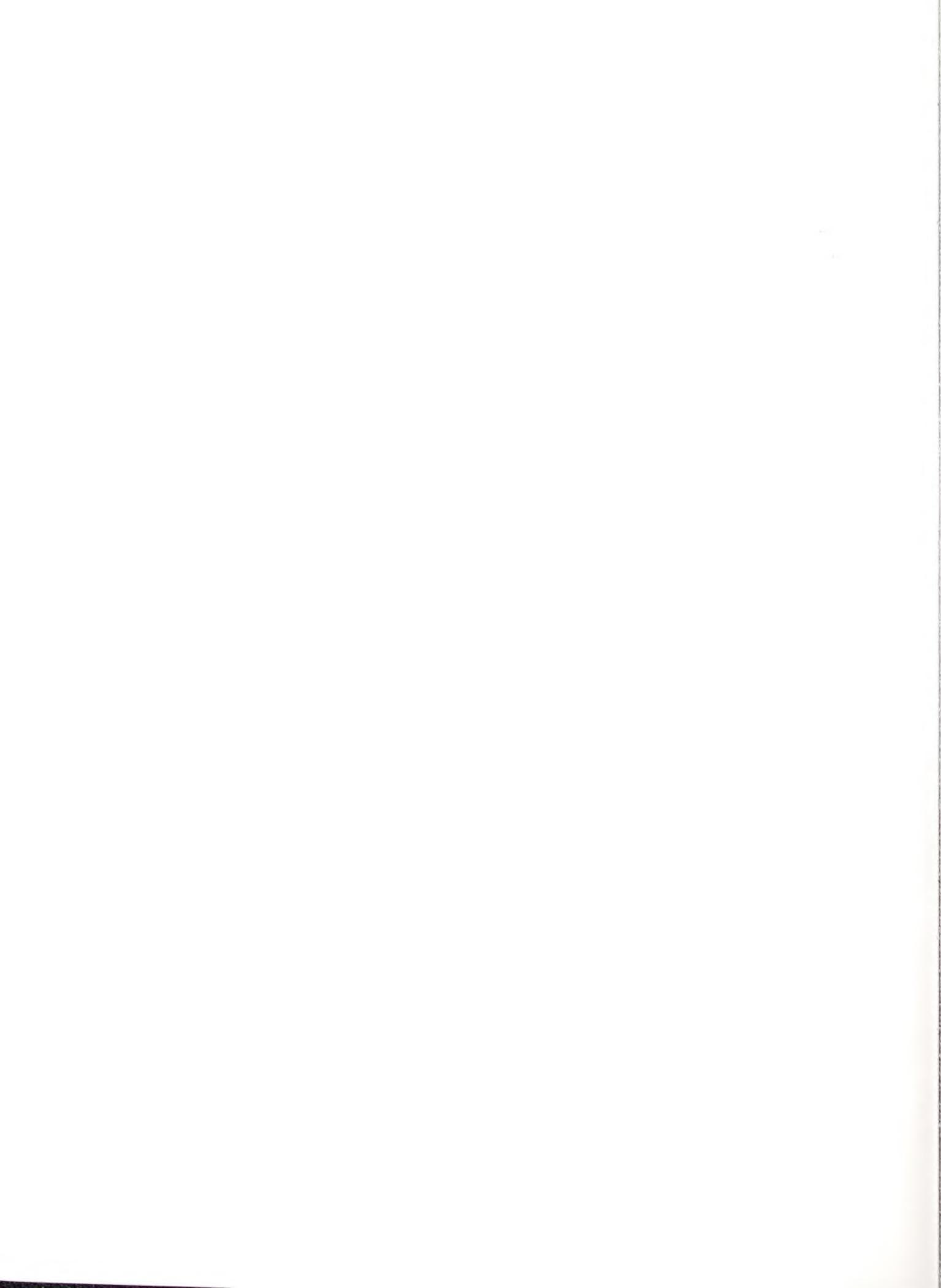# Northwestern
Technical Institute

CATALOG

MILLENNIUM
1999-2000
EDITION

NORTHWESTERN TECHNICAL INSTITUTE
1999-2000 GENERAL CATALOG, VOL. XIII
Millennium Edition

Northwestern Technical Institute is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, GA, Telephone Number 404-679-4501) to award the Associate of Applied Technology Degree

Northwestern Technical Institute is accredited by the Accrediting Commission of the Council on Occupational Education (41 Perimeter Center East, NE Suite 640, Atlanta, GA 30346, Telephone Number 770-396-3790) to award the Associate of Applied Technology Degree, the Diploma, and the Technical Certificate

AFFILIATIONS:

American Technical Education Association
Associate Member American Association of Community Colleges
Business Council of Georgia
Electronics Technicians Association
Georgia Association of Collegiate Registrars and Admissions Officers
Georgia Association of Student Financial Aid Administrators
Georgia Industrial Developers Association
Georgia Motor Trucking Association
Microsoft Authorized Academic Training Program Institution
National Center for Occupational Education

Northwestern Technical Institute
PO BOX 569
265 Bicentennial Trail
Rock Spring, GA 30739
www.northwestern.tec.ga.us

Information .... (706) 764-3510
Admissions Office .... (706) 764-3514
Admissions Office .... (800) 735-5726

Northwestern Technical Institute is a higher education institution of the Georgia Department of Technical and Adult Education and is an Equal Opportunity Educational Institution.

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If you are an individual with a disability who may require assistance or accommodation in order to participate in or receive the benefits of the services, programs, or activities offered by Northwestern Technical Institute, or if you desire more information, please contact us at (706)764-3510.

Northwestern Technical Institute
1999-2000

The contents of this catalog do not constitute a contract between Northwestern Technical Institute and its students on either a collective or individual basis. It represents Northwestern Technical Institute's best academic, technical, social, and financial planning information at the time the catalog was published. Courses and curriculum changes, modifications of fees, and other changes, plus unforeseen changes in other special aspects of Northwestern Technical Institute's life sometimes occur after the catalog has been printed but before the changes can be incorporated in a later edition of the same publication. Because of this, Northwestern Technical Institute does not assume contractual obligation with students for the contents of this catalog.

Northwestern Technical Institute is an equal opportunity educational institution and welcomes applications for employment and educational programs from all individuals regardless of race, color, religion, sex, disability, age, or national origin. Northwestern Technical Institute is non-discriminatory on the basis of sex in its educational programs and activities, including employment and admission of students to the school as required by Title IX of the Educational Amendments of 1972 and by rules and regulations based therein and published as 45 CFR, part. 86.

Northwestern Technical Institute complies fully with the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 and does not discriminate against individuals with disabilities.

HISTORY OF NORTHWESTERN TECHNICAL INSTITUTE

Northwestern Technical Institute was established by an act of the Georgia General Assembly in 1964. The facility was completed in the summer of 1966 with the first students accepted to begin classes in the fall of 1966. Diplomas were offered in eight programs of instruction. Local governance of the institution was provided by the Walker County Board of Education. At the time it opened it was called the Walker County Area Vocational Technical School. The institution was assigned a four county service area in northwest Georgia: Catoosa, Chattooga, Dade and Walker counties. In 1987 the Walker County Board of Education voted to transfer ownership of the institution to the Georgia Department of Technical and Adult Education. This transfer became effective on July 1, 1988, and the institution became known as Walker Technical Institute. In 1992 Walker Technical Institute was granted authority to award the Associate of Applied Technology degree in seven areas. Today the institution offers the AAT degree with 8 majors and the diploma with 17 majors. In 1998, the institution changed its name to Northwestern Technical Institute to more accurately reflect the institution's service area.

NORTHWESTERN TECHNICAL INSTITUTE
PO BOX 569
265 Bicentennial Trail
Rock Spring, Georgia 30739
www.northwestern.tec.ga.us

Georgia
Virtual Technical Institute

Northwestern Technical Institute is a founding member of the Georgia Virtual Technical Institute, a consortium of technical institutes offering web based courses in a variety of technical and general education areas. Education anytime, any place, any where is accomplished by taking advantage of the worldwide connectivity of the internet and the world wide web. Offering courses over the web removes the obstacles of both time and place that are many times an unsurmountable barrier to pursuing higher education. Persons interested in learning more about the GVTI or Northwestern's web based classes may call 706-764-3673 or contat the GVTI office on line at http://www.northwestern.tec.ga.us.

The minimum technology requirements for taking a GVTI class are described below. Please note that these requirements may change due to advances in technology .

Computer Requirements

Windows 95, 486dx or faster processor, 8MB of RAM or more, 14.4 kbps modem or faster, sound card & speakers.

MacOs 7.5.5 or later, Power PC Processor, 16 MB of RAM or more, 14.4 kbps modem or faster.

Internet Service Provider

An ISP is a company that can provide you with the software necessary for getting onto the internet. Contact your local ISP to set up your personal account. Withour an ISP, it is impossible to take GVTI online classes.

Email Account

Since it is the primary form of comunication, you must have an email address prior to applying or registering. Generally, your ISP will give you an email account. Please contact your ISP if you are unsure of your email address.

Java Compliant Web Browser

You will need a Java compliant browser. For the Java capable browser we recommend Microsoft Internet Explorer 3.0.2 (or higher) or Netscape Navigator 3.0.1 (or higher). You can download a current version for free.

Microsoft
Authorized Academic Training Program

Northwestern Technical Institute is a **Microsoft Authorized Academic Training Program Institution.** To achieve such a designation, an institution of higher education must have Microsoft certified professionals on staff, use approved Microsoft training materials, use the most current versions of Microsoft software, and have state-of-the-art computer hardware.

Northwestern Technical Institute offers two Microsoft certification options through the Computer Information Systems Department. The **Microsoft Office User Specialist** program provides training in Microsoft Office products and prepares the student to sit for the Microsoft Office User Specialist examinations. **The Microsoft Windows NT Certificate** is designed for the student with prior computer experience and prepares the student to sit for the Microsoft Certified Systems Engineer core examinations.

Microsoft Authorized Testing Center

Northwestern Technical Institute is an authorized Microsoft Testing Center. Being an ATC allows Northwestern the ability to provide Microsoft certification examinations in the full suite of Microsoft Office products, including Microsoft Word, Microsoft Access, Microsoft Excel, and Microsoft PowerPoint.

Microsoft Authorized Academic Testing Center

Northwestern Technical Institute is also designated as a Microsoft Academic Testing Center. This designation allows the institution to serve as an examination center for individuals wishing to sit for the Microsoft certification examinations.

General Information

GENERAL INFORMATION

THE NORTHWESTERN TECHNICAL INSTITUTE VISION

Northwestern Technical Institute is a higher education institution of the Georgia Department of Technical and Adult Education and the primary provider of accessible, high quality educational opportunities in Northwest Georgia. It is an integral component of a seamless educational system offering programs of study that result in the student's achievement of career and personal goals. Northwestern provides educational experiences that produce graduates noted for their excellence as employees and as lifelong learners.

THE NORTHWESTERN TECHNICAL INSTITUTE MISSION

The mission of Northwestern Technical Institute is to offer accessible, high quality educational opportunities that lead to careers in technology, business, health, and human services. The institution offers a variety of educational opportunities leading to the certificate, the diploma, and the AAT degree as well as providing the community with adult literacy, economic development, and personal enrichment programs. The institution's educational programs focus on the development of technical competence and critical thinking skills; social, personal, and intellectual values; and an understanding of society. The Office of the President, and the divisions of Student Services, Administrative Services, Instructional Services, and Economic Development work cooperatively in support of the mission.

The Northwestern mission is accomplished through a shared institutional value system which recognizes the following student rights:

- The right to learn regardless of age, gender, color, ethnic or linguistic background, marital status, the presence of dependents, disability, or financial circumstances.
- The right to equal opportunity for access to relevant learning opportunities throughout life.
- The right to a learning environment which includes appropriate instructional materials, equipment, media, and facilities.
- The right to be taught by competent instructors who possess appropriate subject matter expertise as well as knowledge and skills relating to the teaching/learning process.
- The right to academic support resources including instructional technology that can make self-directed or distance learning possible.
- The right to individualized information and guidance leading toward further study.
- The right to student support services that include career and personal counseling, advisement, financial aid, and job placement.
- The right to membership in the learning organization that is Northwestern Technical Institute.

ACCREDITATION

Northwestern Technical Institute is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, GA, Telephone Number 404-679-4501) to award the Associate of Applied Technology Degree.

Northwestern Technical Institute is accredited by the Accrediting Commission of the Council on Occupational Education (41 Perimeter Center East, NE Suite 640, Atlanta, GA 30346, Telephone Number 770-396-3790) to award the Associate of Applied Technology Degree, the Diploma, and the Technical Certificate of Credit.

LOCATION

Northwestern Technical Institute is located in Rock Spring, Georgia, on U. S. Highway 27, six miles north of LaFayette, Georgia, and ten miles south of Fort Oglethorpe, Georgia.

ADVISORY COMMITTEES

Advisory committees, composed of outstanding representatives from business and industry, meet with school personnel to make recommendations, offer suggestions, and assist in evaluations of each training program.

BOOK STORE

Northwestern Technical Institute contracts with Interstate Textbook Company to provide a full service book and supply store for students. The "Campus Shop,"located adjacent to the cafeteria, carries not only textbooks, but a variety of paperback books, office supplies, and other products.

EMERGENCY CLOSING

The President or the Vice President for Instructional Services is authorized to take action to close the school if conditions exist that may threaten the health and safety of students and personnel. The President or the Vice President for Instructional Services is also empowered to delay the opening hour of the school day and/or release students and personnel before the normal day ends if hazardous conditions exist.

School closures or delayed openings will be announced by local radio stations and major Chattanooga area television and radio stations.

HEALTH CARE

Any student with a health condition such as diabetes, hemophilia, epilepsy, or any other potentially dangerous ailment should inform his/her instructors and register the problem with the Student Services Office. Applicants must be physically able to attend school regularly and to perform essential class and laboratory functions.

MAIN CAMPUS

The main campus consists of six modern buildings providing administrative offices, faculty offices, classrooms, laboratories, shops, cafeteria, and Library. The campus has over 100,000 square feet of assignable space.

FAMILY EDUCATIONAL RIGHTS
AND PRIVACY ACT OF 1974

NOTICE TO STUDENTS

Northwestern Technical Institute informs students of the Family Educational Rights and Privacy Act of 1974. This Act, with which the institution complies fully, was designated to protect the privacy of educational records, to establish the right of students to inspect and review their educational records, and to provide the guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with the Family Educational Rights and Privacy Act Office (FERPA) concerning alleged failures by the Institution to comply with the Act.

Directory information will be treated as public information and will generally be available on all students and former students at the discretion of the Institution. Directory information includes the following:

> The student's name, address, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, height, weight, age, hometown, hobbies, dates of attendance, degrees, honors, awards applied for and/or received, and previous educational institutions attended by the student.

Any student who does not wish directory information disclosed must file a written request with the Vice President for Student Services. Questions concerning the Family Educational Rights and Privacy Act may be referred to the Registrar's Office.

WEAPONS POLICY

It is unlawful for an individual to bring to, possess, or have under such person's control, any explosive compound, firearm, or knife designed for the purpose of offense or defense while at a public gathering (O.C.G.A. 16.11.127). Having a license to carry a pistol is no justification under this policy.

It is unlawful for any person to carry to or to possess or have under such person's control while within a school safety zone or at a technical institute building, function, or property or on a bus or other transportation furnished by any technical institute any weapon or explosive compound.

The term "weapon" means and includes any pistol, revolver, or any weapon designed or intended to propel a missile of any kind, or any dirk, bowie knife, switchblade knife, ballistic knife, any other knife having a blade of three or more inches, straight-edged razor, spring stick, metal knucks, blackjack, any bat, club, or other bludgeon-type weapon, or any flailing instrument consisting of two or more rigid parts connected in such a manner as to allow them to swing freely, which may be known as a nunchaku, shuriken, or fighting chain, or any disc of whatever configuration, having at least two points or pointed blades which is designed to be thrown or propelled and which may be known as a throwing star, oriental dart, or any other weapon of like kind, any stun gun or laser. "Weapon" does not include any fireworks the possession of which is regulated by Chapter 10 of Title 25 of Georgia Law.

This policy exempts law enforcement officers, judges, magistrates, solicitors, district attorneys, and employees of the department of corrections, or employees of local or federal correctional facilities who are authorized to carry a firearm. Also exempt are persons employed as campus police or security officers who are authorized to carry a weapon in accordance with Chapter 8, Title 20, and private detectives/security agents who hold firearms permits issued by the Georgia Board of Private Detectives and Security Agencies. Also exempt is any legal weapon carried in a locked container, locked compartment or locked gun rack in a privately owned vehicle.

An employee or student found in violation of this policy shall, in addition to any criminal action taken, be subject to dismissal from the institute or termination of employment as determined by the President.

Student Organizations and Activities

STUDENT ORGANIZATIONS AND ACTIVITIES

The following activities are available to Northwestern Technical Institute students.

PHI THETA KAPPA
Phi Theta Kappa is an international organization recognized as the official honor society for two year colleges. Its members are associate degree students who have demonstrated excellence in academics, character, and citizenship.

NATIONAL VOCATIONAL TECHNICAL HONOR SOCIETY
Students who maintain an average of 3.5 for a minimum of two quarters and who maintain a 3.6 work ethics average are eligible for membership in the National Vocational-Technical Honor Society.

The purpose of this organization is to recognize outstanding postsecondary technical students. Students are inducted into this organization twice a year.

STUDENT LEADERSHIP COUNCIL
The Student Council is a volunteer organization made up of volunteer representatives from all occupational programs at Northwestern. This organization works on projects throughout the year to benefit the institution and its students.

GOAL PROGRAM
The Georgia Occupational Award for Leadership is a recognition sponsored jointly at the state level by the Department of Technical and Adult Education and the Business Council of Georgia. At the local level the program is sponsored by the Walker County Chamber of Commerce and Northwestern Technical Institute. 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 Northwestern Technical Institute in the state contest. Grades, attitude, personal goals, and self-confidence are considered in selecting GOAL winners.

STUDENT PARKING
All full and part-time students and continuing education students are required to display a campus parking permit in the lower left hand section of the rear window of their vehicle. There is no charge for the parking permit, however failure to properly display a parking permit may result in the vehicle being towed. Parking permits are distributed at registration.

Admission

Requirements and Procedures

ADMISSION POLICY
Requirements and Procedures

ADMISSION POLICY
The admissions policy of Northwestern Technical Institute assures the citizens of Georgia 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 Northwestern Technical Institute will:

- Be nondiscriminatory to any eligible applicant regardless of race, color, national origin, sex, disability, religion, age, or marital status;
- Increase the prospective student's opportunities;
- Guide the implementation of all activities related to admission to Walker Technical Institute and its programs; to student financial aid; and to the recruitment, placement, and retention of students; and
- Complement the instructional program.

ADMISSION REQUIREMENTS
Below are the general requirements for admission into the certificate, diploma, or degree programs. Specific admission requirements are listed for each program in the curriculum section of this catalog. **NOTE: All Nursing and Allied Health programs have additional admission requirements**.

Age: Applicants for admission must be at least 16 years of age. Applicants for Licensed Practical Nursing, Occupational Therapy Assistant, Pharmacy Assistant, and Surgical Technology must be 17 years of age or older, and applicants for Commercial Truck Driving and Emergency Medical Technician must be at least 18 years of age.

Education: Educational requirements vary according to the particular program of study. All Associate of Applied Technology and all business and medical diploma programs require a high school diploma or equivalent (GED). Prior to graduation from an industrial technology diploma program, all students must have graduated from a high school or completed GED requirements.

Placement Scores: Applicants for all degree, diploma, and selected certificate programs must take the ASSET placement test or provide official documentation of a course grade of "C" or better in credit-level English and mathematics taken from an accredited postsecondary institution; or submit appropriate ASSET, CPE, SAT or ACT scores.

ADDMISSION PROCEDURES
1. Submit an application for admission to the Office of Admissions along with a $15 non-refundable application fee.
2. Submit an official copy of high school or GED transcript.
3. Take placement exam or submit SAT, ACT, CPE, ASSET scores or transfer college credit from an accredited postsecondary institution.
4. Applicants for Licensed Practical Nursing, Medical Assistant, Occupational Therapy Assistant, and Surgical Technology are required to complete additional admission procedures.

5. An orientation program must be attended by each new student. The orientation program is designed to acquaint students with school policies, procedures and services.

NOTE: Test scores submitted must have been taken within the previous five (5) years. If scores are not available, applicants will be required to take a scheduled placement test.

ADMISSION STATUS
Admission to Northwestern Technical Institute will be in one of the following categories: Program Ready, Provisional, Developmental, or Special.

Program Ready: All the admission requirements have been met as set by the statewide minimum for admission into a program and eligible to take all the courses in the curriculum. Regular admission of transfer students is contingent upon meeting all the regular admission requirements and is in good standing at a regionally accredited diploma or degree granting institution.

Provisional Status: Placement test scores indicated a need for skills development in reading, writing, math and/or algebra. Occupational courses may be taken along with the developmental courses prior to gaining regular admission.

Developmental Status: Placement test scores are below a designated level in reading, writing, math and/or algebra. Complete developmental studies courses before taking any occupational courses in your program. Applicants who do not have a GED or high school diploma will be referred to the Adult Basic Education program. This program allows students to receive the needed skills at no charge.

Special Status: Applicant not seeking a degree, diploma or certificate wishing to enroll in a course for personal, consumer or occupational purposes may take up to 25 credit hours of occupational courses and receive credit. Specially admitted students are not eligible for financial aid.

"OFFICIAL" DOCUMENTS
"Official" transcripts, GED transcripts, or other required documents must be sent directly from the issuing school or agency to: Office of Admissions, Northwestern Technical Institute, P.O. Box 569, 265 Bicentennial Trail, Rock Spring, GA 30739. If brought by the applicant in person, documents must be in an unopened envelope that has been officially sealed by the issuing school or agency.

ASSET PLACEMENT EXAM
The ASSET placement exam is a multiple-choice exam measuring knowledge in language, reading, mathematics, and algebra (scores on the algebra portion may not be required for placement in every program). The purpose of the ASSET is to ensure that a student has the 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 placement exam unless he or she can provide documentation of the following:

1. A course grade of "C" or better in credit-level English and mathematiics taken from an accredited postsecondary institution.
2. Acceptable SAT, ACT, or CPE test scores which are no more than five years old.

ABILITY-TO-BENEFIT EXAM

An applicant who does not have a 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 Ability-To-Benefit (ATB) examination as well as acceptable program entry scores. Passing the ATB exam does not take the place of having a high school diploma or GED for admission purposes.

TRANSIENT STUDENT ADMISSION REQUIREMENTS

A student in good standing at another accredited institution may be permitted to enroll as a special student on a space-available basis in order to complete work to be transferred back to the parent institution. A transient student will be advised in writing by the parent institution concerning recommended courses.

The transient student must do the following:

a. Submit an application for admission to the host institution. A transient student will be designated as a special student by the host institution for reporting purposes.
b. Present a statement from the Registrar or Academic Dean of the parent institution to the effect that the student is in good standing, is program ready, and is eligible to return to that institution.
   Note: The 25-hour credit maximum may be waived for the student upon the recommendation of the parent institution.
c. Pay scheduled fees of the host institution.

