor Objectives listed under Module-C (Clinical) of the Georgia Office of EMS, EMT-Intermediate Curriculum standard. This course will include a minimum of 30 clinical hours, and along with Clinical Applications for the EMT-Intermediate – II, will include a minimum skill set. 03142009

EMS 1205 – Clinical Applications for the EMT-Intermediate II 0-3-1
Prerequisite: Program admission. The course will include clinical hours to be spent in both Hospital Emergency Departments and on Ambulance Clinical Rotations. This course will include all of the EMT-Intermediate Clinical Procedures Requirements With Accompanying Psychomotor Objectives listed under Module-C (Clinical) of the Georgia Office of EMS, EMT-Intermediate Curriculum standard. This course will include a minimum of 30 clinical hours, and along with Clinical Applications for the EMT-Intermediate – I, will include a minimum skill set. 03142009

EMS 1207 – Practical Applications for the EMT-Intermediate 1-2-2
Prerequisite: Program admission. This is the final course for those pursuing EMT-Intermediate Certification. This course expands upon the critical thinking skills and assessment based management techniques covered in the 'Practical Applications for the EMT-Basic' course. This course integrates all components of the US DOT EMT-Basic 1994 Curriculum as well as the US DOT EMT-Intermediate 1985 Curriculum, and all Georgia specific modules for the EMT-Basic and EMT-Intermediate curricula. Preparation for the national certification exam for EMT-Intermediate/85s will be paramount throughout the course, and students will be required to complete this course prior to being eligible to sit for the National Registry Intermediate-1985 Exam. Topics will include skills competency verification and assessment based management techniques for the EMT-Intermediate. 03142009

ENG 096 – English II 5-0-5IC
Prerequisite: Entrance English score in accordance with approved TCSG admission score levels. Emphasizes standard English usage. Topics include: capitalization, basic punctuation, subject and verb agreement, correct verb forms, spelling, and basic paragraph development. 03142009

ENG 097 – English III 5-0-5IC
Prerequisite: ENG 096, or entrance English score in accordance with approved TCSG admission score levels. 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, mechanics, spelling, and sentence writing and paragraphing skills needed for writing memos, letters, reports, and short essays.

ENG 098 English IV 5.0-5IC
Prerequisite: ENG 097 or entrance English score in accordance with approved TCSG admission score levels. Emphasizes the ability to communicate using written and oral methods. Topics include writing and the process of writing, revising, and oral communications.

ENG 1010 – Fundamentals of English I 5-0-5
Prerequisite: ENG 097 or entrance English score in accordance with approved TCSG admission score levels and RDG 097 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. Homework assignments reinforce classroom learning.

ENG 1012 – Fundamentals of English II 5-0-5
Prerequisite: ENG 1010. Provides knowledge and application of written and oral communications found in the workplace. Topics include: writing fundamentals and speaking fundamentals.

ENG 1101 – Composition and Rhetoric **5-0-5**
Prerequisite: Program admission level language competency or ENG 098 and RDG 098. 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. (Replaces ENG 191 eff 200901) 03142009.

ENG 1102 – Literature and Composition **5-0-5**
Prerequisite: ENG 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. (Replaces ENG 103 eff 200901) 03142009

ENG 1105 – Technical Communications **5-0-5**
Prerequisite: ENG 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.

ENG 2130 – American Literature **5-0-5**
Prerequisite: ENG 1101. A survey of important works in American literature. Includes a variety of literary genres: short stories, poetry, drama, nonfiction, and novels. Emphasized American literature as a reflection of culture and ideas. Topics include: literature and culture; essential themes and ideas; literature and history; research skills; and oral presentation skills.03142009

EST 100 - Introduction to Esthetics **4-2-5**
Prerequisite: Program Admission. Introduces the fundamental theory and practices of the Professional Esthetician. Emphasis will be placed on professional practices and safety. Topics include: state and local laws, rules and regulations, professional image, history of the skin, care and use of cosmetics, bacteriology, sterilization and sanitation, chemistry for estheticians, ingredients and product analysis, and hazardous duty standards act.

EST 101 Anatomy and Physiology of the Skin **5-0-5**
Prerequisite: EST 100. Introduction to anatomy and physiology; disorders of the skin and nutrition and health of the skin. Topics include: cells/tissues/organs, skeletal system, muscular system, nervous system, circulatory system, endocrine system, excretory system, respiration system, digestive system, structure of the skin, disorders of the skin, and nutrition and health of the skin.

EST 102 – Skin Care Procedures **1-12-6**
Prerequisite: EST 101. Introduces the theory, procedures, and products used in the care and treatment of the skin. Topics include: client consultation and preparation, cleansing the skin, techniques for professional massage, facial treatments and body treatments, aromatherapy, body wraps, reflexology, and air borne and blood borne pathogens and OSHA updates

EST 103 – Electricity and Facial Treatments with Machines **2-12-7**
Prerequisite: EST 102. Provides instruction on and application of techniques and theory in the treatment of the skin. Topics include: skin analysis equipment, basic skin care products, basic electricity, men's skin care products, post consultation and home care, mechanical versus chemical exfoliations, microdermabrasion, and advanced product types and features.

EST 104 – Advanced Skin Care **1-11-5**
Prerequisite: EST 103. Provides instruction on and application of techniques and theory in the treatment of the skin. Topics include: intrinsic aging, analysis of sensitive skin, treatment for hyperpigmentation, causes of acne, methods of holistic therapy, joining a medical team, and preoperative and postoperative care.

EST 105 – Color Theory and Makeup **1-8-4**
Prerequisite: EST 102; Corequisite: EST 103, EST 104. Provides instruction on and application of techniques and theory in the treatment of the skin. Topics include: morphology of hair, hair removal, sanitation, eyebrow shaping, waxing, ingrown hair service, color theory, face proportions and shape, choosing and using makeup products, makeup tools, basic makeup application, camouflage therapy, and medical application

EST 106 – Practicum I **0-18-6**
Prerequisite: EST 105. Provides laboratory experience necessary for the development of skill levels to be a competent esthetician. The allocation of time to the various phases of esthetics is prescribed by the state board of cosmetology. This course includes a portion of the hours for licensure. Topics include: body treatments, aromatherapy, reflexology, facials, and hair removal.

EST 107 – Practicum II **0-18-6**
Prerequisite: EST 106. Provides experience for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of conduct and positive attitudes. The requirements for this course will be met in a laboratory setting. Topics include: body treatments, aromatherapy, reflexology, facials, and hair removal.

FIN 191 – Introduction to Finance **5-0-5**
Provides an introduction to financial markets, institutions, and management in contemporary society. Emphasis is placed on developing an understanding of the financial markets in which funds are traded, the financial institutions participating in facilitating the trade of such funds, and the financial principles and concepts behind sound financial management. Topics include: the financial systems of the United States, business finance management, financing of other sectors of the economy, and the time value of money.

FSC 101- Introduction to the Fire Service **5-0-5**
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.

FSC 102 – Basic Firefighter - Emergency Services Fundamentals **3-2-4**
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 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: Infection Control CPR First Aid ICS-100 IS-700 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.

FSC 103 – Basic Firefighter – Module I **3-6-6**
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 fire ground. Basic knowledge and skills will be provided to the candidate/recruit so they can achieve the tactical priorities through various fire ground operations such as: response and size-up, forcible entry, ladders, search and 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: 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 requirements.

FSC 104 – Basic Fire Fighter - Module II 2-4-4
Prerequisite: FSC 102, FSC 103. This course builds from the skills and knowledge in Module I and provides the knowledge and skills to support the fire ground techniques learned in the previous courses. The firefighter will learn various uses of ropes and knots and how to hoist fire fighting tools and equipment. The firefighter will also gain the knowledge and skills of building construction principles that will be used throughout their firefighting career to identify building conditions such as: fire spread and travel, how and where to ventilate, indications of potential building collapse, etc. The firefighter will learn survival techniques that will be used throughout their career to help keep themselves safe and how to rescue themselves or another firefighter. Firefighter rehabilitation will be discussed during this course, so that the firefighter will know how and when to properly rehab themselves before, during, after an emergency response. Knowledge of fire suppression systems will be discussed, so that the firefighter will have a basic understanding of the components of a fire detection, protection, and suppression system. Basic cause determination will be discussed so that firefighters will be aware of observations during various phases of fire ground operations. Finally to complete the Firefighter I program the firefighter will participate in the following "live fire" scenarios in order to complete the objectives of the program. Exterior Class A Fire Interior Structure Attack – Above Grade Level Interior Structure Attack – Below Grade Level Vehicle Fire Dumpster Fire 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: NPQ – Fire Fighter 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 requirements.

FSC 105 – Fire and Life Safety Educator I 5-0-5
Most structural fires, fire deaths and fire injuries occur in the home. This course addresses some of the most important responsibilities of the modern fire service; teaching the public to prevent or if needed, escape fires and related emergencies. We have adopted the approach that we must learn from each incident then put the information to work to prevent fires and fire losses through public fire and life safety education. Topics include: general requisite knowledge, administration, planning and development, education and implementation, and evaluation.

FSC 106 Fire Prevention, Preparedness, and Maintenance 3-2-4
This course expands upon knowledge from FSC 102, FSC 103 and FSC 104 and will emphasize pre-incident survey, maintenance and testing of various fire service tools and equipment, service testing of fire hose, and testing of fire hydrants for operability and flow. This is one of three courses designed to give the Fire Fighter I the knowledge and skills for testing at the NPQ FF-2 Level. 03142009

FSC 108 - Fire Ground Operations 3-2-4
Emphasizes skill development for safe fire ground operations to include: communications of the fire incident; attack and extinguishment of interior structural fire; extinguishment of ignitable liquid fire; and the control of a flammable gas cylinder fire. The documentation and reporting of fire incidents is also included in this course.

FSC 109 - Introduction to Technical Rescue 4-2-6
This course will expand upon knowledge from FSC 102, FSC 103 and FSC 104 and will emphasize duties involved in performing activities related to accessing and disentangling victims from motor vehicle accidents and helping special rescue teams. This is 1 of 3 courses designed to give the Fire Fighter 1 the knowledge and skills for testing for the NPQ FF-2 Level.

FSC 110 – Fire Administration - Supervision and Leadership 5-0-5
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 record's 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: NFA – Leadership I NFA – Leadership II 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.

FSC 121 - Firefighting Strategy and Tactics 5-0-5
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 fire fighting, 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.

FSC 132 – Fire Service Instructor **4-2-5**

Prerequisite: 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 FSC 132 are qualified to test for the National Professional Qualification (NPQ) Fire Instructor I Exam.

FSC 141 – Hazardous Materials Operations **4-2-5**

Prerequisite: NPQ FF I; 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.

FSC 145 - Chemistry of Hazardous Materials **4-2-5**

Prerequisite/Corequisite: Fire service employee/volunteer or FSC 101. Emphasis is placed on the shared responsibility of all fire service personnel to prevent fires and fire losses. Topics include: survey of fire prevention activities, conducting basic fire prevention inspections, life safety code, review of local and state laws regarding fire inspection, and review of applicable codes and standards.

FSC 151 - Fire Prevention and Inspection **4-2-5**

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 FSC 151 qualifies individuals to test for the National Professional Qualification (NPQ) Inspector Level-I examination.

FSC 161 – Fire Service Safety and Loss Control **5-0-5**

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 will be covered to provide general knowledge and basic skills on occupational health and 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.

FSC 201 – Fire Administration – Management 5-0-5
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 it's 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 every day. 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.

FSC 210 - Fire Service Hydraulics 5-0-5
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.

FSC 220 – Fire Protection Systems 5-0-5
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, no water-based suppression systems, fire alarm systems, smoke management systems, and portable fire extinguishers.

FSC 230 – Fire Service Building Construction 5-0-5
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.

FSC 241 – Incident Command 4-2-5
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 non-governmental organizations to work together during virtual all domestic incidents. These course competencies will cover those objectives entailed in NIMS 100, 200, 700, and 800.

FSC 260 - Fire Service Information Management 5-0-5
This course begins with the fundamentals of information gathering and report writing as they apply to the fire service then narrows its scope to include specific types of record keeping. Topics include Introduction to Management Information Systems, Introduction to Microcomputers, Introduction to Technical Writing, Fire Loss Investigations, Collecting Fire Data, National Fire Incident Reporting System, Introduction to Statistics Terminology, Use of Fire Loss Information, Fire Hazard Assessment, Fire Risk Analysis, Fire Service Computer Modeling, Fire Department Data and Management (includes several specific fire department information management tasks), and Public Information Management. Applicable laws, standards, procedures, and recommendations will be reviewed, and a demonstration of the use of computers for each operation will be included as the topics are covered.

FSC 270 – Fire/Arson Investigation **4-2-5**
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, Techniques used in fire deaths and injuries, arson as a crime, other techniques, State and Federal laws, and future trends in fire investigative technology.

FSC 280 - Fire Service Law **5-0-5**
Presents an introduction to Fire Service Law. Emphasis is placed upon basic principles of law, various legal cases with outcomes of interpretations of the law, civil actions against fire and emergency service organizations, criminal actions against firefighters, negligence actions, discrimination based on Title VII of the Civil Rights Act, ADA, worker's compensation, F.L.S.A., liabilities in termination of employment, Family and Medical Leave Act, O.S.H.A., other codes, product liabilities, age discrimination, labor and employment laws, collective bargaining and general overview of other legislation affecting the fire service. The course includes a review of the court jurisdiction system.

FST 210 – Crime Scene Investigation **4-3-5**
Prerequisite: FST 206. Examines the principles of forensic science specifically the various types of physical evidence, classification of evidence and the role of physical evidence in criminal investigation. Topics include: Class and individual characteristic evidence, identification of fingerprint patterns, development of latent fingerprints, plaster casting, trace evidence, drug identification biological evidence, firearms identification, toxicology, questioned documents and forensic pathology. An explanation of crime laboratory services, physical evidence examination, and the function evidence provides in criminal investigation are additional topics.

FST 211 - Crime Scene Investigation II **4-3--5**
Prerequisite: FST210 Crime Scene Investigation . This course explores the concepts and investigative techniques associated with crime scene reconstruction. This course will offer the student an introduction into crime scene reconstruction. Specifically the course will include an in-depth study of blood pattern analysis, crime scene documentation, pattern evidence, firearms trajectories, wound characteristics, and report preparation.

FST 212 – Interview and Interrogation Techniques **3-6-5**
Examines the practical aspects of interviewing and interrogation in both the public and private sector. Topics include: Distinguishing between interviewing and interrogation, interviewing victims, witnesses, and suspects, human behavior, preparation, interview environment, behavior symptoms, structured questioning techniques, statement analysis, interrogation strategy, methods of recording, legal requirements, documentation, and hypnosis.

FST 214 - Document and Report Preparation **4-3-5**
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.

FST 215 - Case Preparation and Courtroom Testimony **3-6-5**
Examines the case file preparation, pre-trial conference, criminal procedure, rules of evidence and testifying. Topics include: Case file structure, investigative summaries, property and evidence receipts, witness statements, reports, witness list exhibit list, identifying the officers responsibilities prior to, during and after trial. The sequence and procedure of the criminal trial process, with emphasis on effective testimony and witness credibility practicals.

FST 230 – Criminal Procedure **5-0-5**
Introduces the substantive law of major crimes against persons and property. Attention is given to the conduct 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 appropriate Supreme Court rulings.

HIS 1111 World History I **5-0-5**
This course is a 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.

HIS 1112 – World History II **5-0-5**
The course is a 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. 03142009

HIS 2111 – U.S. History I. 5-0-5
This course is a survey 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. 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. 03142009

HIS 2112 – U.S. History II 5-0-5
This course will provide an overview 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. 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. 03142009

HIT 1100 - Introduction to Health Information Technology 2-2-3
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).

HIT 1150 - Computer Applications In Healthcare 2-2-3
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.

HIT 1200 - Legal Aspects in Healthcare 2-2-3
Prerequisites: SCT 100. 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.

HIT 1250 - Health Record Content and Structure 3-4-5
Prerequisites: HIT 1100. 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.

HIT 1350 - Pharmacotherapy 3-0-3
Prerequisite: BUS 2300 or AHS 109. 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.

HIT 1400 - Coding and Classification I – ICD Coding 2-4-4
Prerequisite: BIO 2114 or AHS1011, AHS 109 or BUS 2300, HIT 1350 Co requisite: MAS 112 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.

HIT 1410 - Coding and Classification II –ICD Coding Advanced 2-2-3
Prerequisite: HIT 1400. 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.

HIT 2150 - Healthcare Statistics 5-0-5
*Prerequisites: MAT 1111, HIT 1100, HIT 1250.*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.