TRANSFER STUDENT ADMISSIONS

Applicants to Northwestern Technical Institute who have been previously enrolled in one or more institutions of higher education and who wish to enroll in a credit program will be considered for transfer admission. Applicants for transfer admission must meet the following requirements prior to their planned enrollment.

Transfer applicants shall submit to the Admissions Office:
1. A completed application form.
2. A $15.00 non-refundable application fee.
3. An official high school transcript or GED diploma. If an applicant has a baccalaureate degree, a high school transcript is not required. (Exception: A high school transcript is required for all nursing and allied health applicants).
4. Official transcripts from previous institutions of higher education attended that document coursework for which applicants seek credit with a passing grade of C or better.
5. Satisfactory scores on the ASSET Placement Test.

A student who has satisfactorily completed with a "C" grade or better transferable English or mathematics courses may be exempt from taking the placement examination. These courses must be equivalent to the entry level English and math courses required in the applicant's chosen program of study.

A transfer student is admitted to Northwestern Technical Institute:
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 grade point average of at least 2.0 on a minimum of five quarter hours during the first quarter enrolled to continue the next quarter.

Transfer students who are on academic exclusion from their former institution are considered for admission to Northwestern Technical Institute on the same basis as excluded students from NTI who apply for readmission. Such applicants, if admitted, are admitted on probation as indicated in 2 above. A student admitted on probation must earn a grade point average of at least 2.0 on a minimum of five quarter hours during the first quarter enrolled to continue the next quarter.

TIME LIMITATION FOR PROGRAM COMPLETION
Northwestern Technical Institute will accept course credits from regionally accredited institutions of higher education without time constraints. The institution does not limit the amount of time it will honor course work taken at Northwestern. However, at the advisor's discretion, students may be required to repeat course work five years old or older where the course content has changed significantly. There is no minimum amount of time in which a program of study must be completed. Students must take 50% of their program at Northwestern, however. The typical minimum program length is listed in the Curriculum section of this catalog.

RE-ADMISSION OF FORMER STUDENTS
Students who are absent from Northwestern Technical Institute for one full quarter or more, exclusive of summer quarter, will be required to complete the following:
1. Submit a completed application form to the Admissions Office.
2. Meet the Northwestern Technical Institute General Catalog admission re quirements in effect at the time of re-admission.
3. Submit official transcripts from all institutions of higher education attended since the last enrollment at NTI.
A student who withdraws in good standing during a quarter may return the following quarter without completing a new application for admission.

POSTSECONDARY OPTIONS STUDENT (PSO)
Under the postsecondary options program, a student may attend Northwestern Technical Institute while also attending public high school. The student may receive Carnegie unit credit from a public high school and postsecondary credit hours from Northwestern Technical Institute for the same course. The student must adhere to the following admission regulations:
1. Be at least 16 years of age and classified as a junior or senior.
2. Complete an application for admission and pay a $15 (non-refundable) application fee.
3. Present a joint enrollment/postsecondary options application from the public high school with appropriate signatures.
4. Submit an offical copy of high school transcript.
5. Meet all testing requirements for Regular Admission status.
6. Present the Georgia Postsecondary Options Tuition Grant Form at the time of registration each quarter.
NOTE: *A student attending public high school full-time (all day) is not eligible for the PSO program.*

SENIOR CITIZENS

Residents of Georgia who are 62 years of age or older may request a waiver of tuition and fees. 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. Proof of age must be presented at registration to receive a fee waiver.

OUT-OF-STATE

1. 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 tuition purposes, an individual must show that he/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.
2. Out-of-state students may be charged tuition fees twice that charged for Georgia residents. Northwestern Technical Institute does not charge out-of-state tuition to students living in out-of-state counties contiguous to the Northwestern service area.

POLICY ON INTERNATIONAL STUDENTS

Northwestern Technical Institute is not authorized by the Office of Immigration and Naturalization Services to accept any individual who does not already have legal immigration status. International students seeking admission to Northwestern Technical Institute must meet the following requirements in addition to the admission procedures for 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.
2. Submit Test of English as a Foreign Language (TOEFL) scores. A minimum score of 500 is required to meet the English proficiency requirement.
3. Provide SAT, ACT, or ASSET Scores.
4. Pay all costs in full when registering for courses if not eligible for financial aid.
5. Present to the Admissions Office (for photocopying) the original document certifying immigrant or non-immigrant status (resident alien card, Form I-94, refugee card, etc.)
6. Foreign and out-of-state students shall be enrolled only on a space available basis and shall not displace any eligible student desiring to enroll who is a resident of Georgia.
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.

Financial Information

FINANCIAL INFORMATION

APPLICATION FEE
Students applying for admission to any credit course must pay a one time application fee of $15.00 which is non-refundable.

TUITION
All credit students will be assessed fees at the rate of $21.00 per credit hour. A student registering for twelve (12) or more credit hours will be considered a full-time student and will pay $252.00 for credit programs (tuition subject to change).

REGISTRATION FEE
All students pay a quarterly registration fee of $20.00

LATE REGISTRATION FEE
Students not registering on or before the starting date of the quarter will be charged a $20.00 late fee.

CHALLENGE EXAMINATION FEE
Students who wish to receive credit by exam will be charged a $25.00 challenge fee for each class they challenge. For more information, please read the Credit by Examination section under Academic Policies in this catalog.

OTHER FEES

ACCIDENT INSURANCE
Accident insurance is included in the registration fee. Any student taking one or more credit classes is covered by student accident insurance.

BOOKS
Textbooks can be purchased in the bookstore. The book store buys back used textbooks during finals week each quarter. The buy back price is set by the book store management and is based upon the condition of the book, the edition, and the need for the book next quarter.

GRADUATION FEE
All graduates will be charged a $20.00 graduation fee which includes the cost of the diploma and diploma cover. Caps and gowns may be purchased at a separate cost from the bookstore.

REFUND POLICY
It is the policy of Northwestern Technical Institute to refund 75% of the fees paid if the student formally withdraws within seven consecutive calendar days, including holidays, from the first day of class. No refunds will be issued after this date. Formal withdrawal prior to the first day of class will result in a 100% refund. Application fees are not refundable. To receive a refund on any fees paid, the student must initiate the refund proceedings by furnishing a receipt and completing and signing the Refund Request Form. These forms are available in the Records Office.

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

TRANSCRIPT FEE
A fee of $2.00 will be charged for transcripts. To obtain a transcript, a request must be made in writing to the Registrar. Transcripts may not be requested by telephone.

SENIOR CITIZEN WAIVER
Qualified senior citizens, 62 years of age or older, pay application, activity and other fees if applicable. Tuition is waived. Senior citizens will be enrolled on a space available basis the first two days of the quarter.

REPLACEMENT OF STUDENT ID
Lost or damaged student identification cards for the current quarter may be replaced in the Office of the Registrar. There is a charge for this service.

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 $10.00. 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. Northwestern Technical Institute will withhold grades and transcripts until the returned check and the charge are collected. Students will be withdrawn from class if the fees are not paid.

REPLACEMENT DIPLOMA
A replacement diploma may be obtained by requesting one in the Office of the Registrar. There is a charge for this service.

INDEBTEDNESS
It is expected that every student will discharge any indebtedness to the Institute 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/her indebtedness to the Institute. A student may be prohibited from attending classes or taking final examinations after the due date of any unpaid obligation.

APPEAL PROCESS

Students failing to meet the "Academic Policies for Financial Aid" will be notified in writing by the Financial Aid Office. Any extenuating circumstances which influenced the student's academic performance may be submitted in writing on a "Financial Aid Appeal Form" to the Financial Aid Office for consideration. Appeals for unsatisfactory academic progress will be forwarded to the Financial Aid Satisfactory Progress Committee. All final appeals are forwarded to the Vice President for Student Services. No financial aid will be disbursed until the financial aid appeal is approved. If the appeal is denied, the student will be responsible for the payment of tuition and fees until the academic policies are met.

REFUND POLICY

A few exceptions to the refund policy exist concerning financial aid recipients. Financial aid will be adjusted for classes dropped or added during the seven day period. Also, first-time students are subject to a federal pro-rata calculation up to 60% point of time of instruction.

FINANCIAL AID TRANSCRIPT

Students who have attended a postsecondary institution since high school must request a financial aid transcript be mailed to Northwestern Technical Institute (whether they received financial aid or not).

FEDERAL PELL GRANT

Students who demonstrate financial need and are enrolled in an eligible program may be eligible for this grant. The amount of the grant may range from $400 to $3000 per academic year, depending on the level of federal funding, cost of education, enrollment status, and the student's Expected Family Contribution (EFC), which is taken from the Student Aid Report. Complete eligibility requirements are available from the Financial Aid Office.

HOPE SCHOLARSHIP PROGRAM

This state funded program is available for most Georgia residents attending Northwestern Technical Institute. The HOPE Scholarship and HOPE Grant pay all tuition and fees for those who qualify and are not receiving federal financial aid to cover tuition. Students pursuing a federal eligible program must complete the **Free Application for Federal Student Aid** and the **Northwestern Technical Institute Financial Aid Application** to apply for the HOPE Program. Students pursuing a certificate program not eligible for federal funds, students with a bachelors degree, or students whose total income is at least $50,000 must only complete the **Northwestern Technical Institute Financial Aid Application**. All students eligible for the HOPE Program will receive a book allowance up to $100.

GEORGIA STUDENT INCENTIVE GRANT

Georgia residents attending full-time with sufficient financial need may be eligible for this grant. Funds are limited, and, therefore, awards are made on a first-come first-served basis. Students should file the **Free Application for Federal Student Aid** as early as possible (January or February prior to the upcoming academic year). Awards for a minimum of $100 are made for the Fall, Winter, and Spring quarters.

FEDERAL WORK-STUDY
This program allows students to work in on-campus jobs and earn money to pay their educational expenses. Students will normally be paid the Federal minimum wage and are paid monthly based on the number of hours worked. Students should apply for the Federal Pell Grant initially and their eligibility for College Work-Study will be determined from their Student Aid Report papers. Students should contact the Financial Aid Office for more details.

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (FSEOG)
A Federal Supplemental Educational Opportunity Grant (FSEOG) is for undergraduates with exceptional financial need - that is, students with the lowest Expected Family Contributions (EFCs) - and give priority to students who receive Federal Pell Grants. An FSEOG doesn't have to be paid back. There is no guarantee every eligible student will be able to receive an FSEOG; students may be awarded an FSEOG based on the availability of funds.

REHABILITATION SERVICES
Vocational Rehabilitation cooperates with Northwestern Technical Institute by providing financial assistance to students who have disabilities and who qualify for Vocational Rehabilitation.

VETERANS BENEFITS
Veterans benefits are available to qualified veterans and dependents of deceased or disabled veterans. Applicants should contact the Financial Aid Office or their local or regional Veterans Administration Office to obtain applications.

Tuition refunds for students receiving benefits through the Department of Veterans Affairs will be prorated over the length of the course after deduction of a twenty dollar ($20.00) fee.

NORTHWESTERN INSTITUTE FOUNDATION SCHOLARSHIPS
A limited number of scholarships and loans, funded by the Northwestern Technical Institute Foundation, are available for students who demonstrate financial need. For additional information contact the Financial Aid Office.

JOB TRAINING PARTNERSHIP ACT (JTPA)
This is a federal program available to students who qualify based on federal income guidelines. This program pays tuition, books, and supplies for full-time students. There is also a travel, meal, and child care allowance to those qualifying. All persons interested in applying for JTPA must first apply for the Federal Pell Grant. To apply for JTPA, contact the JTPA office at Northwestern Technical Institute.

STUDENT SERVICES

The major objective of the Student Services Program at Northwestern Technical Institute is to assist students in developing the attitudes and abilities necessary to be successful in the occupation they plan to enter.

ORIENTATION
In order that new students may be fully informed and aware of all phases of school life, a program of orientation is provided at the time of placement testing and at registration. Orientation includes an orientation packet and video explaining the school rules and policies, and a briefing on Student Services. New students and all returning students who have not attended for one year are required to attend orientation.

CAREER EXPLORATION
Northwestern Technical Institute's professional career counseling staff provides personal career counseling, various career interest assessments, computerized career guidance, and program observation. Located in the testing center, the service is free and open to the public. Any adult who is interested in making a change in career direction should contact the center to make an appointment to receive testing and counseling and to take advantage of other resources designed to give information and support.

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

SERVICES TO STUDENTS WITH DISABILITIES-ADA
A special needs counselor is available to those students with disabilities who may need individual educational plans, specialized equipment, books, or referral services.

JOB PLACEMENT
The Job Placement Office at Northwestern Technical Institute assists students in selecting appropriate employment upon completion of their courses of study. Some assistance may be given for part-time work while attending school. The services at the placement office are available for all current and former students.

The successful placement of graduates is one of the major goals of the staff at Northwestern Technical Institute.

FOLLOW-UP
The follow-up program maintains contact with former students in the employment field. The data collected from graduates and their employers assists Northwestern Technical Institute in meeting its training objectives and developing up-to-date curricula for its courses of study.

SERVICES FOR SPECIAL POPULATIONS

Northwestern Technical Institute is committed to providing technical education to students with special needs through the special populations assistance program under the administration of the Vice President of Student Services. The two primary purposes of the program are:

1. To improve the educational development of the special populations students and
2. To improve the understanding and support of the campus environment.

Special populations students are those special needs students who are academically and/or economically disadvantaged or are physically and/or mentally disabled as defined under Section 504 of the Rehabilitation Act of 1973 and the American Disabilities Act of 1990 and as defined by Carl Perkins Vocational Applied Technology (who are national origin minority students with limited English language skills and non transitional students).

Students attending Northwestern Technical Institute who have special needs should contact the ADA Coordinator for counseling and initiation of intervention strategies.

To insure equal access and equal opportunity for all students, Northwestern Technical Institute provides access to the following services:

Disadvantaged/Developmental Services
Students with Disabilities
Sex Equity Services
Single Parent, Displaced Homemaker Services
Financial Aid Services
Community Based Organization Services
JTPA Services
PEACH Services
Limited English Proficiency Services and
Vocational Rehabilitation Services
Northwest Georgia Career Depot (One-Stop Shop)
Fatherhood Initiative

VETERANS EDUCATIONAL SERVICES

Northwestern Technical Institute assists armed services veterans and other students eligible for veterans educational benefits from the Veterans Administration (VA). The Financial Aid Office 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 their appropriate school and VA forms. Program changes are to be reported promptly on appropriate VA forms through the Financial Aid Office.

All students receiving VA educational benefits are also required to report changes in course load, withdrawals, or interruptions in attendance to the Financial Aid Office to minimize personal liability resulting from over-payment of VA benefits.

All students receiving VA educational benefits are required to complete a veteran data sheet at each registration to insure proper school certification for that respective quarter.

SATISFACTORY ACADEMIC PROGRESS POLICY

A student is required to maintain satisfactory academic progress to remain eligible for financial aid. Northwestern Technical Institute uses the following standards to monitor students' progress toward their diploma, degree or certificate. Satisfactory progress has two components, quality and quantity.

Quality

Students must maintain a cumulative grade point average (GPA) of at least 2.0 to remain in good standing. The GPA is 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 one quarter to improve the GPA to the satisfactory level. If, after one quarter, the GPA remains below 2.0, the student will lose financial aid eligibility until the cumulative GPA is back up to the 2.0 level.

Quantity

There are a maximum number of hours that students may attempt in pursuing their area of study. These hours are not to exceed 150% of the hours needed for graduation. For example, if a student is pursuing a diploma in Management and Supervision which requires 88 credit hours for graduation, he or she is allowed to attempt a maximum of 132 hours and still maintain satisfactory progress. In order for students to graduate within the maximum "time frame" of hours, at the end of each quarter they are expected to have cumulatively completed at least 66% of their credit hours. For example, a student who attempts 15 credit hours his first quarter in school would be expected to successfullty complete 10 hours for that quarter. If the student took 15 more credit hours the second quarter, he 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% 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 make satisfactory academic progress. Students may reestablish good standing when they have cumulatively completed 66% of their attempted credit hours.

The following grades do not count toward successfully completing a course: "F" grades; "I" or incomplete; "WF," "WP," or "WD," withdrawals. Changing a course from credit to audit during a quarter gives the student a grade of "AU", which does not count as completing a course either. Any combination of these for all courses results in no progress and immediate loss of financial aid eligibility without a probation. Repeat courses will be considered as any other course. Financial aid does not pay for courses that are audited (indicated by "AU") nor for courses completed by credit by examination (indicated by "EX").

Policy for Reinstatement of Eligibility for Financial Aid

1. Students whose GPA is classified as unsatisfactory can reestablish eligibility when the GPA reaches 2.0. Students may reestablish good standing when they have cumulatively completed 66% of their attempted credit hours. It is the

responsibility of students to report to the Financial Aid Office when they meet the above requirements.

2. The above requirements to re-establish financial aid will be made at the student's own expense.

Students will be notified of their failure to make satisfactory academic progress. If the student feels there were circumstances beyond his or her control that kept him or her from maintaining satisfactory progress, he or she may appeal in writing, using a satisfactory progress appeal form, to a review committee. If the student does not agree with the committee's decision an appeal can be made to the Vice President for Student Services whose decision is final. Appeal forms are available from the Financial Aid Office. Students will be notified of the committee's decision within two weeks of submitting the appeal.

Career Planning

Northwestern Technical Institute provides career planning for those prospective students who need assistance in choosing a program of study and are not quite sure how to get started. A personal career planner is available to answer your questions concerning programs of study, admissions, financial aid, registration, classes, and job placement. This service is free and open to the public. Any adult wishing to add value to their life through education should contat the Admissions Office to make an appointment with a Career Planner.

Single Parent Displaced Homemaker Program

SINGLE PARENT/DISPLACED HOMEMAKER PROGRAM

Displaced homemakers are individuals who have experienced a sudden personal and economic dislocation due to divorce, separation, disability, or death of a spouse. For many years they may have been full-time homemakers dependent on the income of a spouse, but dislocation from the role requires that they become employed.

The barriers displaced homemakers encounter when they seek employment are numerous. Displaced homemakers are subject to the highest unemployment rate of any single group. Age, lack of prior paid work experience, limited education, and lack of specific job skills are but some of the obstacles to employment.

In order to assist single parents and displaced homemakers with career and life planning decisions, a program called New Connections To Work is available at Northwestern Technical Institute. This program has been developed to serve single parents (male or female), displaced homemakers, and single pregnant women by empowering them to gather information, explore career alternatives, and become prepared to enter the job market.

The primary objective of the program is to provide a supportive environment where participants can develop a personal plan of action that will lead to employment and help them to overcome the barriers that prevent them from becoming independent and employable. This is accomplished through a series of workshops and small group seminars that include educational and career opportunities; information about non-traditional jobs; and a program of assessing personal skills, interests, and values. In addition, the program offers counseling in coping skills and includes such topics as dealing with stress, legal rights, decision making, and problem solving.

There is no charge to the displaced homemaker or single parent for any of the program services.

More information regarding the workshop schedules may be obtained by contacting the New Connections To Work Program at Northwestern Technical Institute.

EXPANDED HORIZONS EQUITY PROGRAM

Traditional ideas that suggest that "this is a man's job" and "that's woman's work" just aren't true any more. Today's jobs are open to qualified applicants. Northwestern Technical Institute's Expanded Horizons Equity Program is designed to assist males and females who are pioneering into nontraditional technical training.

Nontraditional programs for men include Business and Office Technology, Information and Office Technology, Cosmetology, and Practical Nursing. Nontraditional programs for women include Air Conditioning Technology, Drafting, Electronics, Industrial Maintenance, Machine Tool Technology, and Commercial Truck Driving.

The Expanded Horizons Equity Program at Northwestern Technical Institute attempts to assist individuals who must overcome certain obstacles in order to complete nontraditional technical training, obtain productive employment, and become self-sufficient. Funded by the Carl D. Perkins allocation grant, Expanded Horizons provides career guidance; job search skills; tuition assistance; assistance for books, tools, and supplies; and a fitness training program for females through the YMCA. Expanded Horizons provides enhanced services and coordination of resources to individuals who might otherwise be forced to forego educational opportunities.

ONE STOP SHOP
"The Career Depot"

(A collaborative effort of Northwestern Technical Institute, Northwest Georgia Private Industry Council SDA JTPA, Department of Labor, Walker County Department of Family and Children Services, Rehabilitation Services, Walker County Health Department, Lookout Mountain Community Services, and Valley Hospital.)

Program Description:
The purpose of the One Stop Shop is to promote improved comprehensive services integration and accessibility of customer services throughout the service delivery area. The goals are to increase the quantity of the employment and training and community services provided within limited available resources; improve the quality of services by effecting a better match between customer needs and services provided; and accomplish both through creation of a customer driven unified system. These goals will be accomplished by making effective use of resources which may include but are not limited to electronic connections through the Department of Labor and Health Department, PC - based systems, internet access, networking physical location, mobile resources, and eventually commonality of information gathering forms and sharing customer and services information.

The One Stop Activities are located in Room 116 for PEACH clients from Walker and Catoosa Counties. The New Connections to Work initiative is conducting job search/employability/life skills seminars bi-weekly for Walker County PEACH and quarterly for Catoosa County. The literacy program at Northwestern Technical Institute has established an MOU with the Walker Department of Family and Children Services to provide instruction to students who need to work on their GED. The Literacy component provides career and educational (academic) assessment for all students enrolled in the One-Stop program. Currently the CAPS software is used for vocational assessment and ABLE assessment to identify grade levels of clients. Those students who are in need of their GED will spend half a day in Workshop activities and the second half of the day in literacy class.

Adult Literacy

ADULT LITERACY PROGRAMS

Adult Literacy is a program designed specifically for adults with different academic needs, backgrounds, and skills. A flexible program of study has been designed to meet the needs of any individual who wishes to participate.

Day and evening community literacy classes are offered in Northwestern Technical Institute's service delivery area, which includes Catoosa, Chattooga, Dade and Walker Counties. Individualized instruction is offered at three levels. Level I includes instruction in the areas of reading readiness, basic arithmetic skills, and basic grammar. Level II includes instruction in the areas of reading comprehension, reading in the content areas, mathematics, and language arts. Level III includes instruction that will enable a student to develop the skills necessary to pass the GED Tests. There is no charge for community adult literacy classes. On-site industry classes are also available upon request. Individuals desiring additional information may contact the Office of Adult Literacy.

The Tests of General Education Development (GED)
The Adult General Education Program provides a means by which Georgia residents may demonstrate the attainment of developed abilities normally acquired through completion of a high school program of study. Persons who have not graduated from high school in the United States or Canada, nor previously earned a GED, and are nineteen (19) years old or older, are eligible to take the test.

Persons 16 to 18 years of age may test under certain conditions. Contact the Director of Counseling and Assessment for application forms and instructions.

The Tests of General Educational Development (GED) are issued to persons who successfully pass a series of five (5) tests in the areas of Writing Skills, Social Studies, Science, Literature and the Arts, and Mathematics.

Free classes to prepare adults for this examination are offered on a year round basis at several locations in the area. The GED test is administered in the Testing and Counseling Center on the main campus at Northwestern Technical Institute. The fee for the test is $35.00 and photo identification is required.

For additional information on this program contact the Adult Literacy Office at (706) 764-3521.