HIT 2200 - Performance Improvement 3-0-3
*Prerequisites: HIT 1100, HIT 1250.*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 government's role in health care and accreditation requirements of various agencies.

HIT 2300 - Healthcare Management 3-4-5
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.

HIT 2400 - Coding and Classification System III – CPT/HCPCS Coding 2-4-4
Prerequisites: HIT 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

HIT 2410 - Revenue Cycle Management 2-2-3
Prerequisites: HIT 2400. This course focuses on how the revenue cycle is impacted by various departments within the facility such as patient access/registration, case management/quality 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.

HIT 2450 - Health Information Technology Practicum I 0-9-3
Prerequisites: HIT 1200, HIT 1250, HIT 1410, HIT 2400. This is a supervised internship in acute care and alternative care settings. This course will prepare the student to perform the basic functions and tasks of a health information department in a traditional hospital setting and alternative care settings. Activities will include application of health information management procedures learned in the classroom and lab. The HIT program director and the health care facility staff will guide the student in accomplishing the objectives set forth in the Professional Practice Experience Handbook. This course is designed to help the student gain entry-level competences as set forth by the American Health Information Management Association (AHIMA).

HIT 2460 - Health Information Technology Practicum II 0-12-4
Prerequisites: HIT 1200, HIT 1250, HIT 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 HIT coursework. The student will also learn professional skills to prepare them for employment in the HIM career field.

HIT 2500 - Professional Seminar 3-4-5
Prerequisites/Corequisite: HIT 1250, HIT 2400, HIT 2410. 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.

HUM 1101 – Introduction to Humanities 5-0-5
Prerequisite: ENG 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 project.

ICT 205 - Fund of Pressure, Temp., Flow and Level 1-5-3
An introduction to the concepts of pressure/level/flow/temperature calculations and conversions; operating principles of indicators, recorders, transmitters, and transducers. Measure pressure/level/flow/temperature using various indicators and recorders. Develop troubleshooting techniques for various devices.

ICT 207 - Maintenance and Calibration 5-5-7
Introduces methodology into maintenance procedures for various process control systems that will include preventive as well as predictive methodologies. Provides an in-depth study of calibration theory, procedures and techniques using diverse associated test equipment.

ICT 209 - Final Control Elements 3-5-5
Includes the principles of operation, calibration, servicing, troubleshooting, repair and replacement of actuators/positioners/control valves.

IDS 101 – Industrial Computer Applications 3-5-5
Prerequisite: IFC 101, SCT 100. 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.

IDS 102 - Print Reading and Problem Solving 3-2-4
Prerequisite: Program Ready. 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.

IDS 103 - Industrial Wiring **3-9-6**
Prerequisite/Corequisite: IFC 101, IFC 102. 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.

IDS 104 - Electricity **5-5-7**
Provides an overview of applied electricity for technical and industrial applications: topics include electrical units and principles, applied DC circuits, applied AC circuits, common transformers, single phase circuits, three phase circuits, introduction to troubleshooting and common industrial motors/motor controls. The course emphasizes basic electrical terminology and associated problem solving in electrical technology. Competencies are reinforced with practical hands on lab exercises and use of electrical meters.

IDS 105 - DC and AC Motors **2-3-3**

Prerequisite: Corequisite: IFC 101, IFC 102. 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.

IDS 107 - Basic Mechanics **3-5-5**
Prerequisite: Provisional Admission. Emphasizes basic skills training needed in mechanical maintenance. Provide instruction for learning common terminology of maintenance and much needed practical measuring/mathematical skills. The course also introduces layout/fabrication procedures focusing on good shop practice skills and addresses typical materials and manufacturing processes used in the plant. Introduces power transmission equipment.

IDS 109 - Mechanical Laws and Principles **5-5-7**
Prerequisite: Provisional Admission. 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.

IDS 110 - Fundamentals of Motor Controls **2-3-3**
Prerequisite/Corequisite: IDS 105. Introduces the fundamental concepts, principles, and devices involved in industrial motor control. Emphasis is placed on developing a theoretical foundation of industrial motor control devices. Topics include: principles of motor control, control devices, symbols and schematic diagrams, and Article 430 NEC.

IDS 113 - Magnetic Starters and Braking **1-5-3**
Prerequisite/Corequisite: IDS 110. 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.

IDS 115 - Two-Wire Control Circuits **0-5-2**
Prerequisite: Corequisite: IDS 110. Provides instruction in two-wire motor control circuits using relays, contactors, and motor starters, with application sensing devices. Topics include: wiring limit switches, wiring pressure switches, wiring float switches, wiring temperature switches, wiring proximity switches, and wiring photo switches.

IDS 121 - Advanced Motor Controls **1-3-2**
Prerequisite/Corequisite: IDS 115. Continues the study and application of motor control circuits with emphasis on sequencing circuits, complex circuits, and motor control centers. Topics include: sequencing circuits, reduced voltage starting, motor control centers, and troubleshooting.

IDS 131 - Variable Speed Motor Control **2-3-3**
Prerequisite: Corequisite: IDS 121. Provides instruction in the fundamentals of variable speed drives, industrial motors, and other applications of variable speed drives. Topics include: fundamentals of variable speed control, AC frequency drives, DC variable speed drives, installation procedures, and ranges.

IDS 141 – Basic Industrial PLCs **4-6-6**
Prerequisite: IDS 105, IDS 121. Introduces operational theory, systems terminology, PLC installations, and programming procedures for programmable logic controls. Emphasis is placed on PLC programming, connections, installations, and start-up procedures. Topics include: PLC hardware and software, PLC functions and terminology, 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.

IDS 142 – Industrial PLCs **4-6-6**
Prerequisite/Corequisite: IDS 141. Provides for hands-on development of operational skills in the maintenance and troubleshooting of industrial control systems and automated industrial equipment. Emphasis is placed on applying skills developed in previous courses in programmable logic controls (PLC's) in a industrial setting. This course includes advanced skills necessary to complete the students knowledge and skills to understand and work with PLC's in an industrial plant.

IDS 209 - Industrial Instrumentation **4-6-6**
Prerequisite: IDS 141, IDS 142. 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.

IDS 211 - Industrial Pneumatics **3-2-4**
Prerequisite: IMT 113. Provides instruction in fundamental concepts and theories for safely operating pneumatic components and systems. Topics include: pneumatic theory, preventive maintenance, compressors, regulators, pneumatic valves, actuators, servicing safety, and troubleshooting.

IDS 215 - Industrial Mechanics **4-6-6**
Prerequisite: Program admission level math achievement. Provides instruction in basic physics concepts applicable to mechanics of industrial production equipment, and teaches basic industrial application of mechanical principles with emphasis on power transmission and specific mechanical components. Topics include: mechanical tools, fasteners, basic mechanics, lubrication, bearings, packings and seals.

IDS 221 - Industrial Fluidpower **6-4-7**
Prerequisite: Program admission level math achievement. Provides instruction in fundamental concepts and theories for safely operating hydraulic components and pneumatic systems. Topics include: hydraulic theory, suction side of pumps, actuators, valves, pumps/ motors, accumulators, symbols and circuitry, fluids, filters, pneumatic theory, compressors, pneumatic valves, air motors and cylinders, and safety.

IDS 225 - Advanced Pneumatics **3-2-4**
Prerequisite: IDS 215. Provides instruction in advanced concepts and theories for maintaining and troubleshooting pneumatic components and systems. Topics include: control and motion diagrams; sequence control groups; cascade circuits; pneumatic sequencers; ISO symbols and schematic conventions; advanced control circuits, electropneumatic controls and troubleshooting procedures.

IDS 231 - Pumps and Piping Systems **1-4-2**
Prerequisite: Program admission level math achievement. Studies the fundamental concepts of industrial pumps and piping systems. Topics include: pump identification; pump operation; pump installation, maintenance, and troubleshooting; piping systems; and installation of piping systems.

IDS 241: Maintenance for Reliability **4-6-7**
Prerequisite/Corequisite: IDS 221, IFC-101, IFC-102. 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.

IDS 270 – Advanced PLC's I **5-5-7**
Prerequisite: IDS 142. 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 (PLC's) in an industrial setting. This course includes advanced skills and techniques the students can apply to actual control applications in an industrial environment.

IDS 273 – Advanced PLC's II **5-5-7**
Prerequisite: IDS 270. 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.

IDS 275 – Human Machine Interface **5-5-7**
Prerequisite: IDS 273. 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 (PLC's) in an industrial setting. This course includes advanced skills and techniques the student can apply to HMI applications in an industrial environment.

IDS 280 – Advanced Process Control **5-5-7**
Prerequisite: IDS 275. Teaches advanced process control skills to include Process control drawings, PID control, advanced loops and tuning, Process controllers, DCS systems, and SCADA systems. The student will be introduced to the fundamentals, devices and methods use in today's advanced process systems.

IDS 283 – Networking Industrial Equipment 5-5-7
Prerequisite: IDS 280. Provides communication and networking skills needed for cabling and connection to PLC/HMI Devices.

IDS 285 – Industrial Graphical Communications 5-5-7
Prerequisite: IDS 283. Provides hands on experience in the development and implementation of graphical computer based HMI (Human-Machine Interfaces) for control of automated machines and industrial manufacturing systems. This course is built on the user's knowledge/familiarity of programmable logic controls (PLC's) 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.

IFC 100 – Industrial Safety Procedures 2-1-2
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.

IFC 101 - Direct Current Circuits I 3-2-4
Prerequisite/Corequisite: MAT 101 or MAT 103 or Higher. 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. 03102009

IFC 102 - Alternating Current I 3-2-4
Prerequisite: IFC 101. Introduces the theory and application of varying sine wave voltages and current. Topics include: magnetism, AC wave generation, AC test equipment, inductance, capacitance, and basic transformers. 03102009

IFC 103 - Solid State Devices 3-2-4
Prerequisite/Corequisite: IFC 102. Introduces the physical characteristics and applications of solid state devices. Topics include: introduction to semiconductor fundamentals, diode applications, basic transistor fundamentals, basic amplifiers, and semiconductor switching devices. 03102009

IMT 126 - Programmable Logic Control Practicum 1-9-4
Prerequisite/Corequisite: ELT 114. Provides for hands-on development of operational skills in the maintenance and troubleshooting of automated industrial machinery. Emphasis is placed on applying skills developed in previous courses in programmable logic control (PLC) in an industrial setting. Topics include: hard-wiring PLC equipment, writing and executing programs, and troubleshooting PLC circuits. 03102009

MAS 101 - Legal Aspects of the Medical Office 3-0-3
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. 03102009

MAS 103 – Pharmacology 5-0-5
Prerequisite: AHS 1011 (diploma) or BIO 2113 and BIO 2114 (degree), AHS 109, MAT 1012 (diploma) or MAT 1111 or MAT 1101 (degree). Introduces drug therapy with emphasis on safety, classification of drugs, their action, side effects, and/or adverse reactions. Also introduces the basic concept of arithmetic used in the administration of drugs. Topics include: introduction to pharmacology; calculation of dosages; sources and forms of drugs; drug classification; and drug effects on the body systems.

MAS 106 – Medical Office Procedures 4-2-5
Prerequisite: Program admission; *Prerequisite/Corequisite*: BUS 1130. 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. 03102009

MAS 108 - Medical Assisting Skills I 2-10-6
Prerequisite: Program Admission, AHS 1011 (diploma) or BIO 2113 and BIO 2114 (degree), AHS 109; Corequisite: AHS 104, MAS 103. 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. 03102009

MAS 109 - Medical Assisting Skills II **2-10-6**
Prerequisite: MAS 103, MAS 108. 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.

MAS 110 - Medical Insurance Management **1-5-3**
Prerequisite: Program Admission, AHS 1011 (diploma) or BIO 2113 and BIO 2114 (degree), AHS 109, MAS106; Corequisite: MAS 103, MAS 111, MAS 112. Emphasizes essential skills required for the medical practice. Topics include: managed care, reimbursement, and coding. 03102009

MAS 111 - Administrative Practice Management **2-5-4**
Prerequisite: ENG 1101, AHS 1011 (diploma) or BIO 2113 and BIO 2114 (degree),, AHS 109, BUS 1130, SCT 100; Corequisite: MAS 103, MAS 106, MAS 110. 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. 03102009

MAS 112 – Human Diseases **5-0-5**
Prerequisite: AHS 1011 (diploma) or BIO 2113 and BIO 2114 (degree), AHS 109. Provides clear, succinct, and basic information about common medical conditions. Taking each body system, the disease condition is highlighted following a logical formation consisting of: description, etiology, signs and symptoms, diagnostic procedures, treatment, prognosis, and prevention. Topics include: introduction to disease and diseases of body systems.

MAS 117 - Medical Assisting Externship **0-24-8**
Prerequisite: Completion of all required courses except MAS 118; Corequisite: MAS 118. Provides students with an opportunity for in-depth application and reinforcement of principles and techniques in a medical office job setting. This clinical practicum allows the student to become involved in a work setting at a professional level of technical application and requires concentration, practice, and follow-through. Topics include: application of classroom knowledge and skills; functioning in the work environment; communication; and following directions. 03102009

MAS 118 - Medical Assisting Seminar **4-0-4**
Prerequisite: Completion of all required courses except MAS 117; Corequisite: MAS 117. Seminar focuses on job preparation and maintenance skills and review for the certification examination. Topics include: letters of application, resumes, job applications, job interviews, letters of resignation and review of program competencies for employment and certification. 03102009

MAS 151 - ICD-9-CM Coding I **3-0-3**
Prerequisites/Corequisites: AHS 1011 (diploma) or BIO 2113 and BIO 2114 (degree), AHS 109, MAS 112, ENG 1010 (diploma) or ENG 1101 (degree). Provides an introduction to medical coding skills and application of international coding standards for billing of health care services. Topics include: international classification of diseases, codebooks format, guidelines and conventions, and coding techniques. 03102009

MAS 152 - ICD-9 Coding II **2-3-3**
Prerequisite: MAS 151. Continues development of skills and knowledge presented in Medical Procedures 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 hospital records, and coding outpatient records. 03102009

MAS 153 - Physicians' Procedural Coding **3-0-3**
Prerequisites: MAS 151. 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. 03102009

MAT - 095 – Learning Support Mathematics I **5-0-5IC**
Prerequisite: Entrance arithmetic score in accordance with approved DTAE admission score levels. Introduces elementary arithmetic needed for advancement to the level of basic mathematics. Topics include: standard notation, addition and subtraction of whole numbers, multiplication and division of whole numbers, rounding and estimating whole numbers, solving equations, applications and problem solving, exponential notation and order of operations, factorizations, divisibility, and least common multiples. 03102009

MAT 096 - Learning Support Mathematics II **5-0-5IC**
Prerequisite: MAT 095, or entrance arithmetic score in accordance with approved TCSG admission score levels. Teaches the student basic arithmetic skills needed for the study of mathematics related to specific occupational programs. Topics include: number theory, whole numbers, fractions, decimals, measurement, and word problems. Homework assignments reinforce classroom learning.

MAT 097 - Learning Support Mathematics III **5-0-5IC**
Prerequisite: MAT 096 or entrance arithmetic score in accordance with approved TCSG admission score levels. Emphasizes in-depth arithmetic skills needed for the study of mathematics related to specific occupational programs and for the study of basic algebra. Topics include: whole numbers, fractions, decimals, percents, measurement, geometry, and application problems.

MAT 098 - Elementary Algebra **5-0-5IC**
Prerequisite: MAT 097 or entrance arithmetic score in accordance with approved TCSG admission score levels. This course provides instruction in basic algebra. Topics include: introduction to real numbers and algebraic expressions, solving equations and inequalities, graphs of linear equations, polynomial operations, and polynomial factoring.

MAT 099 - Intermediate Algebra **5-0-5IC**
Prerequisite: MAT 098 or MAT 1013 or entrance score in accordance with approved TCSG admission score levels. This course provides instruction in intermediate algebra. Topics include: factoring, inequalities, rational expressions and equations, linear graphs, slope, and applications, systems of equations, radical expressions and equations, and quadratic equations.

MAT 1011 – Business Math **5-0-5**
Prerequisite: MAT 097 or entrance arithmetic score in accordance with approved TCSG admission score levels. Emphasizes mathematical concepts found in business situations. Topics include: basic mathematical skills, mathematical skills in business-related problem solving, mathematical information for documents, graphs, and mathematical problems using electronic calculators (not to include the touch method).

MAT 1012 – Foundations of Mathematics **5-0-5**
Prerequisite: MAT 097 or entrance arithmetic score in accordance with approved TCSG admission score levels. 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.