General and Academic Policies

GENERAL AND ACADEMIC POLICIES

STATEMENT OF NON-DISCRIMINATION
Northwestern Technical Institute is committed to the concept of an open door policy and equal educational opportunity. Northwestern Technical Institute supports the Civil Rights Act of 1964, Executive Order #11246, Title IX of the Educational Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990. No person shall, on the basis of age, race, religion, color, sex, national origin, or disability be excluded from participation in, or be denied the benefits of, or be subjected to discrimination under any program or activity at Northwestern Technical Institute.

GENERAL REGULATIONS
It is a basic and fundamental responsibility of an educational institution 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 Northwestern Technical Institute. Students forfeit their right to remain at Northwestern Technical Institute if they fail to comply.

A Student Conduct Code, including a statement on student rights and responsibilities, may be found in the Student Handbook.

STUDENT RESPONSIBILITIES
Students are responsible for being informed of all policies and procedures required for continued attendance at Northwestern Technical Institute. Policies and procedures are generally found in this catalog and in the Student Handbook. Other policies pertaining to specific student rights and regulations are found in the school's Policies and Procedures Manual located in the Library. This document is available for reference at any time. The institution'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 Services.

CHANGE OF NAME OR ADDRESS
Students are responsible for notifying the Records Office of any change of name or address. The mailing of notices to the last address on record constitutes official notification.

STATE STANDARDS
As a higher education institution of the Georgia Department of Technical and Adult Education, Northwestern Technical Institute adheres to the policies, procedures, and achievement criteria as established and presented in the state curriculum standards documents. The standards serve as a benchmark for providing high quality technical training that meets the demands of business and industry not only today, but in the future as the changes in our society continue to alter the nature of the workplace. Standards mean that our educational partners in business and industry can rely on the graduates of Northwestern Technical Institute to have the knowledge and technical expertise to perform their jobs to world class standards.

GUARANTEE

The Georgia Department of Technical and Adult Education has developed curriculum standards with direct involvement of business and industry. These standards serve as the industry-validated specifications for each occupational program. The standards allow Northwestern Technical Institute to offer this guarantee:

"If one of our graduates who was educated under a standard program and his/her employer agree that the employee is deficient in one or more competencies as defined in the standards, Northwestern Technical Institute will retrain that employee at no instructional cost to employee or employer."

This guarantee applies to any graduate of Northwestern Technical Institute who is employed in the field of his/her training. It is in effect for a period of two years after graduation.

To inquire or to file a claim under this warranty, please call the Vice President for Instruction.

DRUG AND ALCOHOL

Northwestern Technical Institute prohibits the unlawful possession, manufacturing, distribution, dispensation, and use of illicit drugs and alcohol on the institutional premises or at institute sponsored events in accordance with the Alcohol and Drug Free Communities and School Act Amendments of 1989. (Public Law 101-226).

In compliance with the Federal Drug Free Schools and Communities Act Amendments of 1989 (Public Law 101-226), Section 22, Drug Free Schools and Campuses, Northwestern Technical Institute implements and maintains a drug free program. The Act ensures the prevention of the use of illicit drugs and abuse of alcohol by students.

Students indicted for possession or sale of illegal drugs, alcohol, and/or other mind-altering substances will be suspended from school and forfeit all claim to financial aid.

STATE POLICY ON WEAPONS ON SCHOOL PROPERTY

It is unlawful for an individual to bring to, possess or have under such person's control any explosive compound, firearm, or knife designed for the purpose of offense or defense while at a public gathering (O.C.G.A. 16-11-127). Having a license to carry a pistol is no justification under this policy.

It is also unlawful for a person to carry or possess or have under such person's control while within a school safety zone or at a technical institute building, function, or property or on a bus or other transportation furnished by any technical institute any weapon or explosive compound.

The term "weapon" means and includes any pistol, revolver, or any weapon designed or intended to propel a missile of any kind, or any dirk, bowie knife, switchblade knife, ballistic knife, any other knife having a blade of three or more inches, straight-edge razor spring stick, metal knucks, blackjack, any bat, club or other bludgeon-type weapon, or any flailing instrument consisting of two or more rigid parts connected in such a manner as to allow them to swing freely, which may be known as a nun chahka, nunchaku, shuriken, or fighting chain, or any disc, or whatever configuration, having at least two points or pointed blades which is designed to be thrown or propelled and which may be known as a throwing star or oriental dart, or

any weapon of like kind, and any stun gun or taser. "Weapon does not include any fireworks the possession of which is regulated by Chapter 10 of Title 25 of Georgia Law.

An employee or student found in violation of this policy shall, in addition to any criminal action taken, be subject to dismissal from the institute or termination of employment as determined by the President.

CAMPUS SECURITY POLICIES AND CRIME

Title II of Public Law-542 is the Crime Awareness and Campus Security Act of 1990 (the ACT). As a condition of continued participation in the Title IV student financial assistance programs, this Act requires Northwestern Technical Institute to prepare, publish, and distribute certain policies and information to all current students and employees and to any applicant for enrollment or employment upon request beginning September 1, 1992, and each year thereafter. This includes information on criminal actions or other emergencies occurring on "campus" and the institute's response, current policies concerning security and access to "campus facilities," and recent statistics on criminal offenses reported to local police agencies. Northwestern Technical Institute makes statements of policy regarding the possession, use, and sale of alcoholic beverages and the possession, use, and sale of illegal drugs.

Northwestern Technical Institute's Campus Security Policy and Crime Statistics Report is distributed to all prospective and current students and employees and is available upon request from the Business Office. Complete statistics are available from the Admissions Office.

HEALTH AND SAFETY

The Northwestern Technical Institute campus has first aid kits which meet OSHA standards.

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.

All students are provided with a student accident insurance plan designed especially for the students of community and technical colleges. Complete details of the coverage may be obtained from the Office of the Registrar.

SEXUAL HARASSMENT POLICY

The Department of Technical and Adult Education does not tolerate sexual harassment. Sexual harassment is a form of sex discrimination and is a violation of State and Federal law. It is the intent of the State Board of Technical and Adult Education to provide an academic and work environment free of any type of harassment including sexual harassment for all students and employees. Complete information is available in the Student Handbook.

CONDUCT

Students of Northwestern Technical Institute have an obligation to assist in making the school 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 institute and must also adhere to student conduct regulations as published in the Student Handbook which is 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.

TOBACCO-USE POLICY
In the interest of health and to create a tobacco-free environment, the use of tobacco is expressly prohibited in all buildings. Designated areas have been established outside of the main buildings.

Academic Information

ACADEMIC INFORMATION

GRADING SYSTEM

Grades will be issued at the end of each quarter. The following grading system will be used:

Grade		Grade Points
A	(90-100) Excellent	4.00
B	(80-89) Good	3.00
C	(70-79) Satisfactory	2.00
D	(60-69) Poor	1.00
F	(Below 65) Failing	0.00
AU	Audit	Not Computed
EX	Credit by Competency Exam	Not Computed
I	Incomplete	Not Computed
S	Satisfactory	Not Computed
TR	Transfer Credit	Not Computed
WP	Withdrew Passing	Not Computed
WF	Withdrew Failing	Computed as an "F"
U	Unsatisfactory	Not Computed

"AU" AUDIT   A student may choose to audit a class rather than take it for credit. By auditing the class the student is allowed to attend class without meeting admission requirements and without receiving a grade or credit. Students who audit a class must pay the regular tuition, admission, and registration fees. Students are not allowed to change from audit to credit once the term has begun. Neither are students allowed to change from credit to audit once the term has begun.

"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.) Such a request should be made to the program course instructor. 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 Northwestern Technical Institute.

"I" INCOMPLETE   When circumstances beyond the control of a student or an instructor prevent the completion of course requirements during a quarter, an "I" (incomplete) 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. All work must be completed within the first two weeks of the following quarter, or the grade automatically becomes an "F." Extraordinary circumstances may merit an appeal for an extension of time. Extensions of time must be requested by the instructor and approved by the Instructional Services Office.

"S" SATISFACTORY   Developmental courses and some credit courses which are held for business and industry may award a grade of "S" for Satisfactory rather than an A, B, C or D grade. A grade of "S" indicates that the student has successfully mastered all of the course competencies. A grade of "S" carries no quality points, but credit hours for that course will be awarded to the student.

"TR" TRANSFER CREDIT   A grade of "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 Northwestern Technical Institute for the credit hours received at the former institution. (See Transcript Evaluations under Academic Information.)

"WP" WITHDREW PASSING   This grade signifies that a student withdrew from school voluntarily with a passing grade after the tenth class day and before the sixth week of the quarter. *Not computed in GPA.*

"WF" WITHDREW FAILING   This grade signifies that a student withdrew from school voluntarily with a failing grade after the tenth class day and before the sixth week of the quarter. *Computed as an "F" in GPA.*

"U" UNSATISFACTORY   Developmental courses and some credit courses which are held for business and industry may award a grade of "U" for Unsatisfactory rather than an "F." A grade of "U" indicates that the student did not master all of the course competencies. A grade of "U" carries no quality points.

GRADE POINT AVERAGE
The grade point average (GPA) is a way of mathematically computing a student's academic performance by assigning a value to each grade, multiplying the value by the number of credit hours in the course, and dividing the product by the total number of hours attempted. It is a standard measure for retention and graduation requirements.

Northwestern Technical Institute is on a four-point system which means that an A grade is assigned a value of four points (sometimes called quality points), a B three points, a C two points, a D one point, and an F zero points. The following is an example of a grade point average for one quarter.

GPA COMPUTATION

Credit Hours		Grade & Value		Grade Points
5	x	B	(3) =	15
5	x	D	(1) =	5
1	x	A	(4) =	4
2	x	C	(2) =	4
4	x	C	(2) =	8
Total: 17				36

The total grade points (36) divided by the total attempted credit hours (17) results in a grade point average of 2.11 (approximately a C average).

QUARTERLY GRADE POINT AVERAGE
The quarterly grade point average is the average of all grades earned in a single quarter.

CUMULATIVE GRADE POINT AVERAGE
The cumulative grade point average is the average of all grades earned at Northwestern Technical Institute. This average is calculated by dividing the number of hours in all courses attempted in which a grade of A, B, C, D, or F has been received into the number of grade points earned. The cumulative grade point average is recorded on the student's permanent record.

REPEATED COURSES
When a course is repeated, only the last grade received will be calculated in the cumulative GPA. The first grade will, however, still be recorded on the transcript.

WORK ETHICS GRADE
A code of ethics is basic to all cultures, groups, and professions. Ethics provide guidelines for living and performing and 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 work place.

Each student is evaluated in terms of his or her work ethics twice each quarter, at midterm and at the end of the quarter. This evaluation is reflected in a separate grade on the student's transcript. Attributes measured as a part of work ethics are attendance, punctuality, attitude, participation/initiative, use of equipment, work procedures/safety, professionalism, and problem solving. Details of the work ethics component for each course are provided to the students by the instructor of that course.

GRADE REPORTS
Grade reports are mailed to students approximately two weeks after the close of a quarter. Grades will not be given out by phone.

GRADE APPEALS
A grade appeal must be made not later than the midterm of the academic quarter following the quarter in which the grade was received. A student wishing to initiate an appeal may obtain a copy of the specific procedure from the Office of the Vice President for Instruction.

SATISFACTORY ACADEMIC PROGRESS
Students are considered to be making satisfactory academic progress if they maintain a cumulative grade point average of 2.0 or higher. A cumulative grade point average of 2.0 or higher is required for graduation.

UNSATISFACTORY ACADEMIC PROGRESS
Students are considered to be making unsatisfactory academic progress if they have been placed on academic suspension because of their cumulative grade point average.

ACADEMIC PROBATION AND SUSPENSION
Any student who earns a quarterly grade point average of less than 2.0 will be placed on academic probation during the next quarter of registration and enrollment. A student placed on academic probation must meet with his or her advisor to develop intervention strategies. A student will be suspended for one quarter if the cumulative grade point average falls below a 2.0. When a student is suspended, that student is not allowed to enroll at the institute 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 grade point average of 2.0 or higher

DROP/ADD PERIOD
A student may drop or add a course without academic penalty within the first seven (7) consecutive calendar days, including holidays, following the beginning date for

any quarter. All schedule changes must be approved by the instructor and the student's academic advisor. To drop or add a class, the student must fill out a Change of Registration Form (obtained in the Records Office) and return it to the Records Office with the appropriate signatures. Course(s) dropped during the drop/add period will not appear on the student's official academic record. A student may withdraw from a class after the official drop/add period but before the sixth (6th)week of the term. Students who withdraw during this time period will be assigned a grade of WP or WF. A student who stops attending a class but does not officially withdraw from that class will receive a grade of F.

WITHDRAWAL FROM THE INSTITUTE
Students desiring to completely withdraw from the institute should consult their academic advisor and/or counselor. Advisors and counselors are interested in providing assistance to students; they may be able to help students plan their educational pursuits and/or provide needed job information.

In order to officially withdraw from the school, the student must obtain a Withdrawal Form from the Records Office, complete the form, and return it to that office. A student who stops attending classes but who does not officially withdraw from these classes will receive failing grades.

HONOR SOCIETY
Students who maintain an average of 3.5 for a minimum of two quarters and who maintain a 3.6 work ethics average are eligible for membership in the National Vocational-Technical Honor Society.

PHI THETA KAPPA
Phi Theta Kappa is an international organization recognized as the official honor society for two year colleges. Its members are associate degree students who have demonstrated excellence in academics, character, and citizenship.

MERIT LIST
A quarter GPA of 3.50 - 3.79 with a course load of at least twelve credit hours will place a student on the Merit List for that quarter.

PRESIDENT'S LIST
A quarter GPA of 3.8 or higher with a course load of at least twelve credit hours will place a student on the President's List.

PRESIDENT'S LIST FOR PART-TIME STUDENTS
Part-time students become eligible for the President's List when they have a quarterly GPA of 3.0 or higher and have accumulated 15 credit hours of course work with a GPA of 3.8 or higher.

GRADUATION
A student is eligible for graduation when the following requirements have been met:
1. The diploma or associate degree seeking student has a high school diploma or has earned a GED.
2. The required number of hours in the student's program of study have been satisfactorily completed and the student has maintained a minimum grade point average of 2.0.
3. An application for graduation has been filed in the Records Office no

Institute educates the student for an uncertain future in addition to training him or her in specific skills.

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 defined by the curriculum requirements of each program area and includes from 61-120 credit hours in AAT degree programs.

Elective Courses are available for each diploma or degree program and are 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 area, in general education, or in other program areas.

COLLEGE TRANSFER
Courses at Northwestern Technical Institute are not specifically designed to transfer into programs leading to the baccalauretae degree. The Georgia Board of Regents official position on courses taken at Northwestern is " Although courses from these institutions are not designed for programs leading to the baccalaureate 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."

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 studies course work. Students desiring to change their major should complete a Change of Status Form.

CLASS CANCELLATION
The institute reserves the right to cancel any class with insufficient enrollment; however, all courses will be given the opportunity to make 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.

CREDIT BY EXAMINATION
Upon petition from a student, credit by examination may be given. If circumstantial evidence indicates the probability of special technical aptitude or knowledge on the part of the petitioner, 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 an appropriate instructor. To be eligible for credit by examination, the student must be currently enrolled in the institution. There is a nonrefundable $25 fee for each examination. Students who score 75% or higher on all components of the examination will be awarded a grade of "EX" for the course. 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 application and procedure for initiating a request to challenge a courseare available in the Admissions Office.

COURSE SUBSTITUTION

The Institute 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 instructor 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 Records Office. On this form the student will describe the substitutions sought and the reason for making that request. Such course substitution requests must receive approval from the Office of Instructional Services.

DEVELOPMENTAL STUDIES

Northwestern Technical Institute is dedicated to helping its students succeed. Foundation courses in English, reading, and mathematics are offered for students whose placement test scores indicate a need for remediation in one or more of these academic areas. Developmental studies courses improve the student's chance of success upon enrolling in a regular program of study.

At the time a student makes application to the institution, he or she will be given a placement test. This test is used for counseling and placement purposes only. If the test indicates that the student is not academically prepared to enter a regular program of study, the student may be granted developmental or provisional admission status to the Institute and will be placed in one or more developmental courses. Once the student has successfully completed the developmental course work, he or she will progress into courses in the desired program of study.

In order to successfully complete a developmental studies course, the student must meet the following criteria:

1. Complete the required exit examination
2. Score 80% or above on course work
3. Receive instructor recommendation

Applicants who have not completed a high school diploma or GED may be referred to Adult Kiteracy classes for remediation.

HELP LAB

The HELP Lab is an open lab which all students may use to complete word processing assignments and to utilize tutorial software in basic mathematics, algebra, geometry, and trigonometry, as well as in English grammar, composition, and reading. Software is available to diagnose specific needs and provide remedial instruction in one or more individual skills, to supplement classroom instruction, or to provide direction for specific writing projects. In addition to the software available in the lab, instructional video and audio cassettes are available in English grammar, prealgebra, algebra, geometry, and trigonometry through the Library.

Hours will be posted on the door of the HELP Lab and on the student bulletin board. Both Macintosh and Windows type computers with word processing software are available; students should bring a diskette (low density formatted for Macintosh or high density formatted for IBM). A lab assistant will be present to provide assistance in using the equipment or locating materials.

ELECTIVES
Elective hours allow the student to explore a field of interest or to enhance the program of study in which the student is enrolled. Students may select elective hours from any course offered.

LATE REGISTRATION
The late registration period extends the first five (5) class days into each quarter. After that period, any student wishing to register must receive permission from the Director of Instruction. There is a late registration fee of $20. Students registering late are considered to have been absent for all class periods preceding their late enrollment and are responsible for any missed assignments.

NOTIFICATION TO STUDENTS REGARDING TESTING
AS A DEGREE REQUIREMENT
Any or all students may be required to take one or more tests designed to measure general education achievement and/or achievement in selected major areas as a prerequisite to graduation or for the purpose of evaluation of academic programs. Unless otherwise provided for in any individual program, no minimum score or level of achievement is required for graduation. Students may also be asked to participate in one or more satisfaction surveys designed to measure institutional effectiveness. Participation in testing may be required for all students, students in selected programs, and for students selected on a sample basis.

PROOF OF REGISTRATION
Students may be required to present proof of registration and payment of fees upon entering each course at the beginning of the quarter. This includes courses added during the drop/add period.

TRANSCRIPTS
The institute maintains the position that students' records are their own property; therefore, this information is released only when a student signs a Student Release Form in the Admissions Office. Students may have copies of their transcript sent to any institutions or individuals they choose. They may also order copies for their own use. There is a $2.00 fee charged for each transcript.

TRANSCRIPT EVALUATION
Northwestern Technical Institute accepts transfer credits only from regionally accredited colleges or technical institutes. A grade of "C" or better is required in order for the credit to transfer. Transfer credit is given only for courses with an equivalent at Northwestern Technical Institute. In order to receive transfer credit, the student must have official copies of any school transcripts sent to the Admissions Office. Transcripts are generally evaluated within two weeks after receipt.

ACADEMIC DISHONESTY POLICY
If charges of academic dishonesty are initiated by the faculty or professional staff, the charges will be heard by a panel of faculty and students, and the students will be provided an opportunity to refute the charges. The result(s) of the hearing will be administered by the Office of Instructional Services. Any student found guilty of academic dishonesty will receive a grade of F in the course along with other possible sanctions including dismissal from the institution. In cases where academic dishonesty is in the area of misrepresentation, sanctions will be determined by the Office of Instructional Services and may include dismissal from the institution.

Academic dishonesty 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.

1. Cheating—using or providing others with unauthorized materials, information, study aids, or computer-related information.
2. Plagiarism—representing the words, data, works, ideas, computer program or output of another as one's own work.
3. Fabrication—presenting as genuine any invented or falsified citation or material.
4. Misrepresentation—falsifying, altering, or misstating the contents of documents or other materials related to academic matters, including schedules, prerequisites, and transcripts.

LIBRARY

The Library at Northwestern Technical Institute currently houses over 11,000 volumes with room for almost 15,000 more and has seating for seventy people. In addition to the main reading room which contains most of the collection, the Library has a room for accessing the CD-ROM collection, a conference room for meetings and multimedia presentations, a faculty work room for instructors and staff, and the multimedia distribution center control room. The major systems in the Library include an online electronic catalog for finding books, videotapes, and audiotapes; access to GALILEO for searching periodicals and other data; and, Internet workstations for searching the WEB. Northwestern Technical Institute also has resource sharing agreements with Kresge Memorial Library at Covenant College and the Cherokee Regional Library. Northwestern also has an interlibrary loan agreement with the Southeastern Library Network. Two Librarians and one library technical assistant provide reference service in person and over the telephone. The operating schedule during the academic terms is 8:00 AM until 9:00 PM Monday through Thursday and 8:00 AM until 4:00 PM on Friday. When classes are not in session Library operating hours are from 8:00 AM until 4:30 PM Monday Through Thursday and from 8:00 AM until 4:00 PM on Friday. The Library is open to all students, faculty, and staff of Northwestern Technical Institute as well as any adult resident of the Northwestern service area. State of the art electronic information systems are available for accessing the following resources:

- **BiblioFile**, an integrated on-line library system which enables users to locate library books and audiovisual materials relevant to their areas of interest and to check them out.

- **ProQuest**, a periodical access system running two databases:
  1. Periodical Abstracts Research II, which provides indexing and abstracting for over 1600 journals and the most recent six months of the New York Times and Wall Street Journal.
  2. General Periodicals Research II, which provides full text for over 400 of the journals in PA Research II.
- **GALILEO,** State-wide access to the catalogs of Georgia' public and academic libraries.

- **CD Server**, a networked compact disk reference system. Containing 14 CD-ROM drives, this server is used to access multiple databases, including the following:

    1. Academic Abstracts, which provides indexing and abstracting for over 800 journals, with 200 in full text.
    2. Health Source, which provides indexing and abstracting for over 300 periodicals (with over 60 of these in full text) and almost 600 pamphlets (all with full text).

- **DIALOG**, provides on-line access to almost 500 remote databases.

- **Encarta**, the foremost encyclopedia on compact disk.

All students, faculty, and staff of Northwestern as well as all residents of the service area 16 years old or older are invited to use these and the other services of the library. During academic terms the library is open from 8:00 AM until 9:00 PM Monday through Thursday and 8:00 AM until 4:00 PM on Friday.

Academic Programs

PROGRAMS OF STUDY

Associate of Applied Technology Degree Programs

Accounting
Computer Information Systems
    Computer Programming Option
    Microcomputer Specialist Option
    Networking Specialist Option
Drafting Technology
Electronics Technology
    Computer Servicing Specialization
    Industrial Control Specialization
Management and Supervision
    Business Option
    Banking Option
Occupational Therapy Assistant
Quality Control
Secretarial Science

Diploma Programs

Accounting
Air Conditioning Technology
Business and Office Technology
    Legal Secretary Option
    Medical Secretary Option
    Business Secretary Option
Computer Information Systems
    Computer Programming Option
    Microcomputer Specialist Option
    Networking Specialist Option
Cosmetology
Drafting
    Drafting Fundamentals
    Advanced Drafting
Electronics
    Electronics Fundamentals
    Computer Servicing Specialization
    Industrial Control Specialization
Industrial (Electrical) Maintenance
Licensed Practical Nursing
Machine Tool Technology
    Basic Machine Tool Technology
    Advanced Machine Tool Technology
Management and Supervisory Development
Medical Assisting
Quality Control Technology
Surgical Technology
Welding and Joining Technology

PROGRAMS OF STUDY

Technical Certificates of Credit

CAD Operator
Certified Customer Service Specialist
Certified Manufacturing Specialist
Certified Mechanical Inspector
Certified Quality Auditor
Certified Quality Technician
Clerk Typist
Commercial Truck Driving
Data Management
Document Design and Production
Emergency Medical Technician
Employee Relations
Entrepreneurship (Available on the WEB)
Gas Metal Arc Welding
Gas Tungsten Arc Welding
Instructional Technology (Available n the WEB)
Medical Coding (Available on the WEB)
Medical Transcription (Available on the WEB)
Microsoft Office User Specialist (Available on the WEB)
Microsoft Windows NT Professional
Nail Technician
Organizational Leadership
Pharmacy Assistant
Phlebotomy Technician
Production and Inventory Control
Shielded Metal Arc Welding
Team Leader

ACADEMIC PROGRAMS

ASSOCIATE IN APPLIED TECHNOLOGY DEGREE

The purpose of the Associate in Applied Technology Degree is to offer students an educational option that not only leads to a high level of competence and skill in a technical area, but also ensures through the general education component the mastery of computation, communication, computer and problem solving skills necessary to function effectively in the 21st century work force.