MAT 1013 – Algebraic Concepts **5-0-5**
Prerequisite: MAT 098 or entrance algebraic score in accordance with approved TCSG admission score levels. Introduces concepts and operations which can be applied to the study of algebra. Course content emphasizes: basic mathematical concepts; basic algebraic concepts; and intermediate algebraic concepts. Class includes lecture, applications, and homework to reinforce learning.

MAT 1015 - Geometry and Trigonometry **5-0-5**
Prerequisite: MAT 1013. Introduces and develops basic geometric and trigonometric concepts. Course content emphasizes: geometric concepts and trigonometric concepts. 03102009

MAT 1017 – Trigonometry **5-0-5**
Prerequisite: MAT 1013 with a passing grade of C or better. Emphasizes trigonometric concepts. Introduces logarithms and exponential functions. Topics include: geometric formulas, trigonometric concepts, and logarithms and exponentials. 03102009

MAT 1100 – Quantitative Skills and Reasoning **5-2-6**
Prerequisite: Program admission requirements or MAT 098 and/or MAT 1013 with a passing grade of C or better. Overview course covering 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.

MAT 1101 – Mathematical Modeling **5-0-5**
This course is designed as an alternative to College Algebra for those students who will not take Trigonometry, Precalculus, or Calculus. It is an applications-driven course that introduces functions using real-world phenomena as models. Topics include: fundamental concepts of algebra; functions and graphs; linear, quadratic, polynomial, exponential, and logarithmic functions and models of real-world phenomena; systems of equations; and additional topics in algebra.

MAT 1111 – College Algebra **5-0-5**
Prerequisites: MAT 099 with a grade of "C" or better and required Posttest score or MAT 1013 with a grade of "C" or better and required Posttest score or program ready status in Numerical and Intermediate Algebra Skills based on required placement test scores. This course emphasizes techniques of problem solving using algebraic concepts. Topics include: fundamental concepts of algebra; equations and inequalities; functions and graphs; systems of equations; optional topics including sequences, series, and probability; and analytic geometry.

MAT 1112 – College Trigonometry **5-0-5**
Prerequisite: MAT 1111. Emphasizes techniques of problem solving using trigonometric concepts. Topics include: trigonometric functions, properties of trigonometric functions, vectors and triangles, inverse of trigonometric functions/graphing, logarithmic and exponential functions, and complex numbers. 03102009

MAT 1113 – Precalculus **5-0-5**
Prerequisite: MAT 1111. This course 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. 03102009

MAT 1127 – Introduction to Statistics **5-0-5**
Prerequisite: Program admission level Math achievement. Discusses 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. 03102009

MAT 1131 - Differential Calculus **5-2-6**
Prerequisite: MAT 1113. Emphasizes the use of differential calculus. Applications of techniques include extreme value problems, motion, graphing, and other topics as time allows. Topics include: derivatives and applications, differentiation of transcendental functions, and introduction to integration and applications.

MCA 201 – Advanced Milling I **5-5-7**
Prerequisite: MCH 115, MCH 116. Provides instruction in advanced techniques of milling machine operations. Emphasis is placed on skill development through laboratory practice. Topics include: vertical milling, horizontal milling, compound angles, gear cutting, and safety. 03102009

MCA 203 - Advanced Milling II **3-7-6**
Prerequisite: MCA 201. Provides instruction in advanced techniques of milling machine operations. Emphasis is placed on skill development through laboratory practice. Topics include: indexing; rotary table; boring, facing, and turning; straddle milling, and safety. 03102009

MCA 207 – Advanced Lathe Operations II **3-7-6**
Prerequisite: MCA 205. Provides instruction in advanced lathe operations and procedures. Emphasis is placed on skill development through laboratory experiences. Topics include: eccentric turning, special setups, tolerance turning, and safety. 03102009

MCA 208 – Advanced Grinding I **1-4-3**
Prerequisite: MCH 112. Provides instruction in advanced grinding operations and procedures. Emphasis is placed on skill development through laboratory experiences. Topics include: surface grinding, cylindrical grinding, tool and cutter grinding, grinding theory, and safety. 03102009

MCA 209 - Advanced Grinding II **2-3-3**
Provides instruction in advanced grinding techniques and procedures. Emphasis is placed on skill development through laboratory experiences. Topics include: grinding theory, abrasives, wheel preparation, and form grinding.

MCA 211 – CNC Fundamentals **4-6-7**
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.

MCA 213 – CNC Mill Manual Programming **4-6-7**
Prerequisite/Corequisite: MCA 211. Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) milling machines. Topics include: safety, calculations for programming, program codes and structure, program run and editing of programs.03102009

MCA 215 – CNC Lathe Manual Programming **4-6-7**
Prerequisite: MCA 211. 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. 03102009

MCA 217 – CNC Practical Applications **1-9-4**
Prerequisite/Corequisite: MCA 211, MCA 213, MCA 215. Provides additional instruction in part holding and fixture design. Students will also gain addition experience in print-to-part development of CNC programming. Topics include: safety, fixture design and manufacturing, and CNC part manufacturing. 03102009

MCA 219 – CAD/CAM Programming **2-8-6**
Prerequisite/Corequisite: MCA 211. Emphasizes the development of skills in computer aided design (CAD) and computer aided manufacturing (CAM). The student will design and program parts to be machined on computer numerical controlled machines. Topics include: hardware and software, drawing manipulations, tool path generation, program posting, and program downloading. 03102009

MCA 220 - Die Design I **5-5-7**
Prerequisites: MCH 116. Provides instruction in design, construction, selection, and safe use of dies required for mass production. Topics include: die sets, die blocks, punches, types of dies, blanking, bending, types of presses, tool and die drafting, related math, and safety. 03142009

MCA 221 - Die Construction I **2-8-5**
Prerequisite: MCA 220. Provides practical application for theory and competency areas addressed in MCA 220 Die Design I. Students will be assigned the manufacture of punches and dies utilizing a variety of advanced machines. Topics include: jig bore, EDM, indexing, fixtures, precision grinding, and safety. 03142009

MCA 223 - Die Design II **5-5-7**
Prerequisite: MCA 221. Provides a continuation of MCA 220. More advanced theory and projects will be presented. Topics include: related formulas, calculation of bends, draw die calculation, fasteners, spring selection, and safety. 03142009

MCA 224 - Die Construction II **2-8-5**
Prerequisite: MCA 223. Provides practical application of theory and competencies in MCA 223. Topics include: application of related formulas, calculations and manufacture of bends, draw die manufacture, manufacture of fasteners, spring selection, and safety. 03142009

MCA 226 - Machining Math III **5-0-5**
Prerequisite: MCH 104 or MAT 105. Provides a continuation of advanced machining mathematics principles. Topics include: interpolation of compound angles, advanced algebraic equations, compound and complex geometric functions, and advanced trigonometry. 03142009

MCA 228 - Characteristics of Metals/Heat Treatment II **4-1-4**
Prerequisite: MCH 107. Emphasizes selection of proper tool steel for specific tooling operations and proper heat treating procedure of tool steels. Topics include: effects of alloy components in tool steel, identification of tool steel alloys, identification of tool steel by classification, and correct heat treatment procedures.

MCH 101 - Introduction to Machine Tool **2-8-6**
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 bandsaw setup and operation, drill press setup and operation, and quality control. 03142009

MCH 102 - Blueprint Reading I **5-0-5**
Prerequisite: Provisional admission. Introduces the fundamental concepts necessary to interpret drawings and produce sketches for machine tool applications. Topics include: interpretation of blueprints and sketching. 03142009

MCH 103 – Applied Measurement **5-0-5**
Prerequisite: Program admission. This course is designed to develop skills necessary for the use and analysis of measurement for Machine Tool Technology and other industrial purposes. Topics include the use of non-precision measuring instruments, use of precision measuring instruments, use of comparison gauges, and analysis of measurements.

MCH 104 - Machine Tool Math I **5-0-5**
Prerequisite: MAT 1012. Develops mathematical competencies as applied to machine tool technology. This course emphasizes manipulation and use of machining formulas and the discussion of machining geometry. Topics include: machining algebra and machining geometry.

MCH 105 - Machine Tool Math II **5-0-5**
Prerequisite: MCH 104. Continues the development of mathematics competencies as applied to machine tool technology. Emphasis is placed on the uses of geometric and trigonometric principles in machining. Topics include: advanced applied geometry and applied trigonometry.

MCH 106 – Welding for Machine Tool **0-2-1**
Prerequisite: Provisional admission. Introduces basic welding skills necessary for use in machine tool applications. Topics include: arc welding and gas welding.03142009

MCH 107 - Characteristics of Metals/Heat Treatment I **3-2-4**
Prerequisite: Provisional admission. Introduces the properties of various metals, production methods, and identification of ferrous and nonferrous metals. Topics include: heat treatment safety, metallurgy principles and heat treatment of metals. 03142009

MCH 109 - Lathe Operations I **2-8-6**
Prerequisite: Provisional admission. 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. 03142009

MCH 110 - Lathe Operations II **2-8-6**
Prerequisite: MCH 109. Provides further instruction for students to develop skill in the use of metal cutting lathes. Topics include: safety, advanced lathe setup, internal bores, internal threads, process planning, and mating parts manufacturing. 10092007

MCH 112 - Surface Grinder Operations **1-4-3**
Prerequisite: Provisional admission. Provides instruction in the setup, operations, maintenance, and assembly operations of surface grinders. Topics include: surface grinders and surface grinder maintenance, surface grinder setup, and surface grinder operations, and safety.

MCH 114 - Blueprint Reading II **5-0-5**
Prerequisites: MCH 102, MCH 104. Continues the development of blueprint reading competencies as applied to Machine Tool Technology. Topics include: advanced sectioning, geometric dimensioning, geometric tolerancing, and assembly drawings. 10092007.

MCH 115 - Mill Operations I **2-8-6**
Prerequisite: Provisional admission. Provides instruction in the setup and use of the milling machine. Topics include: safety, milling machines, milling machine setup, and milling machine operations. 03142009

MCH 116 - Mill Operations II **2-8-6**
Prerequisite: MCH 115. Provides further instruction for students to develop skills in the use of milling machines. Topics include: safety, advanced milling calculations, advanced milling machine setup and operations. 03142009

MCH 118 - Computer/CNC Literacy **5-0-5**
Provides an introduction to the terminology and application of microcomputers and terminology associated with computer numerical controlled (CNC) equipment. Students will become familiar with the basic operations of computers and the capabilities and limitations of CNC machinery. Topics include: introduction to microcomputer concepts, basic microcomputer operations, functions and subroutines, machine tool applications, Cartesian coordinates, absolute and incremental programming, and capabilities and limitations of CNC.

MCH 151 - Machine Tool Technology Internship **0-15-5**
Prerequisite: Successful completion of all required course work in a Machine Tool Technology. Provides for student work experience in an occupational environment. Topics include: work skills development and personal skills development. Students will be under the supervision of the Machine Tool Technology program faculty and/or persons designated to coordinate work experience arrangements.

MCH 152 - Industrial Machine Applications **2-8-6**
Prerequisites: MCH 110, MCH 112, MCH 116. Provides an opportunity to perform creative and critical thinking skills needed to fabricate, modify, and maintain complex machine assemblies. Emphasis is placed on bench work, lathe, mill, and grinder operations; tool selection; and sequencing fabrication operations. Topics include: job planning, preparation for machining operations, and machining operations. 10092007

MCH 153 - Sawing and Drilling **1-2-2**
Prerequisite: Provisional admission. Introduces the basic knowledge and techniques for sawing and drilling machines operation. Topics include: saw selection, blade selection, feed and speeds determination, use of coolants, saw and saw blade maintenance, sawing operations, drilling set up, determining desired drilling operation from blueprints, and operating drilling machines. 03142009

MKT 100 - Introduction to Marketing **5-0-5**
Prerequisite: Provisional admission. Emphasizes the trends and the dynamic forces that affect the marketing process and the coordination of the marketing functions. Topics include: marketing strategies, marketing mix, marketing trends, and dynamic forces affecting markets. 03142009

MKT 101 - Principles of Management **5-0-5**
Prerequisite: ENG 1010 (diploma), ENG 1101 (degree). Develops skills and behaviors necessary for successful supervision of people and job responsibilities. Emphasis will be placed on personnel management, the basic supervisory functions, supervisory skills and techniques, and the special challenges and demands of supervising employees. Topics include: management theories, including total quality management; morale; motivation, supervision, and evaluation of employees; recruitment, screening, and selection of employees; supervision techniques; and functions of management. 03142009

MKT 103 - Business Law **5-0-5**
Prerequisite: Provisional admission. Introduces the study of contracts and other business obligations in the legal environment. Topics include: creation and evolution of laws, court decision processes, sales contracts, commercial papers, risk-bearing devices, and Uniform Commercial Code. 03142009

MKT 104 - Principles of Economics **5-0-5**
Prerequisite: Program admission level math achievement. Provides a study of micro and macro economic principles, policies, and applications. Topics include: supply and demand, money and the banking system, business cycle, and economic systems. 03142009

MKT 106 - Fundamentals of Selling 5-0-5
Prerequisite: Provisional admission. Emphasizes sales strategies and techniques, to assist the student in the sales process. Topics include: customer relations, professional image, product/service knowledge, selling techniques and procedures, sales presentations, and ethics of selling. 03142009

MKT 107 - Buying 5-0-5
Prerequisite: Program admission level math achievement. Introduces the fundamental principles of buying, merchandising, and accounting for products and services. Topics include: assortment planning; locating resources; ordering merchandise; just –in-time or quick response inventory control; pricing for profit; and financial statements, ratios, and accounting vocabulary.03142009

MKT 108 - Advertising 3-2-4
Prerequisite: Program admission. Introduces the fundamental principles and practices associated with advertising activities. Topics include: purposes of advertising, principles of advertising, budgeting, marketing and advertising plans, regulations and controls, media evaluation, target marketing and selection, campaign planning, and trends in advertising.03142009

MKT 109 - Visual Merchandising 3-2-4
Prerequisite: Provisional admission. Focuses on the components of display necessary for the effective visual presentation of goods and services. Opportunities will be provided to utilize the principles and techniques that are common to display work in various types of businesses. Emphasis will be placed on design, color, tools and materials, and installation of displays. Topics include: design principles, color principles, tools and materials of the trade, props and fixtures, lighting and signing, installation of displays, store planning, and safety. 03142009

MKT 110 - Entrepreneurship 6-4-8
Prerequisite: Program admission level math achievement. Provides an overview of the activities that are involved in planning, establishing, and managing a small business enterprise. Topics include: planning, location analysis, financing, and development of a business plan. 03142009

MKT 112 - Principles of Banking 5-0-5
Prerequisite: Provisional admission. Introduces the student to the history, documents, and operational functions of the banking industry. Topics include: history, documents, operations, and specialized services. 03142009

MKT 113 - Money and Banking 5-0-5
Prerequisite: Program admission. Emphasizes the relevance of monetary instruments, intermediaries, and the central banks to local, state, and international economics. Topics include: history and evolution of financial institutions; monetary instruments and flow; and central banking, operation, and policies. 03142009

MKT 114 - Financial Business Machines 1-4-3
Prerequisite: MAT 1011. Emphasizes basic calculator, teller terminal, proof machine, and financial computer use. Topics include: introduction to types of equipment, calculators, teller machines, proof machines, and financial computers. 03142009

MKT 115 - Financial Management 4-1-4
Prerequisite: Program admission. Provides knowledge and applications in the management of personal and consumer finance. Topics include: record keeping, budgeting, credit principles, investment principles, and forecasting. 03142009

MKT 122 – Buying and Merchandise Management 5-0-5
Prerequisite: Program admission level math achievement. Introduces the fundamental principles of buying, merchandising, and accounting for products and services. Topics include: assortment planning; locating resources; ordering merchandise; just-in-time or quick response inventory control; pricing for profit; and financial statements, ratios, and accounting vocabulary, principles of merchandising, traffic patterns, basic stock and inventory, inventory control, mark-ups and mark-downs, and types of discounts. 03142009

MKT 123 - Small Business Management 5-0-5
Prerequisites: ACC 101 ENG 1010 and MAT 1011. Summarizes competencies included in the entrepreneurship specialization and provides opportunities for application and demonstration of skills. Topics include: management principles, marketing functions, financial applications, and entrepreneurial growth potential.

MKT 125 - Retail Operations Management 5-0-5
Prerequisite: Program admission. Emphasizes planning, organizing, and managing of retail firms. Topics include: organizational development, strategic planning, short-term planning, human resource management, inventory controls, analysis of profit and loss statements and balance sheets, and entrepreneurship. 03142009

MKT 130 - Marketing Admin. Occupationally-based Instruction (OBI) I 0-10-3
Prerequisites: Program admission, MKT 101, ENG 1010 (diploma) or ENG 1101 (degree) or instructor permission based upon experience. Introduces the application and reinforcement of marketing administration and employability principles in an actual job placement or practicum experience. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into marketing administration applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of marketing administration techniques, and professional development. The occupation-based instruction is implemented through the use of written individualized training plans, written performance evaluation, required weekly seminar, and required practicum or on-the-job training. 03142009

MKT 131 - Marketing Admin. Occupationally-based Instruction (OBI) II 0-10-3
Prerequisite/Corequisite: MKT 130. Focuses on the application and reinforcement of marketing administration and employability principles in an actual job placement or practicum experience. Students are acquainted with occupational responsibilities through realistic work situations and are provided with insights into marketing administration applications on the job. Topics include: problem solving, adaptability to the job setting, use of proper interpersonal skills, application of marketing administration techniques, and professional development. The occupation-based instruction is implemented through the use of written individualized training plans, written performance evaluation, required weekly seminar, and required practicum or on-the-job training.

MKT 161 - Service Industry Business Environment 0-24-2
Provides students with insight into basic principles of business and quality service. Topics include: introduction to service Industry, learning for success, positive work ethic, customer service overview, working together, introduction to business principles.

MKT 162 - Customer Contact Skills 3-3-6
Provides students with skills to create positive customer relations; to communicate effectively with customers; and to successfully assist customers and solve their problems. Students will learn to select and sell products that benefit customers. Topics include exceeding customer expectations customer service face to face critical thinking information sharing telephone service skills sales skills managing the difficult customer.

MKT 163 - Computer Skills for Customer Service 5-25-3
Provides students with basic personal computer skills in word processing, spread sheet, database and e-mail software. Topics to include introduction to computers, Windows, business software applications, introduction to e-business.

MKT 164 - Business Skills for Customer Service 15-15-3
Provides students with additional business skills to assist customers and improve service operations. Topics include business writing, business math, managing change, tools for service excellence managing multiple tasks and priorities, language of business.

MKT 165 - Personal Effectiveness in CCSS 10-0-1
Provides students with the skills to increase their personal effectiveness in the dynamic and change-oriented service industry. Topics to include positive image, personal wellness, and job interview skills.

MOM 191 - Medical Office Management O.B.I. I 0-10-3
This course will prepare students to perform the basic functions and tasks associated with a medical office. The course will be structured to allow the student to gain experiences in applying knowledge to technical procedures in medical office management and supervision and in developing professional attitudes for interacting with other professionals in the health care field. Topics include: application of skills; functioning in the medical office; listening; and following directions.

MOM 192 - Medical Office Management O.B.I. II 0-10-3
This course continues the areas covered in MOM 191. Students will continue focusing on the skills introduced during that course, plus expand their involvement in the activities of the medical office. Topics include: application of skills, functioning in the medical office, listening, and following directions.

MSD 100 - Principles of Management 5-0-5
Prerequisite: Provisional status admission. Develops skills and behaviors necessary for successful supervision of people and 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 Manager's 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. 03142009

MSD 101 - Organizational Behavior **5-0-5**
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. 03142009

MSD 102 - Employment Law **5-0-5**
Prerequisite: Provisional admission. Develops a working knowledge of the laws of employment necessary for managers. Topics include: Employment Law, the Courts, and 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), Worker's Compensation, Unemployment Compensation, and National Labor Relations Act.03142009

MSD 103 - Leadership **5-0-5**
Prerequisite: Provisional admission. 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.03142009

MSD 104 - Human Resource Management **5-0-5**
Prerequisite: Provisional admission. This course is designed as an overview of the Human Resource Management (HRM) function and the manager and supervisor's 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. 03142009

MSD 105 - Labor Management Relations **5-0-5**
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 labor-management relations, adversarial and cooperative approaches to labor relations, the legal framework of labor relations, employee-employer rights, collective bargaining and union organizing processes, union and nonunion grievance procedures, international labor relations, and the future of labor-management relations in a changing economy. Case studies, readings, and role-plays are used to simulate workplace applications in labor relations. 03142009

MSD 106 - Performance Management **5-0-5**
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. 03142009

MSD 107 - Employee Training and Development **5-0-5**
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 work-related skills, and practice a variety of skills desired by employers. Topics include: developing a philosophy of training; having systems approach to training and development; the context of training; conducting a needs analysis; critical success factors for employees: learning principles; designing and implementing training plans; conducting and evaluating training; human resource development and careers; personal career development planning; and applications in interpersonal relationships and communication. 03142009

MSD 108 – Management and Supervisory Seminar **5-0-5**
Prerequisite: MSD 103. Encourages students to discuss their perception of management practices, which have been studied during the Management/Supervisory Development program. Topics include: current issues and problems in management and supervision and state of the art management and supervision techniques. Guest speakers will contribute to the seminar.

MSD 109 – Managerial Accounting and Finance 5-0-5
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. Topics include: Accounting background, accounting equation, financial statements and financial statement analysis, budgeting and planning, applied analysis for management decisions, cost flow analysis in manufacturing with applications in process improvement, applications in product profitability, cost and pricing, client/server technology: computer software applications, payroll, income tax, inventory management

MSD 112 Introduction to Business and Economics 5-0-5
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. 03142009

MSD 113 - Business Ethics 5-0-5
Prerequisite: 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. 03142009

MSD 114 - Management Communication Technologies 4-2-5
Prerequisite: Provisional admission; Corequisite: SCT 100. This course focuses on communication, supervision, and organizations in the age of technology. It builds on the basic computer skills introduced in SCT 100 using computer-based technology to develop skills in applying information technology. The student will create written, verbal, and electronic communication applied to supervisory functions in the work place. Topics include: word processing applications; spreadsheet applications; database applications; presentation technology and applications; graphical interface applications; interpersonal communications; organizational communications; and global, intercultural, and ethical issues in communicating. 03142009

MSD 115 – Retail Management 5-0-5
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. 03142009

MSD 116 - Business Plan Development 5-0-5
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.

MSD 117 – Small Business Management 5-0-5
Prerequisite: Provisional admission. Introduces the essentials of starting, managing, and growing a small business. Topics include: the role of the entrepreneur, pricing, advertising, financing, layout of facilities, inventory control, staffing, purchasing, vendor selection, and relevant laws affecting small business.

MSD 120 – Employee Compensation and Benefits 5-0-5
Prerequisite: Provisional admission. This business and public administration management course provides students with theoretical and practical knowledge of the design and implementation of effective compensation and benefits programs.

MSD 151 - Personal Development for Supervisors 5-0-5
Prerequisite: Program admission. This course familiarizes the student with those factors that influence management, which are in addition to those covered in management program courses. Topics include: ethical management, individual behavior, group behavior, employee protective laws, and techniques of public speaking. 03142009

MSD 152 - Project Management 5-0-5
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. 03142009

MSD 156 - Supervision in a Service Environment 5-0-5
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.

MSD 157 - Total Quality Management Principles 5-0-5
Prerequisite: MAT 1011 or MAT 1111 Familiarizes the student with the principles and methods of Total Quality Management (TQM). Topics include: the history of quality control, quality control leaders, quality tools, TQM implementation, team building for TQM, and future quality trends.

MSD 175 - Business Spanish 5-2-5
Prerequisite: Program admission. Introduces the vocabulary, sentence structure and conversational skills needed to communicate in Spanish with co-workers in a business setting. Topics include the following: parts of speech, vocabulary, sentence structure, and common phrases in the workplace. 03142009

MSD 202 - Production/Operations Management 5-0-5
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. 03142009

MSD 205 - Service Sector Management 5-0-5
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.

MSD 206- Project Management 5-0-5
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. 03142009

MSD 210 Team Project 5-0-5
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 competencies, videos, web sites, bulletin boards, and slide presentations.03142009

MSD 220 - Management Occupation-Based Instruction 0-10-3
Prerequisites: Program admission, ENG 1010, MSD 100 or MKT 101 (or instructor approval). Introduces students to the application and 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.

MSN 126 - Grouting, Cleaning, and Curing Tile 2-2-2
Prerequisite/Corequisite: MSN 125 Provides instruction in the skills needed to adequately fill, waterproof, clean, and cure tile joints to give a strong and pleasing finish. Topics include: grout mixes, grout application, tile cleaning, and tile curing.

MUS 1101 – Music Appreciation 5-0-5
Prerequisite: ENG 1101. Explores the analysis of well-known works of music, their composition, and the relationship to their periods through writing. Students practice various modes of writing, ranging from exposition to argumentation and persuasion. The course includes a brief review of standard grammatical and stylistic usage in proofreading and editing. 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, writing analysis, practice, revision, and research about a musical composition or compositions. Topics include: historical and cultural development represented in musical arts; contributions of the musical arts; and communication skills. 03142009

NPT 112 – Medical-Surgical Nursing Practicum I 0-21-7
Prerequisites: AHS 102, AHS 103, AHS 109, NSG 110 Corequisite: NSG 112 Focuses on health management and maintenance and the prevention of illness, care of the individual as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, and providing client education. Topics include: health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health in the cardiovascular, respiratory, endocrine, urinary, and gastrointestinal systems; client care, treatment, pharmacology, medication administration, and diet therapy related to the cardiovascular, respiratory, endocrine, urinary, and gastrointestinal systems; and standard precautions.

NPT 113 – Medical-Surgical Nursing Practicum II 0-21-7
Prerequisites: AHS 102, AHS 103, NSG 110. Corequisite: NSG 113. Focuses on health management and maintenance and the prevention of illness, care of the individual as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, and providing client education. Topics include: health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health in the musculoskeletal, neurological, integumentary, and sensory systems, mental health, and oncology; client care, treatment, pharmacology, medication administration, and diet therapy related to the musculoskeletal, neurological, integumentary, and sensory systems, mental health, and oncology; and standard precautions.

NPT 212 - Pediatric Nursing Practicum 0-6-2
Prerequisites: AHS 102, AHS 103, NSG 110. Corequisite: NPT 213, NSG 213, NSG 212. Focuses on health management and maintenance and the prevention of illness, care of the individual as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, and providing client education. Topics include: health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health in the pediatric client; client care, treatment, pharmacology, medication administration, and diet therapy of the pediatric client; growth and development; and standard precautions.

NPT 213 - Obstetrical Nursing Practicum 0-9-3
Prerequisites: AHS 102, AHS 103, NSG 110. Corequisite: NPT 212, NSG 213, NSG 212. Focuses on health management and maintenance and the prevention of illness, care of the individual as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, and providing client education. Topics include: health management and maintenance and prevention of illness; care of the individual as a whole; and deviations from the normal state of health in the reproductive system, obstetric clients, and the newborn; client care, treatment, pharmacology, medication administration, and diet therapy related to the reproductive system, obstetric clients, and the newborn; and standard precautions.

NPT 215 - Nursing Leadership Practicum 0-7-2
Prerequisites: AHS 102, AHS 103, NSG 110. Corequisite: NSG 215. Builds on the concepts presented in prior nursing courses and develops the skills necessary for successful performance in the job market. Topics include: application of the nursing process, critical thinking, supervisory skills, client education methods, group and other TQM processes, and conflict resolution.

NSG 110 - Nursing Fundamentals 5-12-10
Prerequisites: AHS 1011, AHS 104, ENG 1010, MAT 1012, PSY 101. An introduction to the nursing process. Topics include: orientation to the profession; ethics and law; community health; client care which is defined as using the nursing process, using critical thinking, and providing client education and includes principles and skills of nursing practice, documentation, and an introduction to physical assessment; geriatrics; customer/client relationships; and standard precautions.

NSG 112 - Medical Surgical Nursing I 9-0-9
Prerequisites: AHS 102, AHS 103, NSG 110 Corequisite: NPT 112 Focuses on wellness and the prevention of illness, care of the individual as a whole, and deviations from the normal state of health. Topics include: cardiovascular, respiratory, endocrine, urinary, and gastrointestinal systems and associated illness; pharmacology; diet therapy; and nursing procedures/techniques utilizing the nursing process.

NSG 113 - Medical Surgical Nursing II 9-0-9
Prerequisites: AHS 102, AHS 103, NSG 110 Corequisite: NPT 113 Focuses on health management and maintenance and the prevention of illness, care of the individual as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, and providing client education. Topics include: health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health in the musculoskeletal, neurological, integumentary, and sensory systems, mental health, and oncology; client care, treatment, pharmacology, and diet therapy related to the musculoskeletal, neurological, integumentary, and sensory systems, mental health, and oncology; and standard precautions.

NSG 212 - Pediatric Nursing 5-0-5
Prerequisites: AHS 102, AHS 103, NSG 110 Corequisite: NPT 213, NPT 212, NSG 212 Focuses on health management and maintenance and the prevention of illness, care of the individual as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, and providing client education. Topics include: health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health in the pediatric client; client care, treatments, pharmacology, and diet therapy of the pediatric client; growth and development; and standard precautions.

NSG 213 - Obstetrical Nursing 5-0-5
Prerequisites: AHS 102, AHS 103, NSG 110. Corequisite: NPT 213, NPT 212, NSG 212. Focuses on health management and maintenance and the prevention of illness, care of the individual as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, and providing client education. Topics include: health management and maintenance and prevention of illness, care of the individual as a whole, and deviations from the normal state of health in the reproductive system, obstetric clients, and the newborn; client care, treatments, pharmacology, and diet therapy related to the reproductive system, obstetric clients, and the newborn; and standard precautions.

NSG 215 - Nursing Leadership 2-0-2
Prerequisites: AHS 102, AHS 103, NSG 110. Corequisite: NPT 215. Builds on the concepts presented in prior nursing courses and develops the skills necessary for successful performance in the job market. Topics include: application of the nursing process, critical thinking, supervisory skills, client education methods, group and other TQM processes, and conflict resolution.

NTT 100 - Musculoskeletal Anatomy and Physiology 3-4-5
Prerequisite: Program admission. 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.

NTT 101 - Neural Science and Pathology 3-4-5
Prerequisite: Program admission. This course provides an understanding of nervous and endocrine systems' pathology to enable the student to better assess and treat client conditions. Topics include: nervous systems structure and function; assessment of Peripheral Nervous system (PNS); endocrine systems structure and function; communication of the neural and endocrine systems; nervous and endocrine pathology; and NMT Foundational Platform.

NTT 102 - Pathology **3-0-3**
Prerequisite: Program admission. 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: 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.

NTT 103 - Neuromuscular Therapy Fundamentals **3-4-5**
Prerequisite: Program admission. 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; form a treatment plan utilizing assessment procedures; and critical reading.

NTT 105 - Technique and Theory I **2-10-6**
Prerequisites: Program admission. 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; self care; and case study.

NTT 106 - Clinic I **0-15-5**
Prerequisites: NTT 100, NTT 103, NTT 105, NTT 116. Students begin providing supervised therapy services in the college clinic. Students will apply skills learned 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.

NTT 107 - Law And Ethics **1-0-1**
Prerequisites: Program admission. This course will explore local and Georgia law as it pertains to the regulation and licensure of Massage Therapy. Also addressed are issues standards of practice and the Code of ethics per NCBTMB. Detailed ethical scenarios concerning the Therapist/Client relationship are also addressed. Topic include: State law (Georgia), local law, and ethics.

NTT 108 - Technique and Theory II **1-13-6**
Prerequisites: NTT 101, NTT, 102, NTT 103, NTT 105, NTT 106. 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; self care and case studies.

NTT 109 - Adjunctive Modalities **1-4-3**
Prerequisites: NTT 101, NTT, 102, NTT 103, NTT 104, NTT 105, NTT 106. 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

NTT 110 - Progressive Modalities **2-2-3**
Prerequisites: NTT 101, NTT102, NTT 103, NTT 105, NTT 106, NTT 109, NTT 114. 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.

NTT 111 - Licensure Review **0-9-3**
Prerequisites: NTT 100, NTT 101, NTT 102, NTT 103, NTT 105, NTT 106, NTT 107, NTT 108, NTT 114, NTT 116, NTT 118. This course is an integration and review of didactic instruction in order to prepare students to take the National Certification Examination (NCETM/NCETMB) for Therapeutic Massage upon graduation. Students will be self directed in review of competencies of NCBTMB. 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.

NTT 112 - Clinic II **0-15-5**
Prerequisites: NTT 106, NTT 108. 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, case study, community outreach and self care.

NTT 114 – Musculoskeletal Anatomy and Pathology **1-5-3**
Prerequisite: NTT 100. This course provides an advanced understanding of musculoskeletal anatomy and pathology so as to enable the student to better assess and treat client conditions. There is an additional emphasis on the pathology of the musculoskeletal system and its implication for the patient treatment plan utilizing assessment procedures. Topics include: bones; joints; terminology; muscles by body region; and musculoskeletal pathology.