Northwestern Technical Institute offers the Associate of Applied Technology Degree in eight program areas. They range in length from 90 to 110 quarter hours except where additional hours are needed to meet professional credentialing or licensure requirements. Each of these degrees requires regular admission status based on a placement examination. The following majors are offered:

- The Associate of Applied Technology Degree in Accounting
- The Associate of Applied Technology Degree in Computer Information Systems
- The Associate of Applied Technology Degree in Drafting
- The Associate of Applied Technology Degree in Electronics
- The Associate of Applied Technology Degree in Management and Supervisory Development
- The Associate of Applied Technology Degree in Quality Control
- The Associate of Applied Technology Degree in Secretarial Science
- The Associate of Applied Technology Degree in Occupational Therapy Assistant

The Associate in Applied Technology Degree is designed for the student wishing to enter the work force with a college degree or advance within his current profession by obtaining a degree. The Associate in Applied Technology Degree is not designed for transfer into a university program.

The applicant seeking admission to the Associate in Applied Technology program must be a high school graduate or have completed the GED.

Northwestern Technical Institute will accept transfer credit from regionally accredited colleges. However, at least 50% of all course work leading toward the degree must be completed at Northwestern.

All students enrolled in the Associate of Applied Technology Degree must complete a general education core of at least 30 quarter hours. The general education core consists of at least one course in the humanities/fine arts area, one course from the social/behavioral sciences, and one course from the natural science/mathematics area. AAT degree students are encouraged to choose additional electives from the general education core.

DIPLOMA LEVEL TRAINING PROGRAMS

Northwestern Technical Institute offers the diploma in 17 program areas. Diplomas range in length from 60 - 90 credit hours except where additional hours are needed to meet professional creentialing or licensure requirements. The purpose of the diploma level instructional program is to provide high quality technical training in a shorter time frame than the associate degree. Students registering for diploma programs must meet standard institutional admissions requirements for a regularly admitted student. All diploma programs at Northwestern are in full compliance with

the Department of Technical and Adult Education curriculum standards and are designed to ensure mastery of the job skills necessary to function effectively in the 21st century work force. Diplomas are available in the following areas:

DIPLOMA PROGRAMS

Accounting	**Business and Office Technology**
Air Conditioning Technology	**Machine Tool Technology**
Computer Information Systems	**Advanced Machine Tool**
Cosmetology	**Management and Supervision**
Drafting	**Medical Assisting**
Advanced Drafting	**Practical Nursing**
Electronics Fundamentals	**Quality Control Technology**
Electronics Technology	**Surgical Technology**
Industrial Maintenance	**Welding and Joining Technology**

CERTIFICATE LEVEL TRAINING PROGRAMS

Northwestern Technical Institute offers certificate programs in a number of program areas. Certificate programs are quality training programs, usually of a short duration, that meet a specific training need. Many times certificate programs are offered in response to a unique business and industry request or as a result of student demand. Certificate programs vary in length from 15 to 59 quarter hours and may be offered on an intermittent schedule. Students registering for certificate programs must meet standard institutional admissions requirements for either a special student or a regularly admitted student depending upon the length of the certificate program.

TECH PREP PROGRAM FOR HIGH SCHOOL STUDENTS

Tech Prep is a jointly sponsored program between Northwestern Technical Institute and eight northwest Georgia high schools promoting "seamless" technical education for Georgia students, saving time and money.

Many classes taken in high school can lead to advanced placement at Northwestern Technical Institute. This can give new students advanced standing in their chosen field before classes at WTI even start. It also keeps students from having to repeat material they have already learned in high school.

Classes for which a student might possess the required competencies for credit include General Math II, Algebra II, Applied (or Technical) Math II, Advanced Algebra and Trigonometry, Keyboarding, Computer Technology, Data Processing, Accounting, Drafting, Machine Tool, and Welding.

All recent graduates of one of the following high schools should inquire about possible Tech Prep credits: Chattooga High School, Dade County High School, Gordon Lee High School, Lakeview/Fort Oglethorpe High School, LaFayette High School, Ridgeland High School, Ringgold High School, and Trion High School. For more information, contact your high school counselor or Northwestern Technical Institute Admissions Office.

Curriculum

Division of
Business and
Information Technology

ACCOUNTING
AAT Degree

Program Description: The 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. Graduates receive the associate degree in accounting.

Admission Requirements

The requirements for admission to the Accounting Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET
> placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the AAT Degree in Accounting
Minimum Program Length - 6 Quarters

General Core Curriculum			Credit Hours 30
Area I			
ENG	191	Composition and Rhetoric I	5
SPC	191	Fundamentals of Speech	5
HUM	191	Introduction to Humanities	5
Area II			
PSY	191	Introductory Psychology	5
ECO	191	Principles of Economics	5
Area III			
MAT	191	College Algebra	5

Occupational Curriculum			Credit Hours 66
ACC	101	Principles of Accounting I	6
ACC	102	Principles of Accounting II	6
ACC	103	Principles of Accounting III	6
ACC	104	Computerized Accounting	3
ACC	106	Accounting Spreadsheet Fundamentals	3
ACC	150	Cost Accounting	6
ACC	152	Payroll Accounting	4
ACC	156	Tax Accounting	4
ACC	158	Managerial Accounting	6
ACC	160	Advanced Accounting Spreadsheet Applications	4
BUS	101	Beginning Document Processing	5
BUS	108	Word Processing	5
BUS	151	Introduction to Business	5
SCT	100	Introduction to Microcomputers	3

Electives			**5**

Total Credit Hours Required for Graduation			**101**

ACCOUNTING
Diploma

Program Description: The 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. Graduates receive a diploma in accounting.

Admission Requirements

The requirements for admission to the Accounting Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET
> placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the Diploma in Accounting
Minimum Program Length - 4 Quarters

General Core Curriculum			Credit Hours18
ENG	111	Business English	5
ENG	112	Business Communications	5
MAT	111	Business Math	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum			Credit Hours 41
ACC	101	Principles of Accounting I	6
ACC	102	Principles of Accounting II	6
ACC	103	Principles of Accounting III	6
ACC	104	Computerized Accounting	3
ACC	106	Accounting Spreadsheet Fundamentals	3
ACC	152	Payroll Accounting	4
BUS	101	Beginning Document Processing	5
BUS	108	Word Processing	5
SCT	100	Introduction to Microcomputers	3

Electives	12

Total Credit Hours Required for Graduation	71

COMPUTER INFORMATION SYSTEMS
Computer Programming Specialization
AAT Degree

Program Description: The Computer Information System Program is a sequence of courses that prepares students for employment in a variety of positions in the computer field. The Computer Information System program provides learning opportunities which introduce, develop, and reinforce academic, technical, and professional knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes computer programming theory and practical application necessary for successful employment. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in Computer Information Systems. Graduates receive the AAT degree in Computer Information Systems Computer Programming Specialist.

Admission Requirements

The requirements for admission to the Computer Information Systems - Computer Programming Specialist Program are:

> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET
> placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements:
AAT Degree in Computer Information Systems - Computer Programming Specialist
Minimum Program Length - 6 Quarters

General Core Curriculum			Credit Hours 30
Area I			
ENG	191	Composition and Rhetoric I	5
SPC	191	Fundamentals of Speech	5
HUM	191	Introduction to Humanities	5
Area II			
PSY	191	Introductory Psychology	5
ECO	191	Principles of Economics	5
Area III			
MAT	191	College Algebra	5

Occupational Curriculum			Credit Hours 81
SCT	100	Introduction to Microcomputers	3
CIS	103	Operating Systems Concepts	5
CIS	105	Program Design and Development	5
CIS	106	Computer Concepts	5
CIS	xxx	Language Course	7
CIS	112	System Analysis and Design	4
CIS	214	Database Management Programming	6
CIS		Language Electives	28

(Completion of a total of 28 credit hours from language electives, including a minimum of 14 credit hours in the same programming language is required.)

Occupationally Related Electives	18
Electives	5
Total Credit Hours Required for Graduation	**116**

COMPUTER INFORMATION SYSTEMS
Microcomputer Specialist Specialization
AAT Degree

Program Description: The Computer Information Systems Microcomputer Specialist program is designed to prepare students for a variety of entry-level positions using microcomputers. Graduates of the program are qualified to enter careers in which they function as end users or application developers for microcomputer systems. Microcomputer specialists are microcomputer operators, technicians, and programmers combined. They install and maintain microcomputer hardware. They program in a variety of microcomputer programming languages and are knowledgeable in application software and are trained in evaluating new hardware and software. The students are provided with the necessary knowledge and skills to adapt to a variety of positions in the rapidly changing computer field. Skills and attributes of successful graduates are critical thinking, problem solving, human relations skills, and the ability to apply technology to work requirements. Graduates receive the AAT Degree in Computer Information Systems.

Admission Requirements

The requirements for admission to the Computer Information Systems Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET
> placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements
AAT Degree in Computer Information Systems - Microcomputer Specialist
Minimum Program Length - 6 Quarters

General Core Curriculum			Credit Hours 30
Area I			
ENG	191	Composition and Rhetoric I	5
SPC	191	Fundamentals of Speech	5
HUM	191	Introduction to Humanities	5
Area II			
PSY	191	Introductory Psychology	5
ECO	191	Principles of Economics	5
Area III			
MAT	191	College Algebra	5
Occupational Curriculum			81
SCT	100	Introduction to Microcomputers	3
CIS	103	Operating Systems Concepts	5
CIS	105	Program Design and Development	5
CIS	106	Computer Concepts	5
CIS	xxx	Language Course	7
CIS	122	Microcomputer Installation and Maintenance	7
CIS	124	Microcomputer Database Programming	7
CIS	127	Word Processing and Desktop Publishing	7
CIS	128	Spreadsheet and Database Techniques	7
CIS	140	Networking Concepts	5
Occupationally Related Electives			23
Electives			5
Total Credit Hours Required for Graduation			116

COMPUTER INFORMATION SYSTEMS
Networking Specialist Specialization
AAT Degree

Program Description: The Computer Information Systems - Networking Specialist Program is a sequence of courses that prepares students for employment in a vareity of positions in the computer field. The Computer Information Systems program provides learning opportunities which introduce, develop, and reinforce academic, technial, and professional knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes networking fundamentals and practical application necessary for successful employment. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in Computer Information Systems. Graduates receive the AAT Degree in Computer Information Systems - Networking Specialist.

Admission Requirements

Requirements for admission to the Computer Information Systems Networking Specialist Program are:

> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET
> placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements:
AAT Degree in Computer Information Systems - Networking Specialist
Minimum Program Length - 6 Quarters

General Core Curriculum   **Credit Hours 30**

Area I

ENG	191	Composition and Rhetoric I	5
SPC	191	Fundamentals of Speech	5
HUM	191	Introduction to Humanities	5

Area II

PSY	191	Introductory Psychology	5
ECO	191	Principles of Economics	5

Area III

MAT	191	College Algebra	5

Occupational Curriculum   **Credit Hours 81**

SCT	100	Introduction to Microcomputers	3
CIS	103	Operating Systems Concepts	5
CIS	105	Program Design and Development	5
CIS	106	Computer Concepts	5
CIS	xxx	Language Course	7
CIS	122	Microcomputer Installation and Maintenance	7
CIS	140	Networking Concepts	5
CIS	141	Client/Server Database Management	7
CIS	142	Multiple Networks and WANS	7
CIS	156	Introduction to the Internet and Wide Area Networks	5
CIS	258	Introduction to Data Communications	4
CIS	146	Microsoft NT Administration	7
CIS	147	Microsoft NT Installation and Configuration	7
CIS	148	Microsoft NT Diagnostics and Troubleshooting	7
Electives			**5**

Total Credit Hours Required for Graduation   **116**

COMPUTER INFORMATION SYSTEMS
Computer Programming Specialization
Diploma

Program Description: The Computer Information Systems Program is a sequence of courses that prepares students for employment in a variety of positions in the computer field. The Computer Science Program provides learning opportunities which introduce, develop, and reinforce academic, technical, and professional knowledge, skills, and attitudes required for job acquisition, retention, and advancement. The program emphasizes computer programming theory and practical application necessary for successful employment. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in Computer Science. Graduates receive a diploma in Computer Information Systems - Computer Programming Specialist.

Admission Requirements

The requirements for admission to the Computer Information Systems - Computer Programming Specialist program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET
> placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements:
Diploma in Computer Information Systems - Computer Programming Specialist
Minimum Program Length - 5 Quarters

General Core Curriculum			Credit Hours 18
ENG	111	Business English	5
ENG	112	Business Communications	5
MAT	111	Business Mathematics	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum			Credit Hours 81
CIS	103	Operating Systems Concepts	5
CIS	105	Program Design and Development	5
CIS	106	Computer Concepts	5
CIS	xxx	Language Course	7
SCT	100	Introduction to Microcomputers	3
CIS	112	System Analysis and Design	4
CIS	214	Database Management	6
CIS		Language Electives	28

(Completion of a total of 28 credit hours from language electives, including a minimum of 14 credit hours in the same programming language is required.)

Occupationally Related Electives   8

Total Credit Hours Required for Graduation   99

SPECIALIZED CERTIFICATES
COMPUTER INFORMATION SYSTEMS

DATA MANAGEMENT

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

Admission Requirements

The requirements for admission to the Data Management Certificate are:
>   attainment of 16 or more years of age;
>   completion of general admission requirements; and
>   achievement of program ready or provisional scores on the ASSET placement test.

Occupational Curriculum			**Credit Hours**
SCT	100	Introduction to Microcomputers	3
BUS	101	Beginning Document Processing	5
BUS	108	Word Processing	5
CIS	128	Spreadsheet and Database Techniques	7
CIS	140	Network Concepts	5
ACC	160	Advanced Spreadsheets	4

Total Credit Hours Required for Graduation   **29**

SPECIALIZED CERTIFICATES
COMPUTER INFORMATION SYSTEMS

Microsoft Office User Specialist, Product Specialist Option

Description: The Microsoft Office User Specialist Certificate is designed for the end user of the Microsoft Office Suite products. Students completing this certificate program are prepared to sit for the Microsoft Office User Specialist Certification examination.

Admission Requirements
The requirements for admission to the Microsoft Office User Specialist Certificate are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> completion of general admission requirements; and
> achievement of program ready or provisional scores on the reading section of the ASSET placement test.

Occupational Curriculum			Credsit Hours
SCT	100	Introduction to Microcomputers	3
CIS	127	Word Processing and Desktop Publishing	7
CIS	128	Spreadsheets and Database Techniques	7
CIS	155	Microsoft Windows	3
MAT	111	Business Math	5
ENG	111	Business English	5
CIS	221	Advanced Word	5
		or	
CIS	222	Advanced Excel	5
		or	
CIS	223	Advanced Access	5
		or	
CIS	224	Advanced PowerPoint	5
		or	
CIS	226	Advanced FrontPage	5

Total Credit Hours Required for Graduation   35

Microsoft Office User Specialist, Office Suite Specialist Option

Description: The Microsoft Office User Specialist Certificate is designed for the end user of the Microsoft Office Suite products. Students completing this certificate program are prepared to sit for the Microsoft office User Specialist Certification examination.

Admission Requirements
The requirements for admission to the Microsoft Office User Specialist Certificate are:
> attainment of 16 or more years of age;
> completion of general admission requirements; and
> achievement of program ready or provisional scores on the reading section of the ASSET placement test.

Occupational Curriculum			Credit Hours
SCT	100	Introduction to Microcomputers	3
CIS	155	Microsoft Windows	3
CIS	127	Word Processing and Desktop Publishing	7
CIS	128	Spreadsheets and Database Techniques	7
MAT	111	Business Math	5
ENG	111	Business English	5
CIS	221	Advanced Word	5
CIS	222	Advanced Excel	5
CIS	223	Advanced Access	5
CIS	224	Advanced PowerPoint	5
CIS	226	Advanced FrontPage	5

SPECIALIZED CERTIFICATES
COMPUTER INFORMATION SYSTEMS

Microsoft Windows NT Certificate

DESCRIPTION The Microsoft Windows NT Certificate prepares the student to sit for the Microsoft Certified Systems Engineer Examinations. In addition to Microsoft specific training , the student receives training in generic networking concepts including the installation and maintenance of microcomputers.

Admission Requirements

The requirements for admission to the Microsoft Windows NT Certificate are:
>   attainment of 16 or more years of age;
>   documentation of high school graduation or completion of GED;
>   achievement of program ready or provisional scores on the
>   ASSET placement test; and
>   completion of general admission requirement.

Occupational Curriculum			Credit Hours
CIS	122	Microcomputer Installation and Maintenance	7
CIS	140	Networking Concepts	5
CIS	142	Networking Essentials	7
CIS	146	Windows NT Administration	7
CIS	148	Windows NT Diagnostics and Troubleshooting	7
CIS	245	Implementing and Supporting Windows	7

Total Credit Hours Required for Graduation   **40**

Novell Netware Certificate
(INACTIVE)

Description: The purpose of the Novel Netware Certificate is to provide instruction in the use of network operating system software. The courses will enable individuals to both set up and administer a Novell Network.

Admission Requirements

The requirements for admission to the Novell Netware Certificate are:
>   attainment of 16 or more years of age;
>   achievement of program ready or provisional scores on the
>   ASSET placement test; and
>   completion of general admission requirement.

Occupational Curriculum			Credit Hours
SCT	100	Introduction to Microcomputers	3
CIS	103	Operating Systems Concepts	5
CIS	122	Microcomputer Installation and Maintenance	7
CIS	140	Networking Concepts	5
CIS	142	Networking Essentials	7
CIS	143	NetWare Administration	7
CIS	144	NetWare Installation and Configuration	7

Total Credit Hours Required for Graduation   **41**

MANAGEMENT
MANAGEMWENT & SUPERVISORY DEVELOPMENT
AAT Degree

Program Description: 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 which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Graduates will receive the associate degree in Management and Supervisory Development. There are several certificates that can be acquired.

Admission Requirements

The requirements for admission to the Management and Supervisory Development Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the AAT in Management & Supervisory Development
Minimum Program Length - 7 Quarters

General Core Curriculum			Credit Hours 30
Area I			
ENG	191	Composition and Rhetoric I	5
SPC	191	Fundamentals of Speech	5
HUM	191	Introduction to Humanities	5
Area II			
PSY	191	Introductory Psychology	5
ECO	191	Principles of Economics	5
Area III			
MAT	191	College Algebra	5
Occupational Curriculum			46
SCT	100	Introduction to Microcomputers	3
ACC	101	Principles of Accounting	5
		or	
MKT	105	Accounting for Marketing Applications	5
MKT	101	Principles of Management	5
MSD	101	Interpersonal Employee Relations	5
MSD	102	Legal Environment for Supervisors	5
MSD	106	Counseling and Disciplinary Actions	5
MSD	107	Training and Performance Evaluation	5
MSD	108	Management and Supervisory Seminar	5
MSD	110	Management and Supervision O.B.I. I	3
MSD	113	Ethical Management	5
Electives			20
Total Credit Hours Required for Graduation			96

MANAGEMENT
MANAGEMENT & SUPERVISORY DEVELOPMENT
Banking Option
AAT Degree

Program Description: The Management and Supervisory Development Program prepares experienced workers for entry into management or supervisory occupations in a variety of businesses and industries. The Banking option 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 by accepting, for transfer credit, specific college level AIB courses into the Management and Supervision Program towards an Associate of Applied Technology degree.

Admission Requirements

The requirements for admission to the Management and Supervisory Development Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the AAT in Management & Supervisory Development
Minimum Program Length - 6 Quarters

General Core Curriculum			Credit Hours 30
Area I			
ENG	191	Composition and Rhetoric I	5
SPC	191	Fundamentals of Speech	5
HUM	191	Introduction to Humanities	5
Area II			
PSY	191	Introductory Psychology	5
ECO	191	Principles of Economics	5
Area III			
MAT	191	College Algebra	5

Occupational Curriculum			31
SCT	100	Introduction to Microcomputers	3
MKT	101	Principles of Management	5
MSD	101	Interpersonal Employee Relations	5
MSD	113	Ethical Management	5
MSD	102	Legal Environment for Supervisors	5
MSD	103	Leadership and Decision Making	5
MSD	110	Management and Supervision O.B.I. I	3

Approved AIB Courses for Transfer		30
Accounting	1000	5
Economics for Bankers	2310	5
Marketing for Bankers	7740	5
Principles of Banking	1370	5
Supervision	4310	5
Money and Banking	1350	5

Total Credit Hours Required for Graduation	**91**

MANAGEMENT
MANAGEMENT & SUPERVISORY DEVELOPMENT
Diploma

Program Description: 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 which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Graduates may receive an associate degree or diploma in Management and Supervisory Development. There are several certificates that can be acquired.

Admission Requirements

The requirements for admission to the Management and Supervisory Development Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the Diploma in
Management & Supervisory Development
Minimum Program Length - 4 Quarters

General Core Curriculum   **Credit Hours 18**

ENG	111	Business English	5
ENG	112	Business Communications	5
MAT	111	Business Math	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum   **46**

SCT	100	Introduction to Microcomputers	3
MKT	101	Principles of Management	5
MKT	104	Principles of Economics	5
MKT	105	Accounting for Marketing Applications	5
MSD	102	Legal Environment for Supervisors	5
MSD	104	Personnel Administration for Supervisors	5
MSD	106	Counseling and Disciplinary Actions	5
MSD	107	Training and Performance Evaluation	5
MSD	108	Management and Supervisory Seminar	5
MSD	110	Management and Supervision O.B.I. I	3

Electives   **20**

Total Credit Hours Required for Graduation   **84**

MANAGEMENT & SUPERVISORY DEVELOPMENT SPECIALIZED CERTIFICATES

EMPLOYEE RELATIONS

Description: The Employee Relations Certificate has been developed to provide instruction beneficial to individuals moving into supervisory positions. Emphasis in this certificate program is on improving interpersonal relations and developing a broad understanding of the concepts and principles of employment law. This program has been designed to meet the needs of individuals in supervisory capacities who desire short-term, compact training program in employee relations. The program is a subset of both the Management and Supervisory Development diploma and the Associate Degree in Applied Technology in Management and Supervisory Development; individuals who successfully complete this certificate can apply those credits toward the pursuit of this diploma or degree.

Admission Requirements

The requirements for admission to the Employee Relations Certificate Program are:
> attainment of 16 or more years of age;
> completion of general admission requirements; and
> achievement of program ready or provisional scores on the
> ASSET placement test.

Occupational Curriculum			Credit Hours
ENG	191	English Composition & Rhetoric	5
MSD	101	Interpersonal Employee Relations	5
MSD	102	Legal Environment for Supervisors	5
SCT	100	Introduction to Microcomputers	3
PSY	191	Introductory Psychology	5
Elective			5

Total Credit Hours Required for Graduation   **28**

ORGANIZATIONAL LEADERSHIP

Description: The Organizational Leadership Certificate has been developed to provide instruction specifically tailored for those individuals who are moving or will be moving into supervisory roles. The purpose of this program is to meet the need of individuals for effective leadership training that can be attained in a relatively short-term and compact package. The program is a subset of both the Management and Supervisory Development Diploma and the Associate Degree in Applied Technology in Management and Supervisory Development. Individuals who successfully complete this certificate can apply those credits toward the pursuit of a diploma or degree in Management and Supervisory Development.

Admission Requirements

The requirements for admission to the Organizational Leadership Certificate Program are:
> attainment of 16 or more years of age;
> completion of general admission requirements;
> achievement of program ready or provisional scores on the
> ASSET placement test.

Occupational Curriculum			Credit Hours
MKT	101	Principles of Management	5
MSD	103	Leadership and Decision Making	5
MSD	102	Legal Environment for Supervisors	5
MSD	106	Counseling and Disciplinary Actions	5
MSD	107	Training and Performance Evaluations	5
SCT	100	Introduction to Microcomputers	3

Total Credit Hours Required for Graduation   **28**

SPECIALIZED CERTIFICATES

TEAM LEADER

Description: The Team Leader Certificate is designed to prepare the student to assume a first line supervisory position. The certificate content addresses the major issues confronted by the first line supervisor. This certificate includes 5 hours of elective credit therefore allowing for significant customization of the curriculum to fit almost any corporate situation.

Admission Requirements

The requirements for admission to the Integrated Resource Management Certificate are:
>   attainment of 16 or more years of age;
>   completion of general admission requirements;
>   achievement of program ready or provisional scores on the
>   ASSET placement test.

Occupational Curriculum			Credit Hours
MSD	101	Interpersonal Employee Relations	5
MSD	103	Leadership and Decision Making	5
Elective			5
Total Credit Hours Required for Graduation			**15**

PRODUCTION AND INVENTORY MANAGEMENT

Description: Certification in Production and Inventory Management (CPIM) provides specialized knowledge in six functional areas of production and inventory management. Building on competencies included in the Distribution Materials Management curricula, these courses will meet the requirements of the American Production and Inventory Control Society, an international society for resource management, to prepare students for Certification in Production and Inventory Management.

Admission Requirements

The requirements for admission to the Production and Inventory Management Certificate are:
>   attainment of 16 or more years of age;
>   documentation of high school graduation or completion of GED;
>   completion of general admission requirements;
>   achievement of program ready or provisional scores on the reading section of the
>   ASSET placement test.

Occupational Curriculum			Credit Hours
DMM	161	Just-in-Time	3
DMM	162	Production and Activity Control	3
DMM	163	Materials and Capacity Requirements Planning	3
DMM	164	Inventory Management	3
DMM	165	Master Planning	3
DMM	166	System and Technologies	3
Electives			3
Total Credsit Required Required for Graduation			**21**

SPECIALIZED CERTIFICATES

ENTREPRENEURSHIP

DESCRIPTION: The Entrepreneurship Certificate is designed for the individual desiring to start a small business. Topics included in this short training program are marketing, management, business law and one elective course of choice

Admission Requirements

The requirements for admission to the Integrated Resource Management Certificate are:
>   attainment of 16 or more years of age;
>   completion of general admission requirements;
>   achievement of program ready or provisional scores on the
>   ASSET placement test.

Occupational Curriculum			Credit Hours
MKT	100	Introduction to Marketing	5
MKT	123	Small Business management	5
MKT	103	Business Law	5
XXX	xxx	Elective	5

Total Credit Hours Required for Graduation   **20**

SPECIALIZED CERTIFICATES
CERTIFIED CUSTOMER SERVICE SPECIALIST

Program Description: The Certified Customer Service Specialist program prepares both entry level and experienced people to be effective representatives for service businesses such as the travel/vacation industry, retail sales, insurance, banking, and any position in which good customer relations skills are essential. Students will benefit from learning such skills as communicating effectively with difficult people, computer skills, sales skills, effective telephone use, and much more in a highly interactive, enjoyable classroom environment. The CCSS Certificate is recognized state-wide by Georgia's finest service industries as a valuable credential for hiring and promotions.

Admission Requirements:

Applicants must be at least 16 years of age.
Achievement of program ready status on the ASSET placement examination or equivalent SAT, ACT, or CPE scores.
Completion of general admission requirements.

Minimum Program Length is 1 Quarter

Occupational Curriculum			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 Required for Graduation   **15**

CERTIFIED MANUFACTURING SPECIALIST

Program Description: The Certified Manufacturing Specialist program prepares both entry level and experienced manufacturing employees in practical skills such as teamwork, communication, quality control, computer skills, electrical safety, production requirements, and much more in an enjoyable, highly interactive classroom environment. The CMS Certificate is recognized state-wide by Georgia's finest manufacturers as a valuable credential for hiring and promotions.

Admission Requirements:

Applicants must be at least 16 years of age.
Achievement of program ready status on the ASSET placement examination or equivalent SAT, ACT, or CPE scores.
Completion of general admission requirements.

Minimum Program Length is 1 Quarter

Occupational Curriculum			Credit Hours
AMF	152	Manufacturing Organizational Principles	2
AMF	154	Manufacturing Workplace Skills	2
AMF	156	Manufacturing Production Requirements	2
AMF	158	Automated Manufacturing Skills	4
AMF	160	Representative Manufacturing Skills	5

Total Credit Hours Required for Graduation   **15**

OFFICE TECHNOLOGY
SECRETARIAL SCIENCE
AAT DEGREE

Program Description: The Secretarial Science Degree Program is a sequence of courses that prepare students for careers in the secretarial science profession. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of business and office technology theory and practical application to instill critical thinking, problem solving, human relation skills and the ability to apply technology to work requirements necessary for successful employment. Graduates receive the associate degree in Secretarial Science.

Admission Requirements

The requirements for admission to the Secretarial Science Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET placement test; and
> completion of general admission requirements.

Transfer students to the program must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the AAT degree in
Secretarial Science
Minimum Program Length - 7 Quarters

General Core Curriculum			Credit Hours 30
Area I			
ENG	191	Composition and Rhetoric I	5
SPC	191	Fundamentals of Speech	5
HUM	191	Introduction to Humanities	5
Area II			
PSY	191	Introductory Psychology	5
ECO	191	Principles of Economics	5
Area III			
MAT	191	College Algebra	5

Occupational Curriculum			Credit Hours 62
BUS	101	Beginning Document Processing	5
BUS	102	Intermediate Document Processing	5
BUS	106	Office Procedures	4
BUS	108	Word Processing	5
SCT	100	Introduction to Microcomputers	3
ACC	101	Principles of Accounting I	6
BUS	103	Advanced Document Processing	5
CIS	128	Spreadsheet & Database Techniques	7
BUS	107	Machine Transcription	3
BUS	201	Advanced Word Processing	3
MKT	101	Principles of Management	5
ACC	102	Principles of Accounting II	6
MKT	103	Business Law	5

Electives	<u>10</u>

Total Credit Hours Required for Graduation	**102**

OFFICE TECHNOLOGY
BUSINESS AND OFFICE TECHNOLOGY
DIPLOMA
Legal Specialization

Program Description: The Business and Office Technology Diploma Program is a sequence of courses that prepare students for careers in the legal and medical, and business office professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of business and office technology theory and practical application to instill critical thinking, problem solving, human relation skills, and the ability to apply technology to work requirements necessary for successful employment using both manual and computerized business and office technology systems. Graduates receive a diploma in Business and Office Technology.

Admission Requirements
The requirements for admission to the Business and Office Technology Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET placement test; and
> completion of general admission requirements.
> **Minimum Program Length - 4 Quarters**

General Core Curriculum			Credit Hours 18
ENG	111	Business English	5
ENG	112	Business Communications	5
MAT	111	Business Mathematics	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum			Credit Hours 27
BUS	101	Beginning Document Processing	5
BUS	102	Intermediate Document Processing	5
BUS	103	Advanced Document Processing	5
BUS	106	Office Procedures	4
BUS	108	Word Processing	5
SCT	100	Introduction to Microcomputers	3

Legal Specialization Curriculum			Credit Hours 37
BUS	107	Machine Transcription	3
BUS	201	Advanced Word Processing	3
BUS	217	Legal Procedures I	7
BUS	218	Legal Procedures II	7
MKT	103	Business Law	5
BUS	206	Half-Time Legal Office Internship	6
		and	
		Occupationally Related Electives	6
		or	
BUS	219	Legal Office Specialist Internship	12
		or	
Occupationally Related Electives			<u>12</u>

Total Credits Hours Required for Graduation			**82**

OFFICE TECHNOLOGY
BUSINESS AND OFFICE TECHNOLOGY
DIPLOMA
Medical Specialization

Program Description: The Business and Office Technology Diploma Program is a sequence of courses that prepare students for careers in the legal and medical, and business office professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of business and office technology theory and practical application to instill critical thinking, problem solving, human relation skills, and the ability to apply technology to work requirements necessary for successful employment using both manual and computerized business and office technology systems. Graduates receive a diploma in Business and Office Technology.

Admission Requirements
The requirements for admission to the Business and Office Technology Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET placement test; and
> completion of general admission requirements.
> **Minimum Program Length - 4 Quarters**

General Core Curriculum			**Credit Hours 18**
ENG	111	Business English	5
ENG	112	Business Communications	5
MAT	111	Business Mathematics	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum			**Credit Hours 27**
BUS	101	Beginning Document Processing	5
BUS	102	Intermediate Document Processing	5
BUS	103	Advanced Document Processing	5
BUS	106	Office Procedures	4
BUS	108	Word Processing	5
SCT	100	Introduction to Microcomputers	3

Medical Specialization Curriculum			**Credit Hours 32-33**
BUS	208	Office Accounting	4
BUS	211	Medical Terminology	4
		or	
AHS	109	Medical Terminology for Allied Health	3
BUS	212	Anatomy and Terminology	5
		or	
AHS	101	Anatomy and Physiology	5
BUS	213	Medical Document Processing Transcription	5
BUS	216	Medical Office Procedures	3
BUS	205	Half-Time Medical Office Internship	6
		and	
Occupationally Related Electives			6
		or	
BUS	215	Medical Office Specialist Internship	12
		or	
Occupationally Related Electives			12

Electives			<u>5</u>

Total Credit Hours Required to Graduation			**82/83**

OFFICE TECHNOLOGY
BUSINESS AND OFFICE TECHNOLOGY
DIPLOMA
Business Office Specialization

Program Description: The Business and Office Technology Diploma Program is a sequence of courses that prepare students for careers in the legal and medical, and business office professions. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of business and office technology theory and practical application to instill critical thinking, problem solving, human relation skills, and the ability to apply technology to work requirements necessary for successful employment using both manual and computerized business and office technology systems. Graduates receive a diploma in Business and Office Technology.

Admission Requirements

The requirements for admission to the Business and Office Technology Program are:
attainment of 16 or more years of age;
documentation of high school graduation or completion of GED;
achievement of program ready or provisional scores on the ASSET placement test; and
completion of general admission requirements.
Minimum Program Length - 4 Quarters

General Core Curriculum			**Credit Hours 18**
ENG	111	Business English	5
ENG	112	Business Communications	5
MAT	111	Business Mathematics	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum			**Credit Hours 27**
BUS	101	Beginning Document Processing	5
BUS	102	Intermediate Document Processing	5
BUS	103	Advanced Document Processing	5
BUS	106	Office Procedures	4
BUS	108	Word Processing	5
SCT	100	Introduction to Microcomputers	3

Business Office Specialization			**Credit Hours 32-34**
CIS	128	Spreadsheet and Database Techniques	7
BUS	107	Machine Transcription	3
BUS	201	Advanced Word Processing	3
BUS	208	Office Accounting	4
		or	
ACC	101	Principles of Accounting I	6
BUS	109	Applied Office Procedures	3
BUS	204	Half-Time Business Office Specialist Internship	6
		and	
Occupationally Related Electives			6
		or	
BUS	224	Business Office Specialist Internship	12
		or	
Occupationally Related Electives			12

Electives			**5**

Total Credit Hours Required to Graduation			82-84

SPECIALIZED CERTIFICATES
OFFICE TECHNOLOGY

CLERK TYPIST

Description: The Clerk Typist Certificate provides educational opportunities to individuals that will enable them to obtain the knowledge, skills, and attitudes necessary to succeed as a clerk typist in the general clerical field.

Admission Requirements

The requirements for admission to the Clerk Typist Certificate are:
attainment of 16 or more years of age;
completion of general admission requirements;
achievement of program ready or provisional scores on the ASSET placement test.

Occupational Curriculum			Credit Hours
BUS	101	Beginning Document Processing	5
BUS	102	Intermediate Document Processing	5
BUS	107	Machine Transcription	3
BUS	108	Word Processing	5
SCT	100	Introduction to Microcomputers	3
ENG	111	Business English	5
BUS	109	Applied Office Procedures	3

Total Credit Hours Required for Graduation   **29**

DOCUMENT DESIGN AND PRODUCTION

Description: The Document Design and Production Certificate provides instruction in the use of job specific software. It is intended for those individuals whose job requirements demand high skill levels in the production of printed documents from single page announcements and flyers to multiple page documents such as annual reports. This certificate stresses advanced word processing, desktop publishing, and graphic design skills.

Admission Requirements

The requirements for admission to the Document Design and Production Certificate are:
attainment of 16 or more years of age;
completion of general admission requirements; and
achievement of program ready or provisional scores on the ASSET placement test.

Occupational Curriculum			Credit Hours
BUS	101	Beginning Document Processing	5
SCT	100	Introduction to Microcomputer	3
BUS	108	Word Processing	5
BUS	161	Desktop Publishing I	5
BUS	162	Desktop Publishing II	5
BUS	201	Advanced Word Processing	3
CIS	128	Spreadsheet and Database Techniques	7
CIS	140	Network Concepts	5

Total Credit Hours Required for Graduation   **38**

SPECIALIZED CERTIFICATE
OFFICE TECHNOLOGY

MEDICAL TRANSCRIPTIONIST

Description: The Medical Transcriptionist Certificate provides entry level training for medical clerical support in preparation for initial employment with concentration in medical transcription procedures.

Admission Requirements

The requirements for admission to the Medical Transcriptionist Certificate are:
> attainment of 16 or more years of age;
> completion of general admission requirements; and
> achievement of program ready or provisional scores on the ASSET placement test.

Occupational Curriculum			Credit Hours
BUS	102	Intermediate Document Processing	5
BUS	108	Word Processing	5
BUS	211	Medical Terminology	4
		or	
AHS	109	Medical Terminology for Allied Health	3
BUS	212	Anatomy and Terminology	5
		or	
AHS	101	Anatomy and Physiology	
BUS	213	Medical Document Processing/Transcription	5
ENG	111	Business English	5
BUS	216	Medical Office Procedures	3
BUS	201	Advanced Word Processing	3

Total Credit Hours Required for Graduation   **34/35**

Division of Industrial Technology

AIR CONDITIONING TECHNOLOGY
Diploma

Program Description: The Air Conditioning Technology Program is a sequence of courses that prepares students for careers in the air conditioning technology profession. Learning opportunities develop academic, technical, and professional knowledge and skills required for job acquisition, retention, and advancement. The program emphasizes a combination of air conditioning technology theory and practical application necessary for successful employment using both manual and computerized air conditioning technology systems. Graduates receive an Air Conditioning Technology Diploma which qualifies them as entry level Conditioned Air Technicians.

Admission Requirements

The requirements for admission to the Air Conditioning Technology Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED prior to graduation;
> achievement of program ready or provisional scores on the ASSET placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the Diploma in
Air Conditioning Technology
Minimum Program Length - 5 Quarters

General Core Curriculum			Credit Hours 13
ENG	111	Business English	5
MAT	101	General Mathematics	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum			73
ACT	100	Refrigeration Fundamentals	4
ACT	101	Principles and Practices of Refrigeration	7
ACT	102	Refrigeration Components	7
ACT	103	Electrical Fundamentals	5
ACT	104	Electric Motor Controls	3
ACT	105	Electrical Components	5
ACT	106	Electric Systems Installations	4
ACT	107	Air Conditioning Principles	8
ACT	108	Air Conditioning Installation	3
ACT	109	Troubleshooting Air Conditioning Systems	7
ACT	110	Gas Heating Systems	5
ACT	111	Heating Pumps and Related Systems	6
IFC	100	Industrial Safety Precautions	2
IFC	101	Direct Circuit Currents I	4
SCT	100	Introduction to Microcomputers	3

Total Credit Hours Required for Graduation   **86**

SPECIALIZED CERTIFICATE
COMMERCIAL TRUCK DRIVING

Program Description

The Truck Driving Program is designed to address the needs of the trucking industry in Georgia. It provides basic training in the principles and skills of commercial truck operations. The program is based on the definition of a truck driver as one who operates commercial motor vehicles of different types and sizes on all types of roads. The truck driver maintains proper documentation on the load and the vehicle and is responsible for ensuring that the vehicle is in safe operating condition. In doing this, the driver must comply with all federal, state, and local laws and regulations.

Admission Requirements

Admission of new students to the Truck Driving Program is contingent upon their meeting all of the criteria listed below. To be admitted to the program, an applicant:

> Must be at least 18 years of age;
> Must obtain an appropriate license;
> Can have no more than 8 points or 4 moving violations on the Georgia violator scale;
> Can have no DUI in the past seven years;
> Must obtain MVR report for the last three years;
> Achievement of an acceptable score on the reading and math placement exam;
> Must pass DOT physical examination and DOT drug test fulfilling requirements of Motor
> Carrier Safety Regulations (Physical must be current within 30 days.)
> Must complete application of admission.

The items above are minimum requirements for program entrance. A person must be 21 years of age to drive for a company involved in interstate commerce. Some trucking companies require beginning drivers to be 25 years of age, and require an applicant to pass a drug screen.

Commercial Truck Driving
Course Outline

The standard curriculum for the Truck Driving Program is set up as an eight week, 240 hour program. The program is predicated on a student-to-equipment ratio of 3 to 1 and an instructor-to-student ratio of 1 to 6. Also, each student should receive approximately 750 miles driving on various kinds of public roads. The four courses which comprise the program are listed below.

General Core Curriculum
Students may be required to take developmental courses if need is indicated by the ASSET Placement Test

Occupational Curriculum			Credit Hours
CTD	101	Fundamentals of Commercial Truck Driving	5
CTD	102	Basic Operation	5
CTD	103	Advanced Operations	5
		or	
CTD	104	Internship	5

Total Credit Hours Required for Graduation   **15**

For a company interested in developing a cooperative arrangement with the school, the internship can replace the CTD 103 - Advanced Operations.

DRAFTING TECHNOLOGY
AAT DEGREE

Program Description: The Drafting Program prepares students for employment in a variety of positions in the drafting field. The Drafting Program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in drafting. Graduates of the program receive the associate degree in Drafting.

Admission Requirements

The requirements for admission to the Drafting Technology Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the AAT Degree inDrafting (Mechanical Specialization)
Minimum Program Length - 8 Quarters

General Core Curriculum			Credit Hours 30
Area I			
ENG	191	Composition and Rhetoric I	5
SPC	191	Fundamentals of Speech	5
HUM	191	Introduction to Humanities	5
Area II			
PSY	191	Introductory Psychology	5
Area III			
MAT	191	College Algebra	5
MAT	193	College Trigonometry	5

Occupational Curriculum			Credit Hours 94
SCT	100	Introduction to Microcomputers	3
DDF	101	Introduction to Drafting	6
DDF	102	Size and Shape Description I	5
DDF	103	Size and Shape Description II	5
DDF	105	Auxiliary Views	3
DDF	106	Fasteners	3
DDF	107	Introduction to Computer Aided Drawing	6
DDF	108	Intersections and Development	5
DDF	109	Assembly Drawing I	5
DDF	111	Intermediate CAD	6
DDF	112	3-D Drawing and Modeling	6
DDS	201	Strength of Materials	5
DDS	225	Principles of Metallurgy	4
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

Electives			<u>5</u>

Total Credit Hours Required for Graduation			126

ADVANCED DRAFTING
DIPLOMA

Program Description: The Drafting Program prepares students for employment in a variety of positions in the drafting field. The Drafting Program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in drafting. Graduates of the program receive a Drafting diploma.

Admission Requirements

The requirements for admission to the Advanced Drafting Program are:
        attainment of 16 or more years of age;
        documentation of high school graduation or completion of GED prior to graduation;
        achievement of program ready or provisional scores on the ASSET placement test; and
        completion of general admission requirements.
Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the Diploma in Advanced Drafting
Minimum Program Length - 6 Quarters

General Core Curriculum   **Credit Hours 23**

ENG	111	Business English	5
ENG	112	Business Communications	5
MAT	103	Algebraic Concepts	5
MAT	104	Geometry and Trigonometry	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum   **Credit Hours 91**

SCT	100	Introduction to Microcomputers	3
DDF	101	Introduction to Drafting	6
DDF	102	Size and Shape Description I	5
DDF	103	Size and Shape Description II	5
DDF	105	Auxiliary Views	3
DDF	106	Fasteners	3
DDF	107	Introduction to CAD	6
DDF	108	Intersections and Development	5
DDF	109	Assembly Drawing I	5
DDF	111	Intermediate CAD	6
DDF	112	3D Drawing and Modeling	6
DDS	201	Strength of Materials	5
DDS	225	Principles of Metallurgy	4
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

Electives   <u>**3**</u>

Total Credit Hours Required for Graduation   **117**

DRAFTING FUNDAMENTALS
DIPLOMA

Program Description: The Drafting Program prepares students for employment in a variety of positions in the drafting field. The Drafting Program provides learning opportunities which introduce, develop, and reinforce academic and technical knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to upgrade present knowledge and skills or to retrain in drafting. Graduates of the program receive a Drafting diploma.

Admission Requirements

The requirements for admission to the Drafting Technology Program are:
>   attainment of 16 or more years of age;
>   documentation of high school graduation or completion of GED prior to graduation;
>   achievement of program ready or provisional scores on the ASSET placement test; and
>   completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the Diploma in Drafting
Minimum Program Length - 5 Quarters

General Core Curriculum

			Credit Hours 18
ENG	111	Business English	5
MAT	103	Algebraic Concepts	5
MAT	104	Geometry and Trigonometry	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum

			Credit Hours 53
SCT	100	Introduction to Microcomputers	3
DDF	101	Introduction to Drafting	6
DDF	102	Size and Shape Description I	5
DDF	103	Size and Shape Description II	5
DDF	105	Auxiliary Views	3
DDF	106	Fasteners	3
DDF	107	Introduction to CAD	6
DDF	108	Intersections and Development	5
DDF	109	Assembly Drawing I	5
DDF	111	Intermediate CAD	6
DDF	112	3-D Drawing and Modeling	6

Electives   **5**

Total Credit Hours Required for Graduation   76

DRAFTING TECHNOLOGY
SPECIALIZED CERTIFICATE

CAD OPERATOR

Description: The CAD Operator training program is a sequence of courses that 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.