NTT 116 - Wellness Essentials I **2-0-2**
Prerequisite: Program admission. This course introduces the student to the theory of personal responsibility for health and wellness of the Neuromuscular Therapist and provides information and strategies that may be adopted for personal self care. Topics include: personal assessment; self massage techniques; proper body mechanics; personal stretching; and career specific conditioning.

NTT 118 - Wellness Essentials II **2-0-2**
Prerequisite: NTT 116. This course continues to develop the student in the theory of personal responsibility for health and wellness of the Neuromuscular Therapist and provides information and strategies that may be adopted for personal self care. This course provides the theory of self care, the practice and continued development of which is a competency in other courses taken throughout the program. Topics include: personal assessment; self massage techniques; proper body mechanics; personal stretching; and career specific conditioning.

NTT 123 – Professional Leadership **1-2-2**
Prerequisite: NTT 106, NTT 108, NTT 109. This course is designed to prepare students to develop professional leadership skills and maintain a successful practice as a Neuromuscular Therapist. Topics include: networking; business promotion; business management; start-up plan portfolio; and financial management.

NUR 191 -Fundamentals of Nursing **6 C.Hrs.**
Prerequisite: Admission to the nursing program; Corequisite: NUR 192. 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, emergency preparedness, the health-illness continuum, and therapeutic interventions are introduced in NUR 191 and incorporated throughout the curriculum.

NUR192 -Dosage Calculations **3 C.Hrs.**
Prerequisite: Admission to the nursing program; Corequisite: NUR 191. 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.

NUR 193 - Lifespan Nursing Care I **10 C.Hrs.**
Prerequisites: BIO 2113, ENG 1101, NUR 191, NUR 192. Lifespan Nursing Care I (NUR 193) is offered in the second quarter 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 preoperative patient, the oncological patient, the patient with an infectious disease, and the patient with alterations in musculoskeletal, 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, emergency preparedness, the health-illness continuum, and therapeutic interventions are incorporated throughout the course.

NUR 194 - Lifespan Nursing Care II **10 C.Hrs.**

Prerequisites: BIO 2114, PSY 1101, NUR 193. Lifespan Nursing Care II (NUR 194) is offered in the third quarter 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, emergency preparedness, the health-illness continuum, and therapeutic interventions continue to be incorporated throughout the course.

NUR 200 - LPN to ADN Transition **9 C.Hrs.**

Prerequisites: Admission to LPN to ADN Transition track; Completion of all required core courses. The LPN to ADN Transition course (NUR 200) is offered in the summer quarter prior to entering the second level of the nursing program. This course is designed to initiate the transition process from LPN to ADN and builds upon previously learned basic knowledge and skills. The focus of NUR 200 is upon the nursing of individuals throughout the lifespan experiencing common, predictable alterations in function. Content presented includes:: the transition process, the nursing process, and nursing care of the patient with oncology and pain, alterations in hematologic function, alterations in respiratory function, alterations in cardiac function, alterations in renal function, and alterations in 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, emergency preparedness, the health-illness continuum, and therapeutic interventions continue to be incorporated throughout the course. In addition, 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.

NUR 291 - Nursing Care of the Childbearing Family **10 C.Hrs.**

Prerequisites: BIO 2117, PSY 2103, NUR 194 or NUR 200 for transition students. Nursing Care of the Childbearing Family (NUR 291) is offered in the fall quarter 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, emergency preparedness, the health illness continuum, and therapeutic interventions 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.

NUR 292 - Nursing Care to Promote Mental Health **10 C.Hrs.**

Prerequisites: MAT 1111 or higher level math, SCT 100, NUR 291. Nursing Care to Promote Mental Health (NUR 292) is offered in the second quarter of the second 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, adjustment and impulse control 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, emergency preparedness, the health illness continuum, and therapeutic interventions 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 mental health is included.

NUR 293 - Lifespan Nursing Care III **10 C.Hrs.**
Prerequisites: ENG 1102, OR, ART 1101 OR MUS 1101 OR HUM 1101, SPC 1101, NUR 292; Corequisite: NUR 294. Lifespan Nursing Care III (NUR 293) is the third and last course in the lifespan nursing course sequence and is offered in the last quarter 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 hematologic function, 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, emergency preparedness, the health illness continuum, and therapeutic interventions 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.

NUR 294 - Nursing Seminar **3 C.Hrs.**
Prerequisites: ENG 1102 OR ART 1101 OR MUS 1101 OR HUM 1101, SPC 1101, NUR 292; Corequisite: NUR 293. 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 practices and the responsibility of the nurse to the community and to 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.

OTA 101 - Introduction to Occupational Therapy **2-3-3**
Prerequisite: Program admission. 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. 03142009

OTA 102 - Growth and Development **5-0-5**
Prerequisite: AHS 109 or BUS 2310, OTA 101; Corequisite: OTA 103. Introduces the range of responses and reactions to human growth, and the activities to enhance body functions. 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. 03142009

OTA 103 - Developmental Tasks **1-4-3**
Prerequisite: OTA 101. 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, introduction to group and dyadic interaction and occupation for therapeutic intervention. 03142009

OTA 104 - Conditions in Occupational Therapy **5-0-5**
Prerequisite: BIO 2113, BIO 2114, AHS 109 or BUS 2310. 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. 03142009

OTA 105 Analysis of Human Movement **4-4-6**
Prerequisite: BIO 2113, BIO 2114, AHS 109 or BUS 2310; Corequisite: OTA 101. 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, muscular system, and nervous system instruction in goniometric measurements and muscle testing utilizing safety procedures within the framework of OT. 03142009

OTA 201 - Psychosocial Dysfunction 6-3-7
Prerequisite: PSY 2250, All OTA 100 level courses; Corequisite: OTA 202. 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 plan; collaboration with OTR on implementation, reevaluation and intervention termination; and psychosocial dysfunction treatment intervention documentation procedure. Utilization of safety procedures during OT Process. 03142009

OTA 202 - Psychosocial Dysfunction Treatment Methods 0-9-3
Prerequisite: PSY 2250, All OTA 100 level courses; Corequisite: OTA 201. Focuses on intervention of the psychiatric disorders occurring in different stages of human life through practical methods. 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 psychosocial 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 related to occupational performance areas in psychosocial dysfunction. 03142009

OTA 204 – Pediatric Issues 3-5-5
Prerequisite: All OTA 100 level courses. Covers childhood to early adulthood occupational therapy related issues, including developmental disabilities. Topics include: participation in the screening, evaluation, intervention planning, therapeutic intervention, and discharge/follow-up with the pediatric population within the context of occupational performance in order to promote health and prevent disease. Emphasizes the importance of patient, family/significant other/caregiver education and documentation to ensure reimbursement in today's healthcare environment. 03142009

OTA 206 – Physical Dysfunction 6-3-7
Prerequisite: All OTA 100 level courses; Corequisite: OTA 207. 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. Utilization of safety procedures during OT Process. 03142009

OTA 207 – Physical Dysfunction Treatment Methods 0-9-3
Corequisite: OTA 206. 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 related to occupational performance areas in physical dysfunction. 03142009

OTA 209 – Geriatric Issues 3-5-5
Prerequisite: All OTA 100 level courses. Covers occupational therapy related geriatric issues. Topics include: participation in the screening, evaluation, intervention planning, therapeutic intervention, and discharge/follow-up with the geriatric population within the context of occupational performance in order to promote health and prevent disease. Emphasizes the importance of patient, family/significant other/caregiver education and documentation to ensure reimbursement in today's healthcare environment. 03142009

OTA 212 – Occupational Therapy Trends and Issues 2-3-3
Prerequisite: All OTA 100 level courses, OTA 201, OTA 202, OTA 206, OTA 207. Teaches the roles and responsibilities in the administration of occupational therapy services. Topics include: assistance with the management of departmental operations, including safety issues, inventory control, budgeting, scheduling of service recipients; 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, including documentation to insure accountability; personnel training and supervision; continued learning; professional behaviors of time management, personal goal setting and career development; and promotion of the Occupational Therapy profession; professional obligation to provide fieldwork education to future OTA students. 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. 03142009

OTA 213 – Therapeutic Adaptations 3-5-5
Prerequisite: All OTA 100 level courses, OTA 202, OTA 207. 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. 03142009

OTA 221 – Level II Fieldwork - A 0-36-12
Prerequisite: OTA 201, OTA 202, OTA 204, OTA 206, OTA 207, OTA 209, OTA 212, OTA 213; all 100 level courses. 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 or special project, and supervised clinical applications of principles learned in the curriculum and appropriate to the learning needs of the student. 03142009

OTA 222 – Level II Fieldwork - B 0-36-12
Prerequisite: OTA 201, OTA 202, OTA 204, OTA 206, OTA 207, OTA 209, OTA 212, OTA 213; all OTA 100 level courses. 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 or special project, and supervised clinical applications of principles learned in the curriculum and appropriate to the learning needs of the student. 03142009

PHL 103 - Introduction to Venipuncture 3-2-4
This course is designed as an introduction to blood collecting techniques and includes: a presentation of the blood collecting techniques employed in the hospital laboratory, and a study of the equipment necessary for performing each of the techniques. Students practice drawing blood.

PHL 105 - Clinical Practice 0-24-8
Prerequisite: PHL 103. This course provides the opportunity for students to apply the theoretical knowledge learned during the first quarter to actual "on-the-job" situations, in a clinical setting. Requires 100 venipunctures in at least 120 hours of clinical practice.

PHR 1000 - Pharmaceutical Calculations 4-2-5
Prerequisites: MAT 1012 (diploma), or MAT 1111 (A.A.S.). 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.

PHR 1010 - Pharmacy Technology Fundamentals 5-0-5
Prerequisite: Provisional Admission. Provides an overview of the Pharmacy Technology field and develops fundamental concepts and principles necessary for successful participation in the pharmacy field. Topics include safety, orientation to the pharmacy technology field, health care organizational structure, pharmacy policies and procedures, cardiopulmonary resuscitation (CPR), infection control, quality control, ethics, laws, and definitions and terms.

PHR 1020 - Principles of Dispensing Medications 4-4-6
Prerequisite: PHR 1000; Corequisite: PHR 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; distribution systems; documentation; inventory and filing systems; compounding; contamination control; storage and control; pharmacy equipment; and health care organizational structure. This course provides laboratory and clinical practice.

PHR 1030 - Principles of Sterile Medication Preparation 4-4-6
Prerequisites: PHR 1010, PHR 1020; Corequisite: PHR 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.

PHR 1040 - Pharmacology 5-0-5
Prerequisite: PHR 1010; *Corequisites:* AHS 1015, PHR 1030. 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.

PHR 1050 - Pharmacy Technology Practicum 0-21-7
Prerequisites: PHR 1010, PHR 1020; Corequisite: PHR 1030. Orients students to the clinical environment and provides experiences with the basic skills necessary for the pharmacy technician. Topics include: aseptic and sterile techniques, storage and control, documentation, inventory, filing, compounding, parenteral admixtures, filtering, disinfection, medication delivery, and hospital pharmacy techniques.

PHR 2060 - Advanced Pharmacy Technology Principles 4-2-5
Prerequisites: PHR 1030, PHR 1050, SCT 100; Corequisite: PHR 1070. 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, and pharmaceutical calculations review.

PHR 2070 - Advanced Pharmacy Technology Practicum 0-21-7
Prerequisites: PHR 1030, PHR 1050, SCT 100; Corequisite: PHR 1060. 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.

PHY 1110 - Introductory Physics 4-3-5
Prerequisite: MAT 1101 or MAT 1111. The course is an introduction to 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. Laboratory experience supports classroom learning. Computer use is an integral part of class and laboratory assignments. (Replaces PHY 190 eff 200903). 09202008

PHY 1111 – Mechanics 4-3-5
Prerequisite: MAT 1112 or MAT 1113. The first course of three algebra and trigonometry based courses in the physics sequence. This course introduces the classical theories of mechanics. Topics include: measurements and systems of units; Newton's laws; work energy, and power; momentum and collisions; one and two dimensional motion; circular motion and law of gravity; and rotational dynamics and mechanical equilibrium. Laboratory exercises supplement class work. Computer use is an integral part of class and laboratory assignments.

PHY 1112 – Electricity and Magnetism. 4-3-5
Prerequisite: PHY 1111. The second of three algebra and trigonometry based courses in the physics sequence. This course introduces theories of electricity and magnetism. Topics include: electric charge, forces, and fields; electric potential, energy, and capacitance; magnetism; electric current, resistance, and basic electric circuits; alternating current circuits; and electromagnetic waves. Laboratory exercises supplement class work. Computer use is an integral part of class and laboratory assignments.

PHY 1113 – Fluids, Heat, Sound, and Light 4-3-5
Prerequisite: PHY 1111. The third of three algebra and trigonometry based courses in the physics sequence. This course introduces the classical theories of fluids, heat, sound, and light. Topics include: statics and dynamics of fluids; gas laws;, heat transfer; thermodynamics; harmonic motion; wave motion; sound; and properties of light. Laboratory exercises supplement class work. Computer use is an integral part of class and laboratory assignments.

POL 1101 – American Government 5-0-5
Prerequisite: Program admission. This course is a 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. Topics include: foundations of government; political behavior; and governing institutions. 03142009

PSC 1111 – Physical Science I 4-3-5
Prerequisite: MAT 1100 or MAT 1111. Introduces the fundamentals of classical physics, the solar system, and universe from a descriptive viewpoint. Topics include: mechanics; temperature and heat; waves; electricity and magnetism; and astronomy. Laboratory exercises supplement class work. Computer use is an integral part of class and laboratory assignments.

PSY 1010 - Basic Psychology 5-0-5
Prerequisite: Provisional admission. This course presents the basic principles of human behavior and their application to everyday life and work. Topics include: introduction to psychology; social environments; communications and group processes; personality; emotions and motives; conflicts, stress, and anxiety; perception and learning; life span development; and abnormal psychology. (Replaces PSY 101 eff 200903) 10082008

PSY 1101 - Introduction to Psychology 5-0-5
Prerequisite: Program admission. This course emphasizes the basics of psychology. Topics include: science of psychology; social environments; life stages; physiology and behavior; personality; emotions and motives; conflicts, stress, and anxiety; abnormal behavior; and perception, learning, and intelligence. (Replaces PSY 191 eff 200903). 10082008

PSY 1150 – Industrial/Organizational Psychology 5-0-5
Prerequisite: Program admission. This course provides instruction in, and discussion of a wide range of activities related to interpersonal and managerial skills required in today's business and industry. Topics include: an overview of industrial/organizational psychology; principles of human resources management; psychological testing; performance appraisal; training and professional development of employees; principles of leadership; motivational factors, workplace conditions; safety and health; and workplace stressors.

PSY 2103 - Human Development 5-0-5
Prerequisite: PSY 1101. This course surveys the changes that occur during the human life cycle beginning with conception and continuing through late adulthood and death. The scientific basis of our knowledge of human growth and development and the interactive forces of nature and nurture are emphasized. Topics include theories; research methods; nature and nurture; physical development: prenatal development, birth, infancy, childhood, adolescence, adulthood, aging, and death; cognitive development: learning, perception, and language development; and social development: temperament, emotions, personality, attachment, parenting and family relationships. 03142009

PSY 2250 – Abnormal Psychology 5-0-5
Prerequisite: PSY 1101. Studies the nature and causes of various forms of behavior disorder. Topics include: types of abnormalities; psychopathology; assessment and classification of mental disorders; symptomatology of major mental disorders; and critical evaluation of current theories.

PWC 100 - Public Works Infrastructure 5-0-5
This course introduces the student to the methods of maintaining the most common public works infrastructure. Emphasis will be on the different aspects of Roadway Maintenance, Utility Maintenance, and Fleet Management.

PWC 105 - Construction Methods and Cost Estimating 5-0-5
Prerequisite: MAT 1013. Covers basic construction techniques with emphasis on cost estimating. The course includes quantity take off and tabulation of data using spreadsheet format objective is to prepare the student to make accurate and complete quantity take offs in the preparation of an estimate.

PWC 110 - Plan Reading 5-0-5
Prerequisite: MAT 1013. This course introduces the reading and interpretation of construction drawings: plans include right of way construction, bridge plans, and shop drawings. Topics include: Scales, Plan Notation and symbols, and specifications.

PWC 115 - Highway Design 5-0-5
Prerequisite: MAT 1013. This course provides student with a basic understanding of design and construction of roadway and highway systems. Major topics include geometric design, drainage design and computation, erosion control and storm-water management.