Admission Requirements

The requirements for admission to the CAD Operator Certificate are:
        attainment of 16 or more years of age;
        completion of general admission requirements; and
        achievement of program ready or provisional scores on the ASSET placement test.

Occupational Curriculum			Credit Hours
MAT	101	General Mathematics	5
DDF	100	Introduction to CAD	5
DDF	102	Size and Shape Description I	5
DDF	103	Size and Shape Description II	5
DDF	104	Pictorial Drawing	3
DDF	105	Auxiliary Views	3
DDF	106	Fasteners	3
DDF	109	Assembly Drawings I	5

Total Credit Hours Required for Graduation   **34**

ELECTRONICS TECHNOLOGY
COMPUTER SERVICING SPECIALIZATION
AAT DEGREE

Program Description: The Computer Servicing Specialization is a sequence of courses which prepares students for careers 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. Graduates receive the associate degree in Electronics Technology.

Admission Requirements

The requirements for admission to the Electronics Technology Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the AAT Degree in
Electronics Technology - Computer Servicing Specialization
Minimum Program Length - 7 Quarters

General Core Curriculum			Credit Hours 30
Area I			
ENG	191	Composition and Rhetoric I	5
SPC	191	Fundamentals of Speech	5
HUM	191	Introduction to Humanities	5
AREA II			
MAT	191	College Algebra	5
MAT	193	College Trigonometry	5
AREA III			
PSY	191	Introductory Psychology	5
		or	
ECO	191	Principles of Economics	

Occupational Curriculum			Credit Hours 55
SCT	100	Introduction to Microcomputers	3
ELC	104	Soldering Technology	2
ELC	106	Direct Current Circuits I	4
ELC	108	Direct Current Circuits II	4
ELC	109	Alternating Current I	4
ELC	110	Alternating Current II	4
ELC	114	Solid State Devices I	4
ELC	115	Solid State Devices II	4
ELC	117	Linear Integrated Circuits	7
ELC	118	Digital Electronics I	4
ELC	119	Digital Electronics II	7
ELC	120	Microprocessors I	4
ELC	125	Solid State Devices III	4
Computer Servicing Specialization			**30**
ELC	121	Microprocessors II	4
ELC	122	Microprocessor Interfacing	4
CIS	103	Operating Systems	5
CIS	140	Networking Concepts	5
ELC	204	High Level Languages	3
ELC	205	Data Communications	2
CIS	122	Installation and Maintenance	7
		or ELC 201 & ELC 208	
ELC	201	Computer Peripherals	4
ELC	208	Computer System Troubleshooting	3
Electives			<u>13</u>

Total Credit Hours Required for Graduation	**128**

ELECTRONICS TECHNOLOGY
INDUSTRIAL CONTROL SPECIALIZATION
AAT DEGREE

Program Description: The Industrial Control Technology Specialization is a sequence of courses which prepares students for careers in the industrial electronics field. 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 as well as practical applications in the industrial electronics field. Graduates receive the associate degree in Electronics Technology.

Admission Requirements

The requirements for admission to the Electronics Technology Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the AAT Degree in Electronics Technology -
Industrial Control Specialization
Minimum Program Length - 7 Quarters

General Core Curriculum			Credit Hours 30
Area I			
ENG	191	Composition and Rhetoric I	5
SPC	191	Fundamentals of Speech	5
HUM	191	Introduction to Humanities	5
AREA II			
MAT	191	College Algebra	5
MAT	193	College Trigonometry	5
AREA III			
PSY	191	Introductory Psychology	5
		or	
ECO	191	Principles of Economics	

Occupational Curriculum			Credit Hours 55
SCT	100	Introduction to Microcomputers	3
ELC	104	Soldering Technology	2
ELC	106	Direct Current Circuits I	4
ELC	108	Direct Current Circuits II	4
ELC	109	Alternating Current I	4
ELC	110	Alternating Current II	4
ELC	114	Solid State Devices I	4
ELC	115	Solid State Devices II	4
ELC	117	Linear Integrated Circuits	7
ELC	118	Digital Electronics I	4
ELC	119	Digital Electronics II	7
ELC	120	Microprocessors I	4
ELC	125	Solid State Devices III	4
Industrial Control Specialization			**40**
ELC	121	Microprocessors II	4
ELC	122	Microprocessor Interfacing	4
ELC	211	Process Control	7
ELC	212	Motor Controls	7
ELT	113	Programmable Logic Control I	4
ELC	213	Programmable Logic Control II	6
IMT	118	DC and AC Motors	4
IMT	119	Fundamentals of Motor Controls	4

Electives			3

Total Credit Hours Required for Graduation			128

ELECTRONICS TECHNOLOGY
COMPUTER SERVICING SPECIALIZATION
Diploma

Program Description: The Computer Servicing Specialization is a sequence of courses which prepares students for careers 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. Program graduates receive a diploma in Electronics Technology.

Admission Requirements

The requirements for admission to the Electronics Technology Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED prior to graduation;
> achievement of program ready or provisional scores on the ASSET placement test;
> and completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the Diploma in
Electronics Technology - Computer Servicing Specialization
Minimum Program Length - 6 Quarters

General Core Curiculum			Credit Hours 18
ENG	111	Business English	5
MAT	103	Algebraic Concepts	5
MAT	104	Geometry and Trigonometry	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum			Credit Hours 55
SCT	100	Introduction to Microcomputers	3
ELC	104	Soldering Technology	2
ELC	106	Direct Current Circuits I	4
ELC	108	Direct Current Circuits II	4
ELC	109	Alternating Current I	4
ELC	110	Alternating Current II	4
ELC	114	Solid State Devices I	4
ELC	115	Solid State Devices II	4
ELC	117	Linear Integrated Circuits	7
ELC	118	Digital Electronics I	4
ELC	119	Digital Electronics II	7
ELC	120	Microprocessors I	4
ELC	125	Solid State Devices III	4

Computer Servicing Specialization			Credit Hours 30
ELC	121	Micrprocessors II	4
ELC	122	Microprocessor Interfacing	4
CIS	103	Operating Systems	5
CIS	140	Networking Concepts	5
ELC	204	High-Level Languages	3
ELC	205	Data Communications	2
CIS	122	Installation & Maintenance or ELC 201 & ELC 208	7
ELC	201	Computer Peripherals	4
ELC	208	Computer System Troubleshooting	3
Electives			13

Total Credit Hours Required for Graduation	116

ELECTRONICS TECHNOLOGY
INDUSTRIAL CONTROL SPECIALIZATION
DIPLOMA

Program Description: The Industrial Control Technology Specialization is a sequence of courses which prepares students for careers in the industrial electronics field. 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 as well as practical applications in the industrial electronics field. Program graduates receive a diploma in Electronics Technology.

Admission Requirements

The requirements for admission to the Electronics Technology Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED prior to graduation;
> achievement of program ready or provisional scores on the ASSET placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the Diploma in
Electronics Technology - Industrial Control Specialization
Minimum Program Length - 6 Quarters

General Core Curriculum			Credit Hours 18
ENG	111	Business English	5
MAT	103	Algebraic Concepts	5
MAT	104	Geometry and Trigonometry	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum			Credit Hours 55
SCT	100	Introduction to Microcomputers	3
ELC	104	Soldering Technology	2
ELC	106	Direct Current Circuits I	4
ELC	108	Direct Current Circuits II	4
ELC	109	Alternating Current I	4
ELC	110	Alternating Current II	4
ELC	114	Solid State Devices I	4
ELC	115	Solid State Devices II	4
ELC	117	Linear Integrated Circuits	7
ELC	118	Digital Electronics I	4
ELC	119	Digital Electronics II	7
ELC	120	Microprocessors I	4
ELC	125	Solid State Devices III	4

Industrial Control Specialization			Credit Hours 40
ELC	121	Microprocessors II	4
ELC	122	Microprocessor Interfacing	4
ELC	211	Process Control	7
ELC	212	Motor Controls	7
ELT	113	Programmable Logic Control I	4
ELC	213	Programmable Logic Control II	6
IMT	118	DC and AC Motors	4
IMT	119	Fundamentals of Motor Controls	4

Electives			3

Total Credit Hours Required for Graduation			116

ELECTRONICS FUNDAMENTALS
DIPLOMA

Program Description: The Electronics Fundamentals Diploma Program is a sequence of courses that 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. Program graduates will receive a diploma in Electronics Fundamentals.

Admission Requirements

The requirements for admission to the Electronics Fundamentals Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED prior to graduation;
> achievement of program ready or provisional scores on the ASSET placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the Diploma in Electronic Fundamentals
Minimum Program Length - 5 Quarters

General Core Curriculum			Credit Hours 18
ENG	111	Business English	5
MAT	103	Algebraic Concepts	5
MAT	104	Geometry and Trigonometry	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum			Credit Hours 55
SCT	100	Introduction to Microcomputers	3
ELC	104	Soldering Technology I	2
ELC	106	Direct Current Circuits I	4
ELC	108	Direct Current Circuits II	4
ELC	109	Alternating Current I	4
ELC	110	Alternating Current II	4
ELC	114	Solid State Devices I	4
ELC	115	Solid State Devices II	4
ELC	117	Linear Integrated Circuits	7
ELC	118	Digital Electronics I	4
ELC	119	Digital Electronics II	7
ELC	120	Microprocessors I	4
ELC	125	Solid State Devices III	4

Electives	6

Total Credit Hours Required for Graduation	79

INDUSTRIAL (ELECTRICAL) MAINTENANCE
Diploma

Program Description: The Industrial Maintenance program prepares a student for employment in a variety of positions as trainees in the industrial production equipment electrical maintenance field. 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 Industrial Maintenance diploma and are qualified for employment as industrial electrical maintenance trainees.

Admission Requirements

The requirements for admission to the Industrial Maintenance Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED prior to graduation;
> achievement of program ready or provisional scores on the ASSET placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the Diploma
Industrial Maintenance
Minimum Program Length - 5 Quarters

General Core Curriculum   **Credit Hours 13**

ENG	111	Business English	5
MAT	103	Algebraic Concepts	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum   **Credit Hours 70-72**

ELC	106	Direct Current Circuits I	4
ELC	109	Alternating Current I	4
ELC	110	Alternating Current II	4
IMT	101	Industrial Maintenance Safety Procedures	2
SCT	100	Introduction to Microcomputers	3
ELT	113	Programmable Logic Control I	4
IMT	118	DC and AC Motors	4
IMT	119	Fundamentals of Motor Controls	4
IMT	120	Magnetic Starters and Braking	4
IMT	121	Two-Wire Control Circuits	3
ELC	114	Solid State Devices I	4
ELC	117	Linear Integrated Circuits	7
ELC	118	Digital Electronics I	4
ELC	212	Motor Controls	7
IMT	129	Industrial Wiring I	5
IMT	132	Industrial Maintenance(Electrical) Review	3
ELC	213	Programmable Logic Control II	6
		or	
IMT	127	Industrial Maintenance Internship	4

Electives   **4**

Total Credit Hours Required for Graduation   **87/89**

ADVANCED MACHINE TOOL TECHNOLOGY
DIPLOMA

Program Description: The Machine Tool Technology Program is a sequence of courses that prepares students for careers in the machine tool technology profession. 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 technology theory and practical application necessary for successful employment using both manual and computerized machine tool technology systems. Program graduates receive an advanced machine tool technology diploma which qualifies them as Machine Tool Technology Technicians.

Admission Requirements

The requirements for admission to the Advanced Machine Tool Technology Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED prior to graduation;
> achievement of program ready or provisional scores on the ASSET placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the Diploma in Advanced Machine Tool Technology
Minimum Program Length - 8 Quarters

General Core Curriculum			Credit Hours 13
ENG	111	Business English	5
MAT	101	General Mathematics	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum			Credit Hours 75
MCH	101	Introduction to Machine Tool	6
MCH	102	Blueprint Reading for Machine Tool	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	7
MCH	110	Lathe Operations II	6
MCH	112	Surface Grinding Operations	6
MCH	114	Blueprint Reading II	5
MCH	115	Mill Operations I	7
MCH	116	Mill Operations II	6
MCH	118	Computer/CNC Literacy	5
SCT	100	Introduction to Microcomputers	3
Electives			5

Completion of one of the following specializations is required.

Advanced General Machinist Courses			Credit Hours 38
MCA	201	Advanced Milling I	7
MCA	203	Advanced Milling II	6
MCA	205	Advanced Lathe Operations I	7
MCA	207	Advanced Lathe Operations II	6
MCA	208	Advanced Grinding I	4
MCA	209	Advanced Grinding II	3
Technically Related Electives			5

OR

Advanced CNC Specialist Courses			Credit Hours 38
MCA	211	CNC Fundamentals	7
MCA	213	CNC Mill Manual Programming	7
MCA	215	CNC Lathe Manual Programming	7
MCA	217	CNC Practical Applications	6
MCA	219	CAD/CAM Programming	6
Technically Related Electives			5

Total Credit Hours Required for Graduation			126

MACHINE TOOL TECHNOLOGY
DIPLOMA

Program Description: The Machine Tool Technology Program is a sequence of courses that prepares students for careers in the machine tool technology profession. 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 technology theory and practical application necessary for successful employment using both manual and computerized machine tool technology systems. Program graduates receive a machine tool technology diploma which qualifies them as Machine Tool Technology Technicians.

Admission Requirements

The requirements for admission to the Machine Tool Technology Program are:
>   attainment of 16 or more years of age;
>   documentation of high school graduation or completion of GED prior to graduation;
>   achievement of program ready or provisional scores on the ASSET placement test; and
>   completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the Diploma in
Machine Tool Technology
Minimum Program Length - 5 Quarters

General Core Curriculum			Credit Hours 13
ENG	111	Business English	5
MAT	101	General Mathematics	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum			Credit Hours 70
MCH	101	Introduction to Machine Tool	6
MCH	102	Blueprint Reading for Machine Tool	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	7
MCH	110	Lathe Operations II	6
MCH	112	Surface Grinding Operations	6
MCH	114	Blueprint Reading II	5
MCH	115	Mill Operations I	7
MCH	116	Mill Operations II	6
MCH	118	Computer/CNC Literacy	5
SCT	100	Introduction to Microcomputers	3

Electives	**5**

Total Credit Hours Required for Graduation	**88**

QUALITY CONTROL
AAT DEGREE

Program Description: Students completing the Quality Control Technology Program are prepared to develop and operate quality control systems, apply and analyze testing and inspection procedures, use metrology and statistical methods to diagnose and correct improper quality control practices, understand human factors and motivation, develop and administer management information systems, and audit quality systems for deficiency identification and correction. Upon graduation students will receive the associate degree in Quality Control Technology.

Admission Requirements

The requirements for admission to the Quality Control Technology Program are:
>   attainment of 16 or more years of age;
>   documentation of high school graduation or completion of GED;
>   achievement of program ready or provisional scores on the ASSET placement test; and
>   completion of general admission requirements.

Transfer students to the program must meet regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the AAT Degree in
Quality Control
Minimum Program Length - 6 Quarters

General Core Curriculum			Credit Hours 35
Area I			
ENG	191	Composition and Rhetoric	5
SPC	191	Fundamentals of Speech	5
HUM	191	Introduction to Humanities	5
Area II			
PSY	191	Introductory Psychology	5
ECO	191	Principles of Economics	5
Area III			
MAT	191	College Algebra	5
MAT	198	Introduction to Statistics	5
Occupational Curriculum			**Credit Hours 61**
MCH	102	Blueprint Reading for Quality Control	5
SCT	100	Introduction to Microcomputers	3
QCT	113	Metrology	5
QCT	114	Statistical Process Control	3
QCT	115	Quality Cost Control	5
QCT	123	Quality Audit Systems	5
QCT	211	Statistical Quality Control	5
QCT	212	Industrial Statistics for Quality	5
QCT	213	Design of Experiments	5
QCT	221	Quality Planning and Reliability	5
QCT	222	Problem Solving and Decision Making	5
QCT	224	Procurement Quality Control	5
QCT	240	Quality Technician Seminar	5
Electives			<u>5</u>
Total Credit Hours Required for Graduation			101

QUALITY CONTROL
DIPLOMA

Program Description: Students completing the Quality Control Technology Program are prepared to develop and operate quality control systems, apply and analyze testing and inspection procedures, use metrology and statistical methods to diagnose and correct improper quality control practices, understand human factors and motivation, develop and administer management information systems, and audit quality systems for deficiency identification and correction. Upon graduation students will receive a diploma in Quality Control Technology.

Admission Requirements

The requirements for admission to the Quality Control Technology Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the Diploma in
Quality Control
Minimum Program Length - 5 Quarters

General Core Curriculum			Credit Hours 23
ECO	191	Principles of Economics	5
ENG	111	Business English	5
MAT	191	College Algebra	5
MAT	198	Introduction to Statistics	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum			Credit Hours 61
MCH	102	Blueprint Reading for Quality Control	5
SCT	100	Introduction to Microcomputers	3
QCT	113	Metrology	5
QCT	114	Statistical Process Control	3
QCT	115	Quality Cost Control	5
QCT	123	Quality Audit Systems	5
QCT	211	Statistical Quality Control	5
QCT	212	Industrial Statistics for Quality	5
QCT	213	Design of Experiments	5
QCT	221	Quality Planning and Reliability	5
QCT	222	Problem Solving and Decision Making	5
QCT	224	Procurement Quality Control	5
QCT	240	Quality Technician Seminar	5

Electives   **5**

Total Credit Hours Required for Graduation   **89**

SPECIALIZED CERTIFICATES
QUALITY CONTROL

CERTIFIED MECHANICAL INSPECTOR

Description: The Certified Mechanical Inspector Certificate is designed to provide the student with the necessary knowledge to pass the ASQC certification examination. Students completing the Certified Mechanical Inspector Certificate are prepared to work in support of and under the direction of quality engineers, supervisors, or technicians.

Admission Requirements

The requirements for admission to the Certified Mechanical Inspector Certificate are:
>   attainment of 16 or more years of age;
>   documentation of high school graduation or completion of GED;
>   completion of general admission requirements; and
>   achievement of program ready or provisional scores on the ASSET placement test.

Occupational Curriculum			Credit Hours
MAT	103	Algebraic Concepts	5
MCH	102	Blueprint Reading I	5
QCT	113	Metrology	5
QCT	114	Statistical Process Control	3
QCT	230	Seminar in Mechanical Inspection	5

Total Credit Hours Required for Graduation 23

CERTIFIED QUALITY AUDITOR

Description: The Certified Quality Auditor Certificate is designed to provide the student with the necessary knowledge to pass the ASQC certification examination. Students completing the Certified Quality Auditor Certificate will understand the standards and principles of auditing and the auditing techniques of examining, questioning, evaluating, and reporting to determine a quality system adequacy and deficiencies. The Certified Quality Auditor analyzes all elements of a quality evaluation and control systems.

Admission Requirements

The requirements for admission to the Certified Quality Auditor Certificate are:
>   attainment of 16 or more years of age;
>   documentation of high school graduation or completion of GED;
>   completion of general admission requirements; and
>   achievement of program ready or provisional scores on the ASSET placement test.

Occupational Curriculum			Credit Hours
SCT	100	Introduction to Microcomputers	3
MAT	103	Algebraic Concepts	5
QCT	115	Quality Cost Control	5
QCT	123	Quality Audit Systems	5
QCT	235	Seminar in Quality Auditing	5

Total Credit Hours Required for Graduation 23

SPECIALIZED CERTIFICATES
QUALITY CONTROL

CERTIFIED QUALITY TECHNICIAN

Description: The Certified Quality Technician Certificate is designed to provide the student with the necessary knowledge to pass the ASQC certification examination. Students completing the Certified Quality Technician Certificate are prepared to work under professional direction or supervision of quality engineers. The quality technician analyzes and solves quality problems, prepares inspection plans and instruction, selects sampling plan applications, prepares procedures, trains inspectors, perform audits, analyzes quality costs and other quality data, and applies fundamental statistical methods for process control.

Admission Requirements

The requirements for admission to the Certified Quality Technician Certificate are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> completion of general admission requirements;
> achievement of program ready or provisional scores on the ASSET placement test.

Occupational Curriculum			**Credit Hours**
MAT	198	Introduction to Statistics	5
QCT	211	Statistical Quality Control	5
QCT	212	Industrial Statistics for Quality	5
QCT	222	Problem Solving and Decision Making	5
QCT	240	Technician Seminar	5

Total Credit Hours Required for Graduation   **25**

WELDING AND JOINING TECHNOLOGY
DIPLOMA

Program Description: The Welding and Joining Technology is a sequence of courses that prepares students for careers in Welding and Joining Technology profession. Learning opportunities develop academic, technical and professional knowledge and skills required for job acquisition, retention and advancement. The program emphasizes a combination of welding and joining technology theory and practical application necessary for successful employment using both manual and computerized welding and joining technology systems. Program graduates receive a welding and joining technology diploma which qualifies them as Welding and Joining Technicians. Graduates may receive a certificate in two areas.

Admission Requirements
The requirements for admission to the Welding and Joining Technology Program are:

> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED prior to graduation;
> achievement of program ready or provisional scores on the ASSET placement test;
> and completion of general admission requirements.

Transfer students to the program must meet regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the Diploma in
Welding and Joining Technology
Minimum Program Length - 4 quarters

General Core Curriculum			**Credit Hours 13**
ENG	111	Business English	5
MAT	101	General Mathematics	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum			**Credit Hours 62**
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

Electives	5

Total Credit Hours Required for Graduation	75

SPECIALIZED CERTIFICATES
WELDING

GAS METAL ARC WELDING

Description: The purpose of the Gas Metal Arc Welding Certificate is to provide learning opportunities for individuals who need job specific training in the area of Gas Metal Arc Welding.

Admission Requirements

The requirements for admission to the Gas Metal Arc Welding Certificate are:
>   attainment of 16 or more years of age,
>   completion of general admission requirements.

Occupational Curriculum			Credit Hours
WLD	100	Introduction to Welding Technology	6
WLD	101	Oxyfuel Cutting	4
WLD	109	Gas Metal Arc Welding	6

Total Credit Hours Required for Graduation   **16**

GAS TUNGSTEN ARC WELDING

Description: The purpose of the Gas Tungsten Arc Welding Certificate is to provide learning opportunities for individuals who need job specific training in the area of Gas Tungsten Arc Welding.

Admission Requirements

The requirements for admission to the Gas Tungsten Arc Welding Certificate are:
>   attainment of 16 or more years of age,
>   achievement of program ready or provisional scores on the ASSET placement examination,and
>   completion of general admission requirements

Occupational Curriculum			Credit Hours
MAT	101	General Mathematics	5
WLD	100	Introduction to Welding Technology	6
WLD	103	Blueprint Reading I	3
WLD	108	Blueprint Reading II	3
WLD	110	Gas Tungsten Arc Welding	4
WLD	150	Special Projects in Gas	5

Total Credit Hours Required for Graduation   **26**

SPECIALIZED CERTIFICATES
WELDING

SHIELDED METAL ARC WELDING

Description: The purpose of the Shielded Metal Arc Welding Certificate is to provide learning opportunities for individuals who need job specific training in the area of Shielded Metal Arc Welding.

Admission Requirements

The requirements for admission to the Shielded Metal Arc Welding Certificate are:
    attainment of 16 or more years of age,
    achievement of program ready or provisional scores on the ASSET Placement examination, and
    completion of general admission requirements

Occupational Curriculum			Credit Hours
MAT	101	General Mathematics	5
WLD	100	Introduction to Welding Technology	6
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

Total Credit Hours Required for Graduation   **41**

Division of Health and Human Services

COSMETOLOGY
DIPLOMA

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, hair treatment and manipulation, skin and nail care, color, highlighting, permanent weaving, relaxing, haircutting, styling, reception, sales, and management. The curriculum meets the 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.

Admission Requirements

The requirements for admission to the Cosmetology Program are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED prior to graduation;
> achievement of program ready or provisional scores on the ASSET placement test; and
> completion of general admission requirements.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Requirements for the Diploma in Cosmetology
Minimum Program Length - 5 Quarters

General Core Curriculum			Credit Hours 13
ENG	111	Business English	5
MAT	101	General Mathematics	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational Curriculum			57
COS	100	Introduction to Cosmetology Theory	5
COS	101	Introduction to Permanent Waving and Relaxing	2
COS	102	Introduction to Hair Color	4
COS	103	Introduction to Skin, Scalp, and Hair	2
COS	104	Introduction to Manicuring and Pedicuring	1
COS	105	Introduction to Shampooing and Styling	3
COS	106	Introduction to Haircutting	2
COS	107	Haircutting Techniques	2
COS	108	Permanent Waving and Relaxing	3
COS	109	Hair Color	2
COS	110	Skin, Scalp, and Hair	2
COS	111	Styling	3
COS	112	Manicuring and Pedicuring	1
COS	113	Practicum I	4
COS	114	Practicum II	8
COS	115	Practicum/Internship I	4
COS	116	Practicum/Internship II	5
COS	117	Salon/Shop Management	4
SCT	100	Introduction to Microcomputers	3

Total Credit Hours Required for Graduation	73

SPECIALIZED CERTIFICATE
COSMETOLOGY

NAIL TECHNICIAN

The Nail Technician Certificate Program is designed to provide certification of training for persons desiring to become nail technicians. The courses are contained in the Cosmetology Diploma Program and may be applied toward a diploma in that major.

Admission Requirements

The requirements for admission to the Nail Technician Certificate are:
attainment of 16 or more years of age;
completion of general admission requirements

Occupational Curriculum			Credit Hours
COS	100	Introduction to Cosmetology	5
COS	104	Introduction to Manicuring and Pedicuring	1
COS	112	Manicuring and Pedicuring	1
COS	114	Practicum II	8
COS	117	Salon/Shop Management	4

Total Credit Hours Required for Graduation   **19**

LICENSED PRACTICAL NURSING
DIPLOMA

Program Description: The Practical Nursing Program is designed to prepare students to write the State Board of Examination for license 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.

Admission Requirements

INTRODUCTION

The purpose of the Practical Nursing program is to provide educational opportunities to individuals that will enable them to obtain the knowledge, skills, and attitudes necessary to succeed in the field of practical nursing.

The Practical Nursing program provides educational opportunities regardless of race, color, national origin, religion, sex, age, disability, academic disadvantage, or economic disadvantage.

The Practical Nursing program is intended to produce graduates who are prepared for employment as practical nurses. Program graduates are to be competent in the general areas of communications, math, and interpersonal relations. Graduates are to be competent in the occupational areas of anatomy and physiology, drug calculations, administration of medications, nutrition and diet therapy, nursing ethics, patient care, and wellness and prevention of illness.

The Practical Nursing program strives to meet the health care needs of the community which it serves, working in conjunction with specific agencies that employ its graduates. Graduates are prepared to sit for the licensure examination of the Georgia Board of Examiners of Licensed Practical Nursing.

ADMISSION REQUIREMENTS

The following guidelines have been established in considering applicants for admission to the Practical Nursing program. This policy may be evaluated and revised as deemed necessary by faculty and administration.

A. All applicants to the Licensed Practical Nursing program must meet the following requirements:

1. Be 17 or more years of age.

2. Submit application and required fees to Northwestern Technical Institute Admissions Office.

3. Take the placement examination (ASSET) and achieve required scores:
   Writing   35
   Reading   38
   Math   38

If the placement test results indicate that the student is not academically prepared to enter the program, the student may be granted developmental or provisional admission status to the institution and will be placed in one or more developmental classes.

4. Submit official high school and college transcript or GED test results to Northwestern Technical Institute.

NURSING ADMISSION REQUIREMENTS

5. Take the nursing entrance examination.
6. Have a personal interview with designated school official upon satisfactory completion of the above.
7. Students will be selected when the above requirements have been completed based upon "first come, first served" and space available.

B. Students who are transferring from other regionally accredited nursing programs may receive advance placement if:
1. The above requirements have been met.

2. Students were in good standing at their previous institution.

3. A personal reference from the previously attended nursing school faculty has been submitted.

4. Nursing courses have been completed within two years prior to applying for admission or readmission.

5. Science courses have been completed within three years prior to applying for admission or readmission.

C. Students will submit the following **no later than three weeks before rotation in Fundamentals of Nursing (NSG 111).**

1. A completed physical examination including drug screen
2. Dental examination
3. Liability insurance payment
4. CPR certification
5. Rubella titer, PPD, chickenpox immunity

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. Some courses may have special requirements such as an 80% pass rate on the drug calculation examination.

2. Students must attain a numerical grade of 70 or better in each nursing course, including clinical rotations, to progress in the program.

3. A student 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. Student must continue to be in good standing with the institution 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 student was 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, students must reapply to the LPN program.

PHYSICAL EXAMINATION

Students are required to submit a completed physical examination form to the Nursing Office three weeks before clinicals begin in the Fundamentals course. The physical must contain current information within the past three months. Included in the physical form must be the results of a TB skin test or chest x-ray, rubella titer, chicken pox immunity, drug screen, and evidence of tetanus booster within the last ten (10) years. In addition, a drug screen may be required at any time if student behavior warrants.

LIABILITY INSURANCE

Students are required to purchase the liability insurance. In order for the insurance to be effective by the first clinical day, the fee will be due three weeks before the first week of clinical. The approximate cost is $15.00.

GRADUATION REQUIREMENTS

All courses in the nursing curriculum must be completed in order to graduate. Only students who have completed required course work and receive the diploma are eligible to sit for the NCLEX-PN.

Students will be required to 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 completion of the program.

Practical Nursing Program Essential Skills

1. Meet admission standards.
2. Perform, read and interpret vital body signs.
3. Administer and evaluate all types of medications following safe procedures.
4. Perform sterile and isolation techniques.
5. Assist in lifting, transferring, and moving patients according to set nursing standards.
6. Perform daily functions for patients. (Example: feed, bathe, change bed linen, positioning, elimination, etc.)
7. Read and interpret legal documents within the scope of nursing practice.
8. Perform documentation procedures.
9. Move throughout the clinical site in an efficient manner.
10. Communicate verbally and nonverbally with tact and understanding when dealing with patients, families and co-workers.
11. Perform and maintain CPR certification.
12. Demonstrate progressive independence without constant supervision.
13. Demonstrate persistent appropriate personal grooming in class and clinical practice.
14. Follow the policies and procedures of the facility used for clinical practice.

Clinical Requirements
Working Environment - Works inside well-lighted, ventilated patient care unit, spends 89-90% of time in private and semi-private patient care rooms. May possibly receive cuts from sharp instruments and infections from sharp instruments and infections from contaminated equipment and personnel. May be exposed to communicable diseases. May possibly incur strains due to handling heavy equipment. OSHA Risk Factor - Category A. A chance of exposure to blood and other body fluids is high and is a condition of employment. The position exposes the employee to noxious smell, either toxic or non-toxic, 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.

LICENSED PRACTICAL NURSING DIPLOMA

Physical Demands - This position will primarily be medium work requiring the ability to lift up to 50 pounds with frequent lifting and/or carrying objects weighing up to 25 pounds. The ability to push or pull carts weighing up to 50 pounds is required. Occasional stooping, kneeling, reaching, and dexterity is required. Expressing or exchanging ideas by the spoken word is required. The ability to see and obtain impressions through the eyes of shape, size, distance, motions or other characteristics of objects is required. This requires a seeing acuity of near 20/20 vision; with clarity of vision at twenty inches or less, depth perception, four-way field vision, sharp eye focus, and the ability to identify and distinguish color. The ability to hear is essential. This position requires frequent sitting, standing and/or walking. Ability to work under mental and physical stress regularly is required.

Requirements for the Diploma inPractical Nursing
Minimum Program Length - 5 Quarters

General Core Curriculum			Credit Hours 15
ENG	111	Business English	5
MAT	101	General Mathematics	5
*PSY	191	Introductory Psychology	5

Occupational Curriculum			79
SCT	100	Introduction to Microcomputers	3
AHS	101	Anatomy and Physiology	5
AHS	102	Drug Calculation and Administration	3
AHS	103	Nutrition and Diet Therapy I	2
AHS	150	Nutrition and Diet Therapy II	3
NSG	111	Nursing Fundamentals	13
NPT	112	Medical Surgical I Practicum	7
NPT	113	Medical Surgical Nursing Practicum II	7
NPT	214	Maternal Child Nursing Practicum	4
NPT	215	Nursing Leadership Practicum	2
NSG	112	Medical Surgical Nursing I	9
NSG	113	Medical Surgical Nursing II	9
NSG	214	Maternal Child Nursing	10
NSG	215	Nursing Leadership	2

Total Credit Hours Required for Graduation   **94**

*Substituted for PSY 101

MEDICAL ASSISTANT
Diploma

Program Description: The Medical Assistant Program is designed to develop the knowledge and skills necessary to function in a private or group medical practice. A variety of courses are given to assist the student in acquiring the needed knowledge and skills to work in a medical office. After completing the required course work, the student will intern as a medical assistant. Graduates will receive a diploma in Medical Assistant and are employable in the medical office environment.

Admission Requirements

Northwestern Technical Institute admission requirements:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> achievement of program ready or provisional scores on the ASSET placement test;
> payment of fees for liabiity insurance, and
> CPR certification.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Medical Assistant admission requirements:
> 1. Completion of application and related procedures.
> 2. Participation in interview with Program Director.
> 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 for liability insurance.
> 7. Documentation of current CPR certification.

Medical Assistant Program Essential Skills

1. Meet admission standards.
2. Perform, read and interpret vital body signs.
3. Administer and evaluate all types of medications following safe procedures.
4. Perform sterile and isolation techniques.
5. Assist in lifting, transferring, and moving patients according to safety standards.
6. Perform daily functions for patients. (Example: Blood draws, testing, perform EKG's, assist with physical exam, etc.)
7. Read and interpret legal documents within the scope of medical assistant practice.
8. Perform documentation procedures.
9. Move throughout the clinical site in an efficient manner.
10. Communicate verbally and nonverbally with tact and understanding when dealing with patients, families and co-workers.
11. Perform and maintain CPR certification.
12. Demonstrate progressive independence without constant supervision.
13. Demonstrate persistent appropriate personal grooming in class and clinical practice.
14. Follow the policies and procedures of the facility used for clinical practice.

Clinical Requirements
Working Environment - Works inside well-lighted, ventilated patient care areas, spends 89-90% of time in patient care areas. May possibly receive cuts from sharp instruments and infections from sharp instruments and infections from contaminated equipment and personnel. May be exposed to communicable diseases. May possibly incur strains due to handling heavy equipment. OSHA Risk Factor - Category A. A chance of exposure to blood and other

body fluids is high and is a condition of course completion. The courses expose the student to noxious smell, either toxic or non-toxic, 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. **Physical Demands** - This position will primarily be medium work requiring the ability to lift up to 50 pounds with frequent lifting and/or carrying objects weighing up to 25 pounds. The ability to push or pull carts weighing up to 50 pounds is required. Occasional stooping, kneeling, reaching, and dexterity is required. Expressing or exchanging ideas by the spoken word is required. The ability to see and obtain impressions through the eyes of shape, size, distance, motions or other characteristics of objects is required. This requires a seeing acuity of near 20/20 vision; with clarity of vision at twenty inches or less, depth perception, four-way fld vision, sharp eye focus, and the ability to identify and distinguish color. The ability to hear is essential. This position requires frequent sitting, standing and/or walking. Ability to work under mental and physical stress regularly is required..

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 in the Medical Assistant Program.
2. Students must attain a numerical grade of 70 or better in each Medical Assistant 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 Assistant courses.

MEDICAL ASSISTANT
DIPLOMA

Requirements for the Diploma in Medical Assistant
Minimum Program Length - 5 Quarters

General Core Curriculum   **Credit Hours 15**

ENG	111	Business English	5
MAT	101	General Mathematics	5
*PSY	191	Introductory Psychology	5

Occupational Curriculum
67

AHS	101	Anatomy and Physiology	5
BUS	101	Beginning Document Processing	5
BUS	106	Office Procedures	4
MAS	101	Medical Laws and Ethics	2
MAS	103	Pharmacology	5
BUS	212	Anatomy and Terminology	5
SCT	100	Introduction to Microcomputers	3
MAS	104	Medical Administrative Procedures I	3
MAS	108	Medical Assisting Skills I	5
MAS	109	Medical Assisting Skills II	5
MAS	112	Human Diseases	5
MAS	113	Maternal and Child Care	5
MAS	117	Medical Assisting Externship	6
MAS	118	Medical Assisting Seminar	4
MAS	105	Medical Administrative Procedures II	5
		or	
BUS	213	Medical Document Processing/Transcription	5

Total Credit Hours Required for Graduation   **82**

*Substituted for PSY 101

OCCUPATIONAL THERAPY ASSISTANT
ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

Program Description: The Occupational Therapy Assistant program is designed to prepare students to implement treatment procedures and plans, to clients with limitations in occupational performance under the supervision of an occupational therapist per AOTA standards and State regulations. OTAs are trained to use a variety of everyday activities as a means of helping 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. Occupational Therapy Assistants work as a team to assist the impaired individual in returning to a satisfying life. Other occupational therapy assistant responsibilities include clerical skills, record keeping, and assistance with appropriate evaluation.

The Occupational Therapy Assistant 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, Maryland 20824-1220. AOTA's phone number is (301) 652-AOTA.. Graduates are 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 examination, the individual will be a Certified Occupational Therapy Assistant (COTA). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. Note: All Level II Fieldwork must be completed within 18 months of completion of academic preparation.

Admission Requirements

The requirements for admission to Northwestern Technical Institute are described below. The Occupational Therapy Assistant program admission requirements are in addition to the admission requirements to NTI. Prospective students must meet all admission standards for admission to Northwestern Technical Institute and to the OTA program.

NTI ADMISSION REQUIREMENTS
1. Attainment of 17 or more years of age.
2. Complete and submit the Northwestern Technical Institute application along with a $15 nonrefundable application fee.
3. Documentation of high school diploma from a regionally accredited high school or completion of the GED.
4. Submit official transcripts from high school and all college/ postsecondary institutions attended.
5. Achievement of program ready status based on the ASSET placement test. Students who do not achieve program ready status should complete developmental courses determined by placement testing.

OCCUPATIONAL THERAPY ASSISTANT ADMISSION REQUIREMENTS

1. Achieve program ready status as demonstrated by ASSET scores.
2. Achieve satisfactory scores on the Health Occupations Aptitude Test.
3. Documentation of 30-40 hours of volunteer work in at least two different clinical sites and settings with an OTR or COTA supervision.
4. Supply two (2) personal references, one of which should be from the OTR or COTA with whom volunteer work was completed.
5. Supply a brief autobiography in which you describe why you are interested in a career in occupational therapy.
6. Submit the results of a physical examination one month prior to Level I fieldwork. The physical examination must include a TB skin test or chest X-ray and the results of a drig screen.
7. Documentation of CPR certification submitted prior to Level I fieldwork.
8. Documentation of liability insurance paid through Northwestern Technical institute prior to Level I fieldwork.
9. Schedule a personal interview with the designated college official upon completion of the above.
10. Students will be selected when the above requirements have been com pleted based on a "first come, first served" and space available policy.

ESSENTIAL SKILL REQUIREMENTS

In order to complete the OTA program at WTI students will be required to meet the essential skill requirements of the program. These are 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 environ mental 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. Due to the nature of occupational therapy practice, the work is considered medium workrequiring the ability to lift up to 50 pounds with frequent lifting and carrying objects weighing up to 25 pounds. The ability to push/pull carts, wheelchairs, etc. weighing 50 pounds is required. 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 allied health field.

TRANSFER STUDENTS

Students transferring from regionally accredited colleges must meet all NTI and occupational therapy assistant admission requirements. In addition:

1. transfer students must be in good standing at their previous institution;
2. transfer students must submit a letter of recommendation from a professor at their previous institution;
3. transfer students may be required to document proficiency or repeat occupational therapy courses taken more than two 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 for transfer into the OTA program.

RETENTION

1. Occupational Therapy Assistant students must maintain a cumulative grade point average of 2.0 to remain in the program.
2. OTA students must maintain a "C" (70 or higher) grade in each course including field work in order to progress to the next quarter of the OTA program.
3. OTA students must maintain CPR certification.
4. OTA students must maintain liability insurance.

READMISSION

1. Students withdrawing or failing a class after admission into the OTA program will be allowed to return to the program one time when the class is next offered.
2. Students withdrawing or failing a second time must be readmitted to the program and repeat all coursework.
3. Students seeking readmission must meet all current admission requirements.
4. Students seeking readmission must be in good standing with the institution.

Transfer students to the program must meet regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

GRADUATION

All course work in the OTA program must be satisfactorily completed in order to graduate. Only students who have completed the required course work and received the AAT degree will be eligible to sit for the National Board for Certification in Occupational Therapy Examination (NBCOT). Graduates will be eligible to apply for licensure, which is required in the state of Georgia and is contingent upon examination results.

OCCUPATIONAL THERAPY ASSISTANT
ASSOCIATE OF APPLIED TECHNOLOGY DEGREE

Requirements for the AAT Degree in Occupational Therapy Assistant
Minimum Program Length - 8 Quarters

General Core Curriculum   Credit Hours 45

Area I

ENG	191	Composition and Rhetoric	5
SPC	191	Fundamentals of Speech	5
HUM	191	Introduction to Humanities	5

Area II

PSY	191	Introductiory Psychology	5
PSY	201	Abnormal Psychology	5
SOC	191	Introduction to Sociology	5

Area III

BIO	193	Anatomy and Physiology I	5
BIO	194	Anatomy and Physiology II	5
MAT	191	College Algebra	5

Occupational Curriculum   Credit Hours 92

BUS	212	Anatomy and Terminology	5
SCT	100	Introduction to Microcomputers	3
MAS	112	Human Diseases	5
OTA	105	Kinesiology	6
OTA	101	Introduction to Occupational Therapy	3
OTA	102	Growth and Development	5
OTA	103	Developmental Tasks	3
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	5
OTA	213	Advanced Treatment Methods	3
OTA	221	Psychosocial Dysfunction Fieldwork	12
OTA	222	Physical Dysfunction Fieldwork	12

Total Credit Hours Required for Graduation   137

SURGICAL TECHNOLOGY
DIPLOMA

Program Description: The Surgical Technology program prepares students to function in association with nurses and surgeons to help provide the best possible care of the surgical patient. 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. Their 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.

Northwestern Technical Institute Admission Requirements:
1. Attainment of 17 or more years of age.
2. Complete and submit the NTI application along with a $15 non-refundable application fee.
3. Documentation of high school diploma from a regionally accredited high school or completion of the GED.
4. Submit official transcripts from high school and college/postsecondary institutions attended.
5. Achievement of regular program admission status based on the ASSET placement test.

Transfer students must meet the regular admission requirements and be in good standing at a regionally accredited diploma or degree granting institution.

Surgical Technology Admission Requirements:
1. Completion of application and related procedures.
2. Participation in interview with the Program Director.
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. Liability insurance payment.
7. CPR certification.

Essential Skill Requirements:
1. Perform, read, and interpret vital body signs
2. Perform sterile and isolation techniques.
3. Assist in lifting, moving, and transferring patients according to safety procedures.
4. Perform documentation procedures.
5. Perform and maintain CPR certification.
6. Demonstrate progressive independence without constant supervision.
7. Demonstrate persistent appropriate personal grooming in class and clinical practice.
8. Follow the policies and procedures of the facility for clinical use.
9. Manual dexterity is needed for manipulation of treatment equipment.
10. 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 field. 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.

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 Surgical Technology program.
2. Students must attain a numerical grade of 70 or better in each lecture Surgical Technology 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.

SURGICAL TECHNOLOGY DIPLOMA

Minimum Program Length - 5 Quarters

General Core Curriculum   **Credit Hours 13**

ENG	111	English	5
MAT	101	General Mathematics	5
PSY	100	Interpersonal Relations and Professional Development	3

Occupational **Curriculum**   **Credit Hours 66**

SCT	100	Introduction to Microcomputers	3
AHS	101	Anatomy and Physiology	5
SUR	101	Introduction to Surgical Technology	12
SUR	102	Principles of Surgical Technology	8
SUR	112	Introduction to Surgical Practicum	7
SUR	103	Surgical Procedures I	6
SUR	104	Surgical Procedures II	6
SUR	113	Specialty Surgical Practicum	8
SUR	114	Advanced Specialty Surgical Practicum	8
SUR	124	Seminar in Surgical Technology	3

Total Credit Hours Required for Graduation   **79**

SPECIALIZED CERTIFICATES
MEDICAL CODING

Description: The Medical Coding Certificate provides entry level training in the Medical Coding protocols of ICD9 and CPT 4. Other ares of study included in this certificate include anatomy and terminology and human diseases.

Admission Requirements

The requirements for admission to the Medical Transcriptionist Certificate are:
> attainment of 16 or more years of age;
> documentation of high school graduation or completion of GED;
> completion of general admission requirements; and
> achievement of program ready or provisional scores on the English and reading sections of the ASSET placement test.

Occupational Curriculum			Credit Hours
BUS	111	Business English	5
BUS	101	Beginning Document Processing	5
BUS	212	Anatomy and Terminology	5
AHS	101	Anatomy and Physiology	5
MAS	112	Human Diseases	5
MAS	151	ICD9 Coding I	4
MAS	152	ICD9 Coding II	4
MAS	153	CPT4 Coding	2

Total Credit Hours Required for Graduation   **35**

PHARMACY ASSISTANT

Program Description: The Pharmacy Assistant Certificate Program provides educational opportunities to individuals that will enable them to obtain the knowledge, skills, and attitudes necessary to succeed in the pharmaceutical field. This program will produce graduates who are prepared for employment as pharmacy assistants. Program graduates will be competent in the following areas: 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.

Admission Requirements

The requirements for admission to the Pharmacy Assistant program are:
> attainment of 17 years of age or older;
> documentation of high school graduation or completion of GED;
> documentation of high school graduation or completion of GED required;
> achievement of program ready or provisional scores on the ASSET Placement Test; and
> completion of general admission requirements.