PWC 120 - Project Management 5-0-5
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.

PWC 140 - Internship 5-15-10
This course 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.

RAD 101- Introduction to Radiology 4-2-5
Provides the student with an overview of radiography and patient care. Students will be oriented to the radiographic profession as a whole. Emphasis will be placed on patient care with consideration of both physical and psychological conditions. Topics include: ethics, medical and legal considerations, "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, and body mechanics/transportation. 03102008

RAD 103- Body Trunk and Upper Extremity Procedures 2-3-3
Prerequisites: RAD 101, AHS 1011 (diploma) or BIO 2113 and BIO 2114 (degree). Introduces the knowledge required to perform radiographic procedures applicable to the human anatomy. Emphasis will be placed on the production of quality radiographs, and laboratory experience will demonstrate the application of theoretical principles and concepts. Topics include: procedures, anatomy, and topographical anatomy related to body cavities, bony thorax, upper extremities, and the shoulder girdle; and anatomy and routine projections of the bony thorax. 03142009

RAD 106 - Lower Extremity and Spine Procedure 2-3-3
Prerequisite: RAD 101. Continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine projections of the lower extremities; anatomy and routine projections of the pelvic girdle; and anatomy and routine projections of the spine. 03102008

RAD 107 - Principles of Radiographic Exposure I 3-3-4
Prerequisite: RAD 101. Introduces knowledge of the factors that govern and influence the production of the radiographic image on radiographic film. Laboratory experiences will demonstrate applications of theoretical principles and concepts. Emphasis will be placed on knowledge and techniques required to process radiographic film. Topics include: radiographic density; radiographic contrast; recorded detail; distortion; exposure latitude; film holders and intensifying screens; processing area considerations; chemicals, handling and storage of film; characteristics of films utilized in radiographic procedures; automatic processor; artifacts; silver recovery; processing quality assurance concepts; state and federal regulations; and basic principles of digital imaging. 03102008

RAD 109 - Contrast Procedures 2-2-3
Prerequisite: RAD 101. Continues development of the knowledge and skill required prior to execution of radiographic procedures in the clinical setting. Topics include: gastrointestinal (GI) procedures; genitourinary (GU) procedures; biliary system procedures; sterile techniques; minor procedures; and sectional anatomy of the neck, thorax, and abdomen. 03102008

RAD 113 - Cranium Procedures 1-2-2
Prerequisites: RAD 101, RAD 109. This course continues to develop the knowledge required to perform radiographic procedures. Topics include: anatomy and routine cranial radiography; anatomy and routine facial radiography; and sectional anatomy of the head. 03102008

RAD 116 - Principles of Radiographic Procedures II 3-0-3
Prerequisite: RAD 107 This course continues to develop knowledge of the factors that govern and influence the production of the radiographic image on radiographic film and digital image acquisition. Topics include: beam limiting devices; beam filtration; scattered/secondary radiation; control of the remnant beam; technique formation;, and exposure calculations. 03102008

RAD 117 - Radiographic Imaging Equipment 3-3-4
Prerequisite: RAD 120, RAD 121. Provides knowledge of equipment routinely utilized to produce diagnostic images. Various recording media and techniques are discussed. Topics include: radiographic equipment; image intensified fluoroscopy; recording media and techniques; image noise; other imaging equipment; digital imaging/PACS; monitoring and maintenance; and state and federal regulations. 03102008

RAD 118 – Radiologic Special Procedures 3-1-3
Prerequisite: RAD 120, RAD 121. This course provides the student with an overview of Radiologic special procedures and modalities. Provides instruction in the more complicated special Radiologic procedures of the body. Topics include: minor procedures, sterile techniques, special equipment, and introduction to angiographic and interventional procedures.

RAD 119 - Radiographic Pathology and Medical Terminology 3-0-3
Prerequisite: RAD 101, AHS 1011 (diploma) or BIO 2113 and BIO 2114 (degree). BIO . Provides the student with an introduction to the concepts of disease. Pathology and disease as they relate to various radiographic procedures are discussed. Topics include: pathology fundamentals; trauma/physical injury; systemic classification of disease; and medical terminology. 03142009

RAD 120 - Principles of Radiation Biology and Protection 5-0-5
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. 03102008

RAD 123 - Radiologic Science 5-0-5
Prerequisite/Corequisite: MAT 1013 (diploma), MAT 1111 or MAT 1101 (degree). Introduces the concepts of basic physics and emphasizes the fundamentals of x-ray generating equipment. Topics include: atomic structure; structure of matter; magnetism and electromagnetism; electrodynamics; control of high voltage and rectification; x-ray tubes; x-ray circuits; and production and characteristics of radiation. 03142009

RAD 126 - Radiologic Technology Review 4-0-4
Prerequisites/Corequisites: RAD 134, RAD 138. Provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations for radiographers. Topics include: image production and evaluation; radiographic procedures; anatomy, physiology, pathology, and terminology; equipment operation and quality control; radiation protection; and patient care and education. 03142009

RAD 132 - Clinical Radiography I **0-14-5**
Prerequisite/Corequisite: RAD 103 or RAD 108. 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. 03212008

RAD 133 - Clinical Radiography II **0-21-7**
Prerequisite: RAD 101, RAD 132. Continues introductory student learning experiences in the hospital setting. Topics include: equipment utilization; exposure techniques; participation in and/or observation of routine projections of the lower extremities, pelvic girdle, spine, and bony thorax; and participation in and/or observation of procedures related to the gastrointestinal (GI), genitourinary (GU), and biliary systems. Execution of radiographic procedures will be conducted under direct and indirect supervision. 03142009

RAD 134 - Clinical Radiography III **0-21-7**
Prerequisite: RAD 101 Provides students with continued hospital setting work experience. Students improve skills in executing procedures introduced in Radiographic Procedures and practiced in previous clinicals. Topics include: equipment utilization, exposure techniques, participation in and/or observation of gastrointestinal (GI), genitourinary (GU), and biliary system procedures, and participation in and/or observation of cranial and facial radiography. Execution of radiographic procedures will be conducted under direct and indirect supervision. 03142009

RAD 135 -Clinical Radiography IV **0-21-7**
Prerequisite: RAD 101 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 ,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 cranial and facial radiography. Execution of radiographic procedures will be conducted under direct and indirect supervision. 03142009

RAD 136 -Clinical Radiography V **0-21-7**
Prerequisite: RAD 135. Provides students with continued hospital setting work experience. Students demonstrate increased proficiency levels in skills introduced in Radiographic Procedures and practiced in previous clinical radiography courses. Topics include: advanced radiographic anatomy; equipment utilization; exposure techniques; sterile techniques; participation in and/or observation of angiographic, interventional, minor special, and special genitourinary system procedures; participation in and/or observation of special equipment use; patient care; and behavioral and social competency. Execution of radiographic procedures will be conducted under direct and indirect supervision. 03142009

RAD 137 - Clinical Radiography VI **0-28-10**
Prerequisites/Corequisites: RAD 120, RAD 136. Provides a hospital setting in which students continue to develop proficiency levels in skills introduced in previous Radiographic courses and practiced in previous clinical radiography courses. Topics include: patient care, behavioral and social competency, equipment utilization, exposure techniques, and participation in and/or observation of routine and special radiographic procedures. Execution of radiographic procedures will be conducted under direct and indirect supervision. 03142009

RAD 138 - Clinical Radiography VII **0-28-10**
Prerequisite: RAD 137. Provides a culminating hospital setting work experience which allows the students to synthesize information and procedural instruction provided throughout the program. Topics include: patient care, behavioral and social competency, equipment utilization, exposure techniques, participation in and/or observation of routine and special radiographic procedures, and final completion of all required clinical competencies. Execution of radiographic procedures will be conducted under direct and indirect supervision. 03122008

RAD 251 - Mammography Clinical **0-21-7**
Introduces students to the mammography department and provides opportunities to participate in or observe mammography procedures. Emphasis is on anatomy, pathology, positioning, routine breast imaging and technique, special mammographic imaging quality control and film critique.

RAD 252 - Anatomy/Pathology/Positioning **4-0-4**
Provides the student with an overview of mammography anatomy and physiology of the breast, pathology, positioning, patient care, and patient education. Topics to be covered include: organization of the mammography department, professional and legal responsibilities, epidemiology, early detection, staging and treatment planning, patient education/risk vs. benefit of mammography, breast anatomy and physiology, benign and malignant breast pathology, routine and special positioning techniques, and interventional procedures.

RAD 253 - Mammography Physics, Instrumentation, and Quality Assurance 5-0-5
Provides students with concepts of mammography physics, instrumentation, and quality assurance. Topics to be covered include: characteristics of dedicated film screen mammography unit, image receptor, techniques, radiation protection, and quality control.

RDG 096 – Reading II 5-0-5
Prerequisite: RDG 095, or entrance reading score in accordance with approved DTAE admission score levels; Lab may be substituted, as needed, for class hours on a 2 to 1 basis. Emphasizes the strengthening of fundamental reading competencies. Topics include: vocabulary development, comprehension skills, study skills, and occupational/survival reading. 03142009

RDG 097 - Reading III 5-0-5IC
Prerequisite: RDG 096, or entrance reading score in accordance with approved DTAE admission score levels. This course emphasizes vocabulary, comprehension, and critical reading skills development. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills. 03142009

RDG 098 - Reading IV 5-0-5IC
Prerequisite: RDG 097, or entrance reading score in accordance with approved DTAE admission score levels. This course provides instruction in vocabulary and comprehension skills with emphasis on critical reading skills. Topics include vocabulary skills, comprehension skills, critical reading skills, study skills, and content area reading skills. 03142009

RDN 150 - Simulator Applications 4-3-5
Prerequisites: Radiation Therapy Program admission. This class is a geometric application of teletherapy setups to include quality assurance of simulator and treatment machine specification symmetry.

RDN 152 - Introduction to Radiation Oncology 5-0-5
Prerequisite: Radiation Therapy Program admission. This course presents an overview of radiation therapy to include: Medical Terminology, Medical Ethics and Law, Patient Care, Basic Machine Usage, and the Rationale of Radiation Therapy. Responsibilities of the Student, the Academic and Administrative Structure of the Program, and the Role of Radiation Therapy within the Medical Profession are described.

RDN 154 - Radiation Therapy Physics 4-2-5
Prerequisites: Radiation Therapy Program admission. This course is designed to present 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.

RDN 156 - Radiation Therapy Cross-Sectional Anatomy 5-0-5
This course content is designed to study normal sectional anatomy via diagrams and radiologic images. Topics include: Anatomic Planes of the Body, CT Overview, Other Sectional Imaging Modalities, Topographic Anatomy, Sectional Anatomy of the Head and Neck, Sectional Anatomy of the Chest, Sectional Anatomy of the Abdomen, Sectional of the Male and Female Pelvis, Sectional Anatomy of the Spine and Extremities.

RDN 158 - Oncology I 5-0-5
This course is an introduction to the concept of disease, types 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 interrelating of treatment planning with clinical radiation therapy.

RDN 160 - Pathology 2-4-3
Prerequisites: Radiation Therapy Program admission. This course is designed to introduce patient management and basic radiation therapy procedures in the clinical setting. Emphasis is placed on mastering positioning of the chest and extremities, manipulating equipment and applying principles of ALARA. Upon completion, student should be able to demonstrate successful completion of clinical objectives.

RDN 161 - Introduction to Clinical 0-7-2
Prerequisites: Radiation Therapy Program admission. This course content 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 patients' treatment in a radiation therapy department.

RDN 162 - Radiation Therapy Clinical I 0-21-7
This course is designed to introduce patient management and basic radiation therapy procedures in the clinical setting. Emphasis is placed on mastering positioning of the spine, pelvis, head and neck, and thorax and adapting procedures to meet patient variation.

RDN 164 - Quality Management **5-0-5**
Course content is designed to focus on the evolution of quality management (QM) programs and continuing quality improvement in Radiation Oncology. Topics will include the need for quality assurance (QA) checks, QA of the clinical aspects and chart checks, film checks, the various types of evaluations and tests performed on simulators, megavoltage therapy equipment and therapy planning units, the role of radiation therapists in quality management programs, legal and regulatory implications for maintaining appropriate QM guidelines as well as the role computers and information systems server within the radiation oncology department.

RDN 166 - Treatment Planning **4-3-5**
Course content is designed to establish factors that influence and govern clinical planning of patient treatment. Encompassed are isodose descriptions, patient contouring, radiobiologic considerations, dosimetric calculations, compensation and clinical application of treatment beams. Optimal treatment planning is emphasized along with particle beams. Stereotactic and emerging technologies are presented.

RDN 168 - Oncology II **5-0-5**
The second of a two-course sequence in radiation oncology is a continuation to the concepts of disease, types of growths, causative factors, biologic behavior of neoplastic disease, and staging procedures. Moreover, the study of the specific malignant disease entities by site of occurrence is continued. Disease processes and the treatment planning philosophy are discussed as well as the interrelating of treatment planning with clinical radiation therapy.

RDN 172 - Radiation Therapy Clinical II **0-21-7**
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, students will be able to demonstrate successful completion of clinical objectives.

RDN 174 - Research Methods **5-0-5**
Prerequisites: Radiation Therapy Program admission. Content will include specific elements of the research process and protocols, data interpretation, and application of results.

RDN - 176 - Advanced Radiation Techniques **5-0-5**
The content of this course includes complex topics in treatment planning and delivery, 3-D conformal treatment, intensity modulated radiation therapy, stereotactic radiosurgery, brachytherapy, and total body irradiation.

RDN 182 - Radiation Therapy Clinical III **0-21-7**
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 radiation therapy department and patient progression through evaluation, treatment, and follow-up. Upon completion, students will be able to demonstrate successful completion of clinical objectives.

RDN 184 - Principles of Radiation Therapy Management **5-0-5**
Course content is designed to focus on various radiation therapies' operational issues. CQI project development and evaluation and assessment techniques will be emphasized. Human resource issues and regulations impacting the radiation therapy will be examined. Accreditation agencies and the radiation therapist's role in the accreditation process will be emphasized. Billing and reimbursement issues pertinent to the radiation therapy department will be presented.

RDN 186 - Concept Integration and Review **5-0-5**
This class is a review and integration of principles and tenets of radiation therapy concepts that have been presented through the curriculum.

RTT 111 - Pharmacology **5-0-5**
Prerequisites: Respiratory Care Program admission, BIO 2113, BIO 2114, CHM 1111, MAT 1111. Introduces the physiologic and pharmacologic basis of pulmonary and cardiac medications. Focuses on the preparation and calculation of dosages and mixtures and general principles of pharmacology. Topics include: drug preparation, dosage calculation, mixture preparation, pharmacology principles, bronchoactive drugs, and cardiopulmonary system related drugs.

RTT 112 - Introduction to Respiratory Therapy **5-0-5**
Prerequisites: BIO 2113, BIO 2114, CHM 1111, MAT 1111, PHY 1110; Corequisites RTT 113, RTT 193; *Prerequisite/Corequisite*: BIO 2117. Provides students with the principles of chemistry and physics as they apply to respiratory therapy. Emphasizes specific modes of respiratory care in order to understand principles of application to patients, indications, hazards, contraindications, evaluation of therapy, and patient assessment. Topics include: respiratory therapy chemistry and physics principles, patient assessment, medical gases, humidity/aerosol therapy, positive pressure breathing, incentive spirometry, postural drainage, percussion/vibration, universal precautions, and hospital safety.

RTT 113 - Respiratory Therapy Lab I **0-10-5**
Corequisite: RTT 112,. Provides students with the opportunity to gain hands-on experience with basic respiratory therapy equipment. Students perform simulated clinical exercises as well as bedside assessments and cardiopulmonary resuscitation. Topics include: patient assessment, medical gases, humidity/aerosol therapy, positive pressure breathing, incentive spirometry, postural drainage, percussion/vibration, and medical ethics.

RTT 193 - Cardiopulmonary Anatomy and Physiology **10-0-10**
Prerequisite: Respiratory Care Program admission, BIO 2113, BIO 2114, MAT 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; and renal physiology.

RTT 209 - Clinical Practice I **0-8-2**
Prerequisites/Corequisites: RTT 111, RTT 112, RTT 113. 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, patient assessment, and cardiopulmonary resuscitation.

RTT 210 - Clinical Practice II **0-8-2**
Prerequisite/Corequisite: RTT 209. Continues to develop skills used in the clinical practice. Topics include: medical gas therapy, oxygen therapy, aerosol therapy, incentive spirometry, and patient assessment.

RTT 211 - Pulmonary Disease **5-0-5**
Prerequisites: RTT 111, RTT 112. 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, patient assessment, laboratory tests, chest radiographs, and trauma.

RTT 212 - Critical Respiratory Care **5-0-5**
Prerequisites: RTT 112, RTT 113. Provides students with knowledge on all phases of adult critical care and continuous mechanical ventilation. Topics include: mechanical ventilation history, adult critical care, continuous mechanical ventilation, ventilator implementation, ventilation monitoring, ventilator weaning, and ventilator discontinuance.

RTT 213 - Mechanical Ventilation Equipment and Airway Care **2-7-5**
Prerequisites: RTT 112, RTT 113. *Prerequisite/Corequisite*: RTT 212. Provides instruction in the theory, setup, 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, fiber optic bronchoscopy, thoracentesis, chest tube maintenance, arterial blood gas sampling, and non-invasive ventilatory support.

RTT 214 - Advanced Critical Care Monitoring **2-0-2**
Prerequisites: RTT 112, RTT 113, RTT 193. Provides a study of advanced critical care techniques for hemodynamic and noninvasive monitoring. Topics include: arterial pressure monitoring, central venous catheters, pulmonary artery catheters, cardiac output measurement, and noninvasive monitoring techniques.

RTT 215 - Pulmonary Function Testing **1-1-1**
Prerequisite: RTT 193. 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.

RTT 216 – Pediatric and Neonatal Respiratory Care **3-0-3**
Prerequisites: RTT 193, RTT 212, RTT 213. 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, adolescent assessment, and adolescent respiratory care.

RTT 217 - Advanced Respiratory Care Seminar **5-0-5**
Prerequisites: RTT 212, RTT 213. 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.

RTT 218 - Clinical Practice III **0-8-2**
Prerequisite/Corequisite: RTT 210. 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.

RTT 219 - Clinical Practice IV **0-8-2**
Prerequisite/Corequisite: RTT 218. 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.

RTT 220 - Clinical Practice V **0-16-5**
Prerequisites/Corequisites: RTT 212, RTT 213, RTT 218. 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.

RTT 222 - Clinical Practice VI **0-32-10**
Prerequisite: RTT 219. 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.

RTT 227 - Rehabilitation and Home Care **1-1-1**
Prerequisite: RTT 219. 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.

RTT 310 - Clinical Practice **0-8-2**
Corequisites: RTT 301, RTT 302. Introduces students to the clinical setting in a sleep laboratory or a sleep center. Consists of departmental orientation, policies and procedures, individual body mechanics and client transfers. Emphasis is on monitoring and working with polysomnographic equipment and monitoring sleep study clients, monitoring EEG, ECG, EOG, EMG and SpO2, inductive plethysmography and airflow thermocouple electrodes and equipment.

RTT 311 - Clinical Practice II **0-8-2**
Prerequisites: RTT 301, RTT 302, RTT 310. Corequisite: RTT 303 Provides student with clinical practice related to scoring and interpreting polysomnograms of adult and pediatric clients. Emphasis on CPAP/BiPAP® titration, artifact recognition and troubleshooting of sleep montage results, maintenance of Polysomnography equipment and ancillary equipment.

SCT 100 - Introduction to Microcomputers **1-4-3**
Prerequisite: Provisional admission. Introduces the fundamental concepts and operations necessary to use microcomputers. Emphasis is placed on basic functions and familiarity with computer use. Topics include: computer terminology, introduction to the Windows environment, introduction to networking, introduction to word processing, introduction to spreadsheets and introduction to databases. (03102009)

SMB 101 - Planning for Success **5-0-5**
Introduces the fundamental concepts to discover some of the opportunities that self-employment offers in a way that emulates the free-thinking and self-motivate lifestyle of the entrepreneur. Topics include: self-assessment personality types, business selection, target markets, market trends, marketing, competition, capital needs and locations.

SOC 1101 - Introduction To Sociology **5-0-5**
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. (Replaces SOC 191 eff 200903). 10082008

SPC 1101 - Public Speaking **5-0-5**
Prerequisite: Program admission level language competency or ENG 098. Introduces 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. (Replaces SPC 191 eff 200903). 09182008

SUR 101 - Introduction to Surgical Technology **5-2-6**
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, asepsis and the surgical environment, basic instrumentation and equipment, principles of the sterilization process, and application of sterilization principles.

SUR 102 - Principles of Surgical Technology **4-3-5**
Prerequisites: SUR 101, SUR 108, PSY 1101 (degree) or PSY 1010 (diploma). Provides continued study of surgical team participation by wound management and technological sciences for the operating room. Topics include: biomedical principles; minimal invasive surgery; outpatient surgical procedures; hemostasis; wound healing; surgical dressings, catheters, and drains; incisions; and tissue handling techniques.

SUR 108 - Surgical Microbiology **3-0-3**
Prerequisites/Corequisites: Program admission, SUR 101. Introduces the fundamentals of surgical microbiology. Topics include: historical development of microbiology, cell structure and theory, microbial function, human and pathogen relationships, infectious process, bloodborne and airborne pathogens, defense microorganisms, infection control, and principles of microbial control and destruction.

SUR 109 - Surgical Patient Care **2-2-3**
Prerequisite: Program admission. *Prerequisites/Corequisites:* SUR 101, AHS 104, SUR 108 (diploma), BIO 2117 (degree). Introduces a complex diversity of surgical patients. Topics include: biopsychosocial diversities and needs, preoperative routine, intraoperative patient care, postoperative patient care, and health and wellness.

SUR 110 - Surgical Pharmacology **2-2-3**
Prerequisites/Corequisites: SUR 101, SUR 102, SUR 109. Introduces the fundamentals of intraoperative pharmacology, and emphasizes concepts of anesthesia administration. Topics include: weights and measurements, drug conversions, interpretation of drug orders, legal aspects of drug administration, intraoperative pharmacologic agents, and anesthesia fundamentals.

SUR 112 - Introductory Surgical Practicum **0-21-7**
Prerequisites: Program admission, SUR 101; *Prerequisites/Corequisites:* SUR 102. Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include: scrubbing, gowning, gloving, and draping; assistance with patient care; processing of instruments and supplies; maintenance of a sterile field; basic instrumentation; and environmental sanitation.

SUR 203 - Surgical Procedures I **5-2-6**
Prerequisites: SUR 102, SUR 109, SUR 110, SUR 112; Corequisite: SUR 213. Continues introduction to surgical procedures, incisions, wound closure, operative pathology, and common complications as applied to general and specialty surgery. Topics include: general surgery and special techniques, obstetrical and gynecological surgery, gastrointestinal surgery, genitourinary surgery, head and neck surgery, and plastic and reconstructive surgery.

SUR 204 - Surgical Procedures II **5-2-6**
Prerequisites: SUR 203, SUR 213; Corequisite: SUR 214. Continues development of student knowledge and skills applicable to specialty surgery areas. Topics include: ophthalmic surgery, orthopedic surgery, thoracic surgery, vascular surgery, cardiovascular surgery, and neurosurgery.

SUR 213 - Specialty Surgical Practicum **0-24-8**
Prerequisites: SUR 102, SUR 109, SUR 110, SUR 112, SUR 203. Continues development of surgical team participation through clinical experience. Emphasis is placed on observation/participation in routine procedures and procedures for general and specialty surgery. Topics include: participation in and/or observation of general surgery, gastrointestinal surgery, obstetrical and gynecological surgery, genitourinary surgery, head and neck surgery, and plastic and reconstructive surgery.

SUR 214 - Advanced Specialty Surgical Practicum **0-24-8**
Prerequisites/Corequisites: SUR 203, SUR 204, SUR 213. Provides opportunity for students to complete all required Surgical Technology procedures through active participation in surgery in the clinical setting. Topics include: primary scrub on specialty surgical procedures; participation as a surgical team conducting ophthalmic, orthopedic, thoracic, vascular, cardiovascular, and neurosurgery procedures; independent case preparation and implementation of intraoperative skills; and demonstration of employability skills.

SUR 224 - Seminar in Surgical Technology 3-0-3
Prerequisite: SUR 203; Corequisite: SUR 204; *Prerequisite/Corequisite*: SUR 214. Prepares students for entry into careers as surgical technologists and enables them to effectively review for the national certification examination. The Program Assessment Examination is administered prior to completion of this course. Topics include: professional credentialing, certification review, and test-taking skills.

SUR 226 - Advanced Patient Care Principles 3-4-5
Prerequisite: SUR 204, SUR 214. Introduces the fundamentals of advanced patient care concepts. Topics include: invasive patient care monitoring, advanced patient care assessment, phlebotomy, advanced intraoperative surgical skills, methods of drug administration, and leadership skills. 03102009

SUR 228 - First Assistant Practicum 0-24-8
Prerequisite: SUR 204, SUR 214; Corequisite: SUR 226. Introduces the role and advanced surgical skills of the first assistant in the clinical setting. Topics include: demonstration of medication administration, application and demonstration of advanced patient care assessment skills, demonstration of phlebotomy skills, application and demonstration of advanced intraoperative surgical skills, demonstration of professional communication and employability skills, and demonstration of leadership skills. 03102009

SWG 100 - Introduction to Social Services 5-0-5
Prerequisite: Provisional 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.

SWG 101 - Introduction to Social Work 5-0-5
Prerequisite: Provisional Admission An overview of the social work profession and introduction to the terms, concepts, people, and critical events that shaped the profession. Topics include the role of the National Association of Social Workers (NASW) and the Council on Social Work Education (CSWE) in maintaining and strengthening social work education and standards; the importance of human service agencies in fostering or diminishing the quality of services; and developing an understanding of poverty and the impact of institutional racism, sexism and ageism.

SWG 102 - Human Behavior and the Social Environment 5-0-5
Prerequisite: Provisional admission. A basic framework for creating and organizing knowledge of human behavior and the social environment. Introduction of social systems, life span, and strength approaches to understanding human behavior and environmental impact. Emphasis on the impact of human diversity, discrimination, and oppression on the individual's ability to reach or maintain optimal health and well-being.

SWG 103 - Social Work Methods and Procedures 3-4-5
Prerequisite: Provisional admission. Exploration of procedures to identify and evaluate an individual's and/or family's strengths, weaknesses, problems, and needs in order to develop an effective plan of action. Topics include oral and written communications essential for assessment, screening, intervention, client information, and referral.

SWG 104 - Basic Interviewing and Counseling Skills 3-4-5
Prerequisite: Provisional admission. An introduction to major theories treatment modalities including client-centered, psychodynamic, rational-emotive and reality therapy. Topics include cognitive/behavioral approaches such as behavior modification, life skills training and an introduction to experimental therapies.

SWG 105 - Abnormal Behavior 5-0-5
Prerequisite: Provisional admission. This course is designed to increase the students' knowledge and understanding of current issues and perspectives in Abnormal Behavior. It will call attention to the issue of gender as well as cultural in discussions of psychological disorders. Provide ground breaking biological research on abnormal psychology and give an integrated bio-psycho-social understanding of each disorder. Students will be given a respect of traditional approaches to understanding abnormal behavior.

SWG 200 - Special Problems with Youth 5-0-5
Prerequisite: Provisional admission. This course examines various modalities for assessing and intervening with children and adolescents with special needs. The course focuses on problem assessment, types of intervention strategies, techniques and methods for determining the effectiveness of interventions with children and adolescents.

SWG 201 - Adolescent Life Cycle 3-4-5
Prerequisite: Provisional admission. This course is a study of the developmental phases from adolescence through young adulthood and the tasks and goals to be achieved during those stages. Topics including physiological and psychological changes, interpersonal relationships and the individual's ability to relate to the social environment. Emphasis on critical areas of the adolescent period of the life cycle will be crucial to the student's development of skills and techniques needed to work with diverse groups.

SWG 202 - Field Experience I **1-20-8**

Prerequisite: SWG 100, SWG 101, SWG 102, SWG 103, SWG 104, SWG 105, SWG 200, and SWG 201, or Administrative Approval. Field Experience I and II and the concurrent one-hour seminars are designed as a continuum. Students will be introduced to the basic knowledge, values and skills that comprise the core of social work practice. Emphasis is on a generalist approach, which can be applied to work with individual, families, groups, organizations and communities. Students will become proficient at identifying multiple levels of intervention (individual, family, community, social policy) and multiple targets for change (individual, society, family, organization) for addressing a wide variety of social problems. Field experience provides the student with the opportunity to apply and integrate academic content and to develop skills that meet the requirements for entry-level professional social work assistants. Supervision in the field is provided by a qualified practitioner committed to undergraduate education. Students are required to spend a minimum of 336 clock hours in an educationally oriented field practicum, which is practical general training and experience in the workplace The college and the employer develop and document an individualized plan for the student. The plan relates the workplace training and experience to the student's general and technical course of study. The seminar facilitates integration of classroom learning with knowledge gained in field practice settings. The seminar encourages students to discuss his or her different agency settings, wide variety of client populations and numerous field practice roles and activities. The understanding of the professional role is strengthened and is enhanced beyond the individual student's own experience. The one (1) weekly concurrent seminar during the quarter permits Field Experience students in the different agencies and settings the opportunity to share and benefit from the numerous and varied learning experiences. The seminars are held to evaluate, discuss and interpret the student's involvement and development as a beginning level professional social work assistant.

SWG 203 - Field Experience II **1-21-8**

Prerequisite: SWG 100, SWG 101, SWG 102, SWG 103, SWG 104, SWG 105, SWG 200, SWG 201 and SWG 202, or Administrative Approval. Field Experience I and II and the concurrent one-hour seminars are designed as a continuum. Students will be introduced to the basic knowledge, values and skills that comprise the core of social work practice. Emphasis is on a generalist approach, which can be applied to work with individual, families, groups, organizations and communities. Students will become proficient at identifying multiple levels of intervention (individual, family, community, social policy) and multiple targets for change (individual, society, family, organization) for addressing a wide variety of social problems. Field experience provides the student with the opportunity to apply and integrate academic content and to develop skills that meet the requirements for entry-level professional social work assistants. Supervision in the field is provided by a qualified practitioner committed to undergraduate education. Students are required to spend a minimum of 336 clock hours in an educationally oriented field practicum, which is practical general training and experience in the workplace The college and the employer develop and document an individualized plan for the student. The plan relates the workplace training and experience to the student's general and technical course of study. The seminar facilitates integration of classroom learning with knowledge gained in field practice settings. The seminar encourages students to discuss his or her different agency settings, wide variety of client populations and numerous field practice roles and activities. The understanding of the professional role is strengthened and is enhanced beyond the individual student's own experience. The one (1) weekly concurrent seminar during the quarter permits Field Experience students in the different agencies and settings the opportunity to share and benefit from the numerous and varied learning experiences. The seminars are held to evaluate, discuss and interpret the student's involvement and development as a beginning level professional social work assistant.

SWG 204 - Social Policies and Programs for the Aging **4-2-5**

Prerequisite: Provisional admission. This course explores the aging process and the experience of aging from a variety of perspectives: physiological, psychological and socio-cultural. 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 societally. 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.

SWG 205 - Group Work Intervention **2-7-5**

Prerequisite: Provisional admission. This course focuses on the development of knowledge and skills in the use of group methods in clinical social work practice. The course emphasizes: forming the group, assessing member problems, setting goals, structuring group tasks, activities and experiences, understanding and enhancing group functioning, enabling problem-solving processes, facilitating transfer of change, evaluating individual and group change, and terminating the group. Particular attention is given to utilizing group methods in clinical social work with clients/client systems from high risk and vulnerable populations and from varying racial, cultural and socioeconomic backgrounds.

VAS 110 – Vascular Fundamentals 3-3-4
Prerequisite: Program admission. Introduces the basic principles and applications of physical assessment of non-invasive cardiovascular procedures. Topics include: patient and equipment skills related to vascular technology; basic views, terminology, physical principles, and instrumentation. Emphasis is placed on learning methods, patient care techniques and issues related to sonography, introduction to ultrasound procedures, sonographic terminology, patient interviews, elementary principles of sound waves, sonographic imaging techniques, communication and cultural diversity skills, ethic and professionalism, development of critical thinking skills, legal issues, and issues concerning the clinical environment. Topics include hospital and departmental organization and proper body mechanics when scanning, safety procedures and bloodborne pathogens. 11132007

VAS 136 - Basic Extremity Testing 3-5-5
Prerequisites: CVT 103, CVT 110, CVT 111. *Corequisites:* CVT 104, DMS 133. This course provides lecture and group discussions to understand and demonstrate proficiency in measuring ankle/brachial pressure ratios, aorta/renal ratios, resistance and pulsatility index, carotid artery ratios, velocity changes in vessels, B-mode measurements including diameter and area, and to identify normal vascular flow patterns and waveform. Topics include: test validation, measurements, and quantitative principles of noninvasive vascular testing and aorta, renal and carotid quantitation. 03102009

VAS 141 - Basic Cerebrovascular and Extremity Venous 2-5-4
Prerequisites: CVT 103, CVT 110, CVT 111. Corequisite: VAS 143. This course will provide a thorough understanding of the cerebrovascular anatomy, physiology, and pathology. The clinical assessment of patients for cerebrovascular disease will be discussed to include normal and abnormal anatomy. This course will discuss non-invasive and invasive tests for cerebrovascular procedures. Patient factors and patient histories will be described. The course will also provide a thorough understanding of the anatomy, physiology and pathology of extremity venous procedures. As well as, the clinical assessment of patients with acute and chronic venous disease will be discussed. A description of noninvasive tests used to evaluate extremity venous vascular examinations will be discussed. Topics include: extremity venous anatomy, laboratory results, test validation, noninvasive tests: duplex imaging and plethysmography, patient history, risk factors and contributing disease, extremity venous pathology, treatment of venous disease, cerebrovascular anatomy, invasive cerebrovascular tests, sonographic appearance of cerebral artery disease, non-invasive cerebrovascular exams, and physical examination. 11132007

VAS 143 - Vascular Clinical I 0-24-8
Prerequisites: CVT 103, CVT 110, CVT 111. Corequisite: VAS 141. 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, cerebrovascular testing, indirect testing, and proper ergonomic scanning. 03102009

VAS 144 - Vascular Clinical II 0-24-8
Prerequisite: VAS 143. Provides the student opportunities to participate and perform competencies achieved in the noninvasive vascular laboratories and radiology departments. Also, the student will practice competencies to include abdominal, visceral and extremity venous vascular procedures. Topics include: equipment utilization; patient history, identifying risk factors, and contributing disease; procedural skills and patient care; extremity venous vascular procedures, cerebrovascular testing, advanced cerebrovascular testing, extremity arterial vascular procedures, and indirect testing. 11132007

VAS 202 - Advanced Cerebrovascular 2-3-3
Prerequisite: VAS 141; Corequisite: VAS 144. This course provides a thorough understanding of the cerebrovascular anatomy, physiology, and pathology. The clinical assessment of patients for cerebrovascular disease is discussed, including normal and abnormal anatomy. Patient factors and patient histories are described. Topics include: cerebrovascular anatomy, invasive cerebrovascular tests, physical examination, noninvasive cerebrovascular exams, cerebral artery disease, TCDs, and carotid artery studies. 03102009

VAS 203 - Arterial Duplex 2-3-3
Prerequisites: VAS 136, VAS 143. Corequisite: VAS 144. The course will provide a thorough understanding of the anatomy, physiology and pathology of extremity arterial vascular procedures. The clinical assessment of patients with acute and chronic arterial disease will be discussed. A description of noninvasive tests used to evaluate extremity arterial vascular examinations. Topics include: anatomy, physical examination, noninvasive physiologic testing of extremity, patient history, arterial vascular procedures, contributing diseases, and risk factors. 03102009

VAS 205 – Interventional and Therapeutic 2-2-3
Prerequisites: AHS 104, CVT 111, DMS 133, DMS 136, DMS 202, VAS 144. Corequisite: VAS 245. This course includes a description and explanation of therapeutic intervention and other diagnostic tests that may be performed at locations other than a vascular lab to diagnosis venous, cerebral and arterial diseases. Topics include: therapeutic intervention, compression therapy, medical therapy, invasive diagnostic tests, surgical therapy, noninvasive diagnostic tests, and nonsurgical intervention.

VAS 215 - Vascular Physical Principles and Instrumentation Registry Review 2-0-2
Prerequisites: DMS 136, DMS 202. Provides a review of basic knowledge from previous courses and helps the student prepare for national certification examinations for sonography. Information concerning test taking skills will also be reviewed. Course review includes physics, patient care, equipment/image manipulation, scanning procedures, bioeffects and safety. Emphasis will be placed on those items/issues/topics which are part of the certification examination. Topics include: propagation of ultrasound through tissues, principles of pulse echo imaging, quality assurance of ultrasound instruments, elementary principles, bioeffects and safety , ultrasound transducers and pulse echo instruments. 03102009

VAS 220 – Comprehensive Vascular Technology Registry Review 1-3-2
Prerequisite: Program admission. This course will provide the student with an overall review of Vascular Ultrasound Technology and prepare the student for the registry exam. Topics include: normal and abnormal vascular anatomy, pharmacology, pathophysiology, hemodynamics/physics, test validation and measurements, vascular diagnostic procedures, and laboratory values. 11142007

VAS 230 – Essentials of Vascular Sonography (Non-invasive) 1-3-2
Prerequisite: Program admission. 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. For these areas much greater depth will be reached. The field of vascular sonography is much wider and encompassing than these three areas. The broader field of vascular sonography will be introduced but not studied at length or in depth. 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. 11142007

VAS 242 - Abdominal Vascular 3-3-4
Prerequisites: CVT 110, DMS 133, DMS 136, DMS 202,. Corequisite: VAS 245. . Lecture and laboratory course provides instruction in abdominal and visceral vascular anatomy and physiology. This includes the sonographic appearance, testing modalities, and test results in normal and abnormal body systems using duplex imaging. Topics include: patient history, laboratory results, duplex imaging, risk factors and contributing diseases, mechanisms of disease, anatomy, physical examination, and pathology. 03102009

VAS 245 - Vascular Clinical III 0-24-8
Prerequisite: VAS 144. 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, limited TCD, and limited abdominal duplex; and imaging and measuring abdominal organs and recognizing normal and abnormal echo patterns. 11142007

VAS 246– Vascular Clinical IV 0-30-10
Prerequisite: VAS 245. 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. 11142007

WLD 100 - Introduction to Welding Technology 4-4-6
Provides an introduction to welding technology with an emphasis on basic welding laboratory principles and operating procedures. Topics include: industrial safety and health practices, hand tool and power machine use, measurement, laboratory operating procedures, welding power sources, welding career potentials, and introduction to welding codes and standards.

WLD 101 - Oxyfuel Cutting **2-6-4**
Prerequisite: WLD 100. Introduces fundamental principles, safety practices, equipment, and techniques necessary for metal heating and oxyfuel cutting. Topics include: metal heating and cutting principles, safety procedures, use of cutting torches and apparatus, metal heating techniques, metal cutting techniques, manual and automatic oxyfuel cutting techniques, and oxyfuel pipe cutting. Practice in the laboratory is provided.

WLD 102 - Oxyacetylene Welding **1-2-1**
Prerequisite: WLD 100. Introduces the fundamental theory, safety practices, equipment, and techniques necessary to perform basic oxyacetylene welding operations. Topics include: welding theory; oxyacetylene welding safety; use of gas cylinders, regulators; use of torches, tips, and welding apparatus; welding without filler rods; running beads with filler rods; joint design and making butt, open butt and lap joints; and brazing and soldering. Practice in the laboratory is provided. 03102009

WLD 103 - Blueprint Reading I **1-4-3**
Prerequisite: WLD 100. Introduces the knowledge and skills necessary for reading welding and related blueprints and sketches. Topics include: basic lines; sketching; basic and sectional views; dimensions, notes, and specifications; isometrics; and detail and assembly of prints. 03102009

WLD 104 - Shielded Metal Arc Welding I **3-7-6**
Prerequisite: WLD 100. Introduces the fundamental theory, safety practices, equipment, and techniques required for shielded metal arc welding (SMAW) in the flat position. Qualification tests, flat position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: SMAW safety and health practices, fundamental SMAW theory, basic electrical principles, SMAW machines and set up, electrode identification and selection, materials selection and preparation, and production of beads and joints in the flat position.

WLD 105 - Shielded Metal Arc Welding II **3-7-6**
Prerequisite: WLD 104. Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the horizontal position. Qualification tests, horizontal position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: horizontal SMAW safety and health practices, selection and applications of electrodes, selection and applications for horizontal SMAW, horizontal SMAW joints, and horizontal SMAW to specification.

WLD 106 - Shielded Metal Arc Welding III **3-7-6**
Prerequisite: WLD 104. Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the vertical position. Qualification tests, vertical position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: vertical SMAW safety and health practices, selection and applications of electrodes for vertical SMAW, vertical SMAW joints, and vertical SMAW to specification.

WLD 107 - Shielded Metal Arc Welding IV **3-7-6**
Prerequisite: WLD 104. Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the overhead position. Qualification tests, overhead position, are used in the evaluation of student progress toward making industrial standard welds. Topics include: overhead SMAW safety and health practices, selection and applications of electrodes for overhead SMAW, overhead SMAW joints, and overhead SMAW to specification.

WLD 108 - Blueprint Reading II **1-4-3**
Prerequisite: WLD 103. Emphasizes welding symbols and definitions through which the engineer or designer communicates with the welder. Welding symbols are considered an integral part of blueprint reading for the welder. Topics include: welding symbols and abbreviations; basic joints for weldment fabrications; industrially used welds; surfacing back or backing, and melt-thru welds; and structural shapes and joint design

WLD 109 - Gas Metal Arc Welding (GMAW/MIG) **3-7-6**
Prerequisite: WLD 100. Provides knowledge of theory, safety practices, equipment and techniques required for successful gas metal arc welding. Qualification tests, all positions, are used in the evaluation of student progress toward making industrial standard welds. Topics include: GMAW safety and health practices; GMAW theory, machines, and set up; transfer modes; wire selection; shielded gas selection; and GMAW joints in all positions.

WLD 110 - Gas Tungsten Arc Welding (GTAW/TIG) **2-5-4**
Prerequisite: WLD 100. Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful gas tungsten arc welding. Qualification tests, all positions, are used in the evaluating of student progress toward making industrial standard welds. Topics include: GTAW safety and health practices; shielding gases; metal cleaning procedures; GTAW machines and set up; selection of filler rods; GTAW weld positions; and production of GTAW beads, bead patterns, and joints.

WLD 112 - Preparation for Industrial Qualification 2-6-4
Prerequisite: WLD 101, WLD 105, WLD 106, WLD 107, WLD 108, WLD 109, WLD 110. Introduces industrial qualification methods, procedures, and requirements. Students are prepared to meet the qualification criteria of selected national welding codes and standards. Topics include: test methods and procedures, national industrial codes and standards, fillet and groove weld specimens, and preparation for qualifications and job entry.

WLD 133 – Metal Welding and Cutting Techniques 2-3-3
Prerequisite: Provisional admission. Provides instruction in the fundamental use of the electric arc welder and the oxyacetylene cutting outfit. Emphasis is placed on safe setup and use of equipment. Topics include: arc welding, flame cutting, safety practices, oxyfuel welding, and brazing.

WLD 150 Advanced Gas Tungsten Arc Welding 2-8-5
Prerequisite: WLD 110. Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful advanced gas tungsten arc welding (GTAW). Qualification tests, all positions, are used in the evaluation of student progress toward making advanced level industrial standard welds. Topics include: GTAW safety and health practices; shielding gases; metal cleaning procedures; GTAW machines and equipment set up; selection of filler rods; GTAW weld positions; and advanced production of GTAW beads, bead patterns, and joints.

WLD 151 – Fabrication Processes 4-2-5
Prerequisites: WLD 107, WLD 108, WLD 109. Presents practices common in the welding and metal fabrication industry. Topics include: metal fabrication safety and health practices and metal fabrication procedures.

WLD 152 – Pipe Welding 2-8-5
Prerequisites: WLD 107, WLD 108. 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).

WLD 153 – Flux Cored Arc Welding 2-8-5
Prerequisite: WLD 100. 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.

WLD 154 – Plasma Cutting 4-3-5
Prerequisites: WLD 100, WLD 101. 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

WLD 160 Welding and Joining Technology Half-Time Internship 0-150-5
Prerequisite: Completion of two full quarters with a GPA of 3.0 or better. Provides additional skills application in an industrial setting through a cooperative agreement among industry, the Welding Joining Technology program, and the student to furnish employment in a variety of welding occupations. Emphasizes student opportunities to practice welding skills in a "hands on" situation and to work in an industrial environment under the supervision of a master welding technician. Supplements and complements the courses taught in the Welding and Joining Technology program. Topics include: application of welding and joining skills, appropriate employability skills, problem solving, adaptability to job equipment and technology, progressive productivity, and acceptable job performance.

Faculty and Staff

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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Barnor, Nee Q. - Clinical Coordinator and Instructor, Ultrasound Programs. M.S., University of London; B.S., University of Science and Technology; Diploma, Montgomery College

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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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Byrd, Jon - Program Director and Instructor, Aviation Maintenance Technology. A.A.S., Georgia Military College; F.A.A. Inspection Authorization (IA); F.A.A. Mechanic with Airframe and Powerplant Ratings (A&P); F.A.A. Certified Pilot; F.C.C. General Radiotelephone Operators License (GROL)

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Watt, Dwight - Program Director and Instructor, CISCO and Computer Information Systems. Ed.D., University of Georgia; M.B.A., Winthrop University; B.A., Winthrop University. Certification: CCP, MCSE, MCSA, CompTIA A+, CompTIA Network+, CompTIA Server+, CompTIA I-Net+, MOS, IC3, MCP+I, COI, MCDST, CCAI, MCT

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Wilson, Sharon - Instructor, Psychology and Online (GVTC) Coordinator. M.Ed., University of Tennessee, B.S., Tennessee Temple University

Wilson, Yong - Instructor, Mathematics. M.S.A.S., Kennesaw State University; M.S., Southern Polytechnic State University

Wright, Curtis - Program Director and Instructor, Pharmacy Technology, B.S., Bryan College; A.S., Northeast Alabama Community College

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The technical college foundation is established to encourage private contributions in order to build and maintain outstanding academic and support programs at the college. Donations to the college's foundation support areas of institutional need including scholarships to deserving students, materials for the library, staff development for faculty and staff, and equipment. Both colleges established their foundations in 1988.

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Dr. Cathy Vann, Associate Vice President of Academic Affairs
Vicki Ely, Office Manager – Academic Affairs
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Barry Williams, Dean of Industrial Technologies
Barbara Pittman, Secretary - Industrial Technologies & Public Service Technologies

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John Rivest, Librarian/Night Manager
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Ronald Parker, Transition Specialist
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Cass Jackson, Technician
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Melinda Sams, Coordinator of Library Services
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Rhonda Sosebee, Secretary - Academic Affairs

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Marilyn Buckner, Secretary - Industrial Technologies
Susan Greene, Secretary - Public Service Technologies
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Shannon Goodwin, Secretary - General Education
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Justin Allmon, Database Administrator
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Lois Newton, Library Technical Assistant

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Bill Byars, Director of Campus Safety and Security
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Liz Shields, Payroll
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Robbie Johnson, Bookstore Assistant
Wanda Moore-Moon, Director of Accounting
Jackie Cantrell, Accounts Payable
Latoya Porter, Accounts Payable
Rita Bishop, Purchasing
Dee Farris, Accountant/Budgets
Robbie Nash, Asset Management
Johnny Trotter, Director of Facilities
Mike Hopkins, Maintenance Supervisor
Charles Abrams, Custodian
Rob Cummings, BEC Custodian
Debra Godfrey, Custodian
Dennis Holloway, Custodian
Brenda Maddox, Custodian
James Pilgrim, Custodian
Regina Spivey, Custodian
Mark Williams, Custodian
Mike Simpson, Grounds Keeper
J.O. Green, Maintenance Technician
Kevin Randall, Maintenance Technician
Ken Roberts, Maintenance Technician
Craig Willis, Maintenance Technician
Wesley Willis, Maintenance Technician

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Deborah Tomlinson, Cashier
Keith Parker, Maintenance Supervisor
Bud Clance, Maintenance Technician
Kenneth Thomason, Maintenance Technician

Polk County Campus
Phil Frazier, Maintenance Supervisor
Susan Sanzone, Custodian

Walker County Campus
Shaunta Hambrick, Cashier
Becky Mullinax, Purchasing
Lisa Rubner, Security
Phil Ingle, Maintenance Supervisor
David White, Maintenance
Greg Chapman, Maintenance
Tammy Holsomback, Custodian

Office of Adult Education Programs

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Lisa Warren, Assistant

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Other Locations
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Gail Johnson, Director of Business Expansion Center and Continuing Education
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Lisa DiPrima, Career Counselor
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Sherry Herrington, Training Assistant, WIA
Casey Clark, Assistant, WIA
Alice Stevens, Assistant, WIA
Sonya Richards, Special Populations Coordinator
Amy Ogles, Workshop Facilitator
Darrell Pauldo, Fatherhood Coordinator
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Jeannie Lofton, Job Coach
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