Occupational Curriculum			Credit Hours
MAT	101	General Mathematics	5
AHS	101	Anatomy and Physiology	5
BUS	212	Anatomy and Terminology	5
SCT	100	Introduction to Microcomputers	3
PHR	101	Pharmacy Technology Fundamentals	5
AHS	102	Drug Calculation and Administration	3
PHR	102	Principles of Dispensing Medicines	6
DIS	150	Directed Independent Study	3

Total Credit Hours Required for Graduation   **35**

SPECIALIZED CERTIFICATE
EMERGENCY MEDICAL TECHNICIAN

Program Description: The Emergency Medicaal Technician program prepares the student for a career as an EMT (Emergency Medical technician). The program meets the minimum requirements for the U.S. Department of Transportation National Standard Curriculum for Training of Emergency Medical Technicians.

Admission Requirements

Requirements of admission to the Emergency Medical Technician Program are below:
> attainment of 18 or more years of age;
> hold a valid driver's license;
> achievement of an acceptable score in reading on the placement exam;
> completion of EMT application along with NTI application and related procedures;
> documentation of high school graduation or completion of GED;
> formal acceptance into the program by the EMT admissions committee on the basis of interview and assessment of student potential; and
> be physically able to perform the duties of an EMT as verified by a note from a physician. Due to physical requirements involved, pregnant individuals are not eligible for this course.

Required Courses			Credit Hours
EMS	100	Emergency Medical Technology I	7
EMS	101	Emergency Medical Technology II	7
EMS	102	Emergency Medical Technology III	7
EMS	104	Emergency Medical Technology IV	9

Total Credit Hours Required for Graduation　　　　　　　　　　**30**

EMT students are required to purchase Liability Insurance.. The cost is $35.00.

PHLEBOTOMY TECHNICIAN

Program Description: The Phelebotomy program is designed to train students to draw and process blood specimens. Phlebotomy Techs typically work in concert with medical lab techs in hospitals or other health care organizations. Topics include human anatomy, anatomical terminology, venipuncture, and clinical practice.

Admission Requirements:

Requirements for admission into the Phlebotomy technician program are:
> attainment of 16 years of age or older;
> documentation of high school graduation or completion of GED required;
> achievement of program ready or provisional scores on the ASSET Placement Test; and
> completion of general admission requirements.

Occupational Curriculum	Credit Hours
AHS 101 Anatomy and Physiology	5
BUS 212 Anatomy and Terminology	5
PHL 103 Introduction to Venipuncture	4
PHL 105 Clincial Practice	8

Total Credit Hours Required for Graduation　　　　　　　　　　**22**

Continuing Education and Economic Development

CONTINUING EDUCATION

In addition to the regular diploma programs, Northwestern Technical Institute offers ongoing Continuing Education short-term classes and programs. Continuing Education courses are non-credit and are offered in three broad areas: fine arts, professional development, and personal enrichment.

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. Students may register for Continuing Education courses by phone, fax, mail, or walk-in procedures. Schedules listing courses are published quarterly and are available free upon request. For information on Continuing Education courses, contact the Continuing Education Office.

ECONOMIC DEVELOPMENT
PROGRAMS

EXISTING BUSINESS AND INDUSTRY
Northwestern Technical Institute's Economic Development Division can serve as the customized training resource to business and industry throughout the four county service area of Catoosa, Chattooga, Dade, and Walker Counties. With companies facing workforce challenges, remaining competitive requires constant worker training and retraining. All of a company's training needs- from assessment to performance management, from basic to high technology, from productivity enhancement to employee involvement - can be met through Northwestern Technical Institute. Training con be conducted either on campus or in the participating company's facilities.

QUICK START— TRAINING FOR NEW AND EXPANDING INDUSTRY
This program is administered through Northwestern technical Institute and is designed to provide direct assistance to new industry or industry expansion which requires addition of production personnel and equipment. The intent of Quick Start is to train for initial start-up of a new or expanding industry. This training may include semiskilled, skilled, technical, basic academic, and supervisory training to ensure success of trainees. Contact the Vice President for Economic Development for more information or to discuss specific industry training needs. Telephone 706-764-3591

EXPORT ASSISTANCE
Parterning with the Georgia Department of Industry, Trade, and Tourism, Northwestern serves as a site for the Georgia International Trade Data Network (GITDN), a powerful database that provides continually updated information to support the exporting efforts of Georgia's companies. Training in exporting will help Georgia's companies more successfully compete in the global marketplace.

RETRAINING TAX CREDIT

Northwestern Technical Institute is the Georgia Department of Technical and Adult Education unit that approves retraining programs of existing industry seeking State of Georgia income tax credits for the counties of Catoosa, Chattooga, Dade, 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 skills deficiencies would inhibit their utilization of new technology. New technology includes implementation of new equipment and or new operating systems such as workplace reengineering, total quality management, ISO 9000 standards, and employee involvement programs. Executive training, management development training, career development, and personal enrichment training are not included.

Course Descriptions

ACC 101 Principles of Accounting I
Prerequisite: Program ready status in math and reading　　　　**Credit Hours: 6**
Introduces the student to 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 for a personal service business and merchandising enterprise, business transactions, the rules of debit and credit, journalizing and posting transactions, general and subsidiary ledgers, financial statements, adjusting and closing entries, and accounting for cash. Laboratory work demonstrates theory presented in class. (Fall, Spring for Day Classes; Fall for Evening Classes)

ACC 102 Principles of Accounting II　　　　**Credit Hours: 6**
Prerequisite: Grade of "C" or better in ACC 101
Applies the basic principles of accounting to specific account classifications and subsidiary record accounting. Topics include receivable, inventory, plant assets, payroll, payable, and partnerships. Laboratory work demonstrates theory presented in class. (Winter, Summer for Day Classes; Winter for Evening Classes)

ACC 103 Principles of Accounting III　　　　**Credit Hours: 6**
Prerequisite: Grade of "C" or better in ACC 102
Emphasizes the fundamental understanding of corporate and cost accounting. Topics include accounting for a corporation, departmental accounting, job order/process cost accounting, and budgeting. Laboratory work demonstrates theory presented in class. (Fall, Spring for Day Classes; Spring for Evening Classes)

ACC 104 Computerized Accounting　　　　**Credit Hours: 3**
Prerequisites: ACC 102, SCT 100
Emphasizes operation of computerized accounting systems from manual input forms. Topics include setup and operation of equipment, general ledger, accounts receivable, accounts payable, advanced payroll, financial reports, and other topics such as inventory and depreciation for which software is available. Laboratory work includes theoretical and technical application. (Winter, Summer for Day Classes; Winterl for Evening Classes)

ACC 106 Accounting Spreadsheet Fundamentals　　　　**Credit Hours: 3**
Prerequisite: SCT 100
Provides instruction in the use of electronic spreadsheet software packages for program related spreadsheet applications. Students become proficient in creation, modification, and combination of spreadsheet. Topics include creation of spreadsheet; editing and deleting entries; introduction to macros; computations through the use of formula and/or logic functions; and program related spreadsheet applications. Laboratory work includes theoretical and technical application. (Fall,Spring for Day Classes; Spring for Evening Classes)

ACC 150 Cost Accounting　　　　**Credit Hours: 6**
Prerequisite: Grade of "C" or better in ACC 103
Emphasizes a thorugh 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. (Winter, Summer for Day Classes; Fall for Evening Classes)

ACC 152 Payroll Accounting　　　　**Credit Hours: 4**
Corequisite: ACC 102
Provides students with an understanding of the laws that affect a company's payroll structure and practical application skills in maintaining payroll records. Topics include payroll and personnel records, computing and paying wages and salaries, various taxes, and analyzing and journalizing payroll transactions. (Winter, Summer for Day Classes; Fall for Evening Classes)

ACC 156 Tax Accounting   **Credit Hours: 4**
Corequisite: ACC 102
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. (Fall, Spring for Day Classes; Spring for Evening Classes)

ACC 158 Managerial Accounting   **Credit Hours: 6**
Prerequisite: Grade of "C" or better in ACC 103
Emphasizes the interpretation of data used 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. (Winter, Summer for Day Classes; Summer for Evening Classes)

ACC 160 Advanced Accounting Spreadsheet Applications   **Credit Hours: 4**
Prerequisite: ACC 106
Provides students with laboratory based theoretical and technical advanced spreadsheet applications. Emphasis is placed on developing an understanding of scope and application of advanced spreadsheet software. Topics include advanced computational functions, advanced data management functions, advanced file management, advanced data manipulation, advanced spreadsheet printing options, advanced spreadsheet macros, advanced spreadsheet command language, advanced graph generation, and advanced accounting and financial applications. (Winter, Summer for Day Classes; Summer for Evening Classes)

ACT 100 Refrigeration Fundamentals   **Credit Hours: 4**
Introduces basic concepts and theories of refrigeration. Topics include the laws of thermodynamics, pressure and temperature relationships, heat transfer, the refrigeration cycle, and safety. (Fall for Day Classes; Fall, Alternating Years, for Evening Classes)

ACT 101 Principles and Practices of Refrigeration   **Credit Hours: 7**
Prerequisite/Corequisite: ACT 100
Introduces the use of refrigeration tools, materials, and procedures needed to install, repair, and service refrigeration systems. Topics include refrigeration tools, piping practices, service valves, leak testing, refrigerants, evacuation, charging, and safety. (Fall for Day Classes; Fall, Alternating Years, for Evening Classes)

ACT 102 Refrigeration Systems Components   **Credit Hours: 7**
Prerequisites/Corequisites: 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. (Fall for Day Classes; Winter, Alternating Years, for Evening Classes)

ACT 103 Electrical Fundamentals   **Credit Hours: 8**
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. (Winter for Day Classes; Spring, Alternating Years, for Evening Classes)

ACT 104 Electric Motors   **Credit Hours: 3**
Prerequisite/Corequisite: ACT 103
Continues the development of skills and knowledge necessary for application and service of electric motors commonly used by the refrigeration and air conditioning industry. Topics include diagnostic techniques, capacitors, installation procedures, types of electric motors, electric motor service, and safety. (Spring for Day Classes; Fall, Alternating Years, for Evening Classes)

ACT 105 Electrical Components   **Credit Hours: 5**
Prerequisites/Corequisites: ACT 103, ACT 104
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. (Winter for Day Classes; Spring, Alternating Years, for Evening Classes)

ACT 106 Electric Control Systems and Installation   **Credit Hours: 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. (Winter for Day Classes; Summer, Alternating Years, for Evening Classes)

ACT 107 Air Conditioning Principles   **Credit Hours: 6**
Prerequisites/Corequisites: ACT 102, ACT 106, MAT 101, and program admission
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, properties of air, psychometrics, duct design, air filtration, and safety principles. (Summer for Day Classes; Spring, Alternating Years, for Evening Classes)

ACT 108 Air Conditioning Systems and Installation   **Credit Hours: 3**
Prerequisite/Corequisite: ACT 107
Provides instruction on the installation and service of residential air conditioning systems. Topics include installation procedures, service, split-systems, add-on systems, packaged systems, and safety. (Summer for Day Classes; Spring, Alternating Years, for Evening Classes)

ACT 109 Troubleshooting Air Conditioning Systems   **Credit Hours: 7**
Prerequisites/Corequisites: ACT 108, ENG 111
Provides instruction on troubleshooting and repair of major components of a residential air conditioning system. Topics include troubleshooting techniques, electrical controls, air flow, refrigeration cycle, and safety. (Summer for Day Classes; Summer, Alternating Years, for Evening Classes)

ACT 110 Gas Heating Systems   **Credit Hours: 5**
Prerequisites: ACT 102, ACT 106, MAT 101
Introduces principles of combustion and service requirements for gas heating systems. Topics include service procedures, electrical controls, piping, gas valves, venting, code requirements, principles of combustion, and safety. (Spring for Day Classes; Fall, Alternating Years, for Evening Classes)

ACT 111 Electric Heating Systems   **Credit Hours: 3**
Prerequisite/Corequisite: ACT 110
Provides instruction on the operation, installation, and service of electric heating systems. Topics include servicing procedures, electrical controls, troubleshooting techniques, code requirements, and safety. (Spring for Day Classes; Winter, Alternating Years, for Evening Classes)

ACT 112 Heat Pumps   **Credit Hours: 3**
Prerequisites/Corequisites: ACT 110, ACT 111
Provides instruction on the principles, application, and operation of a residential heat pump system. Topics include installation procedures, servicing, electrical components, valves, and safety. (Summer for Day Classes; Summer, Alternating Years, for Evening Classes)

AHS 101 Anatomy and Physiology   **Credit Hours: 5**
Focuses on basic normal structure and function of the human body. Topics include an overview of each body system, how systems coordinate activities to maintain a balanced state, recognizing deviations from the normal. Medical terminology, including basic word structure and terms related to body structure and function, are taught as an integral part of the course. (Fall, Winter, Summer for Day Classes; Fall for Evening Classes)

AHS 102 Drug Calculation and Administration   **Credit Hours: 3**
Prerequisite: MAT 101
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. (Fall, Spring for Day Classes; Fall for Evening Classes)

AHS 103 Nutrition and Diet Therapy I   **Credit Hours: 2**
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, social aspects of diet, patient assessment, and diet planning and preparation. (Fall, Spring for Day Classes; Fall for Evening Classes)

AHS 109 Medical Terminology for Allied Health Science **Credit Hours: 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. (Fall, Spring for Day Classes Only)

AHS 150 Nutrition and Diet Therapy II   **Credit Hours: 3**
Prerequisites: AHS 103
A continuation of the nutritional needs of the individual begun in AHS 103. Topics include nutrients, food sources, the role nutrition plays in the maintenance of health for the individual, diet therapy, and the use of appropriate diets to treat certain pathologic conditions. (Fall, Spring for Day Classes; Fall for Evening Classes)

AMF 152 Manufacturing Organizational Principles   **Credit Hours: 2**
Provides students with an overview of the functional and structural composition of manufacturing organizations. Topics include: manufacturing/consumer connection, manufacturing operational types, structure of manufacturing organizations, manufacturing business principles, and types of manufacturing processes. (Quarterly for Day Classes)

AMF 154 Manufacturing Workforce Skills   **Credit Hours: 2**
Provides students with the knowledge and skills needed to succeed in the manufacturing environment. Topics include listening, working together, change management, stress management, decision making, and job interview skills to create a positive image. (Quarterly for Day Classes)

AMF 156 Manufacturing Production Requirements   **Credit Hours: 2**
Provides students with the knowledge and skills associated with quality and productivity in the manufacturing environment. Topics include world class manufacturing, tools for excellence, and statistical process control. (Quarterly for Day Classes)

AMF 158 Automated Manufacturing Skills   **Credit Hours: 4**
Provides students with an introduction into computerized process conrtrol and the operational requirements associated with automated machines in the manufacturing environment. Topics include basic mechanics, mechanical systems, hand tools, power tools, industrial controls, electrical safety, hydraulic systems, pneumatic systems, troubleshooting principles, and computers and automated principles. (Quarterly for Day Classes)

AMF 160 Representative Manufacturing Skills   **Credit Hours: 5**
Provides students with an introduction to representative manufacturing skills and associated safety requirements. Topics include plant safety, material movement, equipment, precision measurements for manufacturing, and blueprint reading. (Quarterly for Day Classes)

AHS 104 Introduction to Health Care   **Credit Hours 3**
Introduces a grouping of fundamental principles, practices, and issues common to many specializations in the health care profession. Topics include: basic life support,/CPR, basic emergency care/first aid, vital signs, infection control, and blood/air borne pathogens.

BIO 193 Anatomy and Physiology I   **Credit Hours: 5**
Introduces students to 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 function, tissue classifications, the integumentary system, the skeletal system, the muscular system, the repiratory system, the digestive system, and the urinary system. Laboratory experience supports classroom learning. Minimum grade of C required to advance to BIO 194, Anatomy and Physiology II. (Spring for Day Classes Only)

BIO 194 Anatomy and Physiology II   **Credit Hours: 5**
Prerequisite: BIO 193 with a grade of "C" or better
Continues the study of the anatomy and physiology of the human body. Topics include the reproductive system, the cardiovascular system, the blood and lymphatic systems, the nervous and sensory systems, the endocrine system, and the immune system. Laboratory experience supports classroom learning. (Summer for Day Classes Only)

BUS 101 Beginning Document Processing   **Credit Hours: 5**
Introduces the touch system of keyboarding placing emphasis on correct techniques, mastery of the keyboard, and simple business correspondence. Students attain a minimum typing speed of 25 words per minute with a maximum of three errors on a three-minute timed typewriting test. Topics include alphabetic and numeric symbols, simple formatting, keyboarding speed and accuracy, care of equipment, and proofreading. Laboratory practice parallels class instruction. Minimum grade of "C" to advance to BUS 102. (Quarterly for Day and Evening Classes)

BUS 102 Intermediate Document Processing   **Credit Hours: 5**
Prerequisite: BUS 101
Continues the development of keyboarding speed and accuracy with further mastery of correct typewriting techniques. Students attain a minimum typing speed of 40 words per minute with a maximum of five errors on a five-minute timed typewriting test. Topics include production of mailable letters, forms, reports, and tabulations from rough drafts and straight copy; development of keyboarding speed and accuracy; improvement of decision making and communication skills; care of equipment; and proofreading. Laboratory practice parallels class instruction. Minimum grade of "C" to advance to BUS 103. (Quarterly for Day and Evening Classes)

BUS 103 Advanced Document Processing   **Credit Hours: 5**
Prerequisites: BUS 102, ENG 111
Continues the development of increased keyboarding speed and accuracy with mastery of production of complex documents. Students attain a minimum typing speed of 50 words per minute with a maximum of five errors on a five-minute timed typewriting test. Topics include development of keyboarding speed and accuracy; proficient production of complex letters, forms, reports, and tabulations from rough drafts and straight copy; advanced applications of proofreading, decision making, and communication skills; and equipment care. Laboratory practice parallels class instruction. (Quarterly for Day and Evening Classes)

BUS 106 Office Procedures   **Credit Hours: 4**
Prerequisites: BUS 101
Emphasizes essential skills required for the typical business office. Topics include office protocol, prioritizing, time management, telephone techniques, office equipment, mail services, reference materials, filing, correspondence, and travel and meeting arrangements. (Fall, Winter, Spring for Day Classes; Spring for Evening Classes)

BUS 107 Machine Transcription   **Credit Hours: 3**
Prerequisites: BUS 102, CIS 102, ENG 111
Emphasizes transcribing mailable documents from recordings using a word processor. Topics include proper maintenance and usage of equipment and supplies, work area management, transcription techniques, proper formats, speed and accuracy, proofreading, grammar, spelling, and punctuation. (Quarterly for Day ; Fall and Spring for Evening Classes)

BUS 108 Word Processing   **Credit Hours: 5**
Prerequisites: BUS 101
Emphasizes an intensive use of word processing equipment to create and revise mailable documents or reports from rough draft copy and straight copy. Topics include proper maintenance and usage of equipment and supplies, work area management, competency in one or more software packages, and productivity. Minimum grade of "C" required to advance to BUS 201. (Quarterly for Day Classes; Winter, Summer for Evening Classes)

BUS 109 Applied Office Procedures   **Credit Hours: 3**
Prerequisites: BUS 102, BUS 108
Applied Office Procedures serves as a capstone course which provides students with the opportunity to apply skills acquired in other coursework. Topics include application of word/information processing skills, communication skills, telecommunication skills, and records management skills, public relation skills, use of office equipment, and office equipment/supplies procurement. (Fall, Spring for Day Classes; Winter for Evening Classes)

BUS 151 Introduction to Business   **Credit Hours: 5**
Introduces organization and management concepts of the business world. Topics include business organization, enterprise management, marketing management, and financial management. (Fall, Spring for Day Classes; Winter for Evening Classes))

BUS 160 Electronic Communications   **Credit Hours: 3**
Prerequisite: SCT 100
Electronic Communications serves as a capstone course which provides students with the opportunity to acquire skills using electronic communications. Topics include application of electronic mail, the internet, world wide web, gopher services, and graphic presentation software. (Fall, Spring for Day Classes; Winter for Evening Classes)

BUS 161 Desktop Publishing I   **Credit Hours: 5**
Prerequisites: BUS 101, SCT 100
Emphasizes intensive use of desktop publishing software to create publications such as letterheads, resumes, fliers, brochures, reports, newsletters, and business cards. Topics include desktop publishing concepts, operation of DTP software, electronics page layout, basic graphic design, and practical applications. (Winter, Summer for Day Classes; Fall, Spring for Evening Classes)

BUS 162 Desktop Publishing II   **Credit Hours: 5**
Prerequisites: BUS 101, CIS 102
Provides instruction in the use of presentation graphics software to create effective professional presentations and publications. Topics include planning, creating, and enhancing presentations, advanced layout and graphic design, enhancing charts, working with embedded and linked objects and hyperlinks, and using slide show features. (Fall, Spring for Day Classes; Winter for Evening Classes)

BUS 201 Advanced Word Processing   **Credit Hours: 3**
Prerequisites: BUS 108 with a grade of "C"
Provides instruction in advanced word processing and desk top publishing concepts and techniques. Topics include proper maintenance and usage of equipment and supplies, work area management, advanced word processing concepts, and production of business correspondence and documents. (Quarterly for Day Classes; Spring for Evening Classes)

BUS 204 Half-Time Business Office Specialist Internship   **Credit Hours: 6**
Prerequisite: Must be in last quarter of program. Students may take last quarter course work and internship concurrently with permission of the Department Head.
Provides students 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 and Office Technology program faculty and/or persons designated to coordinate work experience arrangements. (Quarterly for Day and Evening Classes)

BUS 205 Half-Time Medical Office Specialist Internship   **Credit Hours: 6**
Prerequisite: Must be in last quarter of program. Students may take last quarter course work and internship concurrently with permission of the Department Head.
Provides the student work experience in a 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 and Office technology program faculty and/or persons designated to coordinate work experience arrangements. (Quarterly for Day and Evening Classes)

BUS 206 Half-Time Legal Office Specialist Internship   **Credit Hours: 6**
Prerequisite: Must be in last quarter of program. Students may take last quarter course work and internship concurrently with permission of the Department Head.
Provides the student work experience in a legal 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 and Office technology program faculty and/or persons designated to coordinate work experience arrangements. (Quarterly for Day and Evening Classes)

BUS 208 Office Accounting   **Credit Hours: 4**
Introduces fundamental concepts of acounting. Topics include the accounting equation; debits, credits, and journalizing; posting and payroll. Both manual and computerized concepts are taught. (Winter, Summer for Day Classes; Fall, Spring for Evening Classes)

BUS 211 Medical Terminology   **Credit Hours: 4**
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 medical prefixes, roots, suffixes, word elements, spelling, pronunciation, and meaning. (Winter, Summer for Day Classes; Fall for Evening Classes)

BUS 212 Anatomy and Terminology   **Credit Hours: 5**
Prerequisite: BUS 211
Introduces the structures and functions of the human body including medical terminology. Topics include spelling; pronunciation; medical terminology; definitions and anatomical terms; and location, identification, and functions of body parts and systems. (Quarterly for Day and Evening Classes)

BUS 213 Medical Document Processing/Transcription   **Credit Hours: 5**
Prerequisites: BUS 212
Provides experience in medical transcription working with the most frequently used medical reports. Topics include proper maintenance and usage of equipment and supplies, work area management, pronunciation, spelling, definitions, typing speed and accuracy, punctuation, and using reference books. (Quarterly for Day Classes; Fall and Spring for Evening Classes)

BUS 215 Medical Office Specialist Internship   **Credit Hours: 12**
Prerequisites: Successful completion of all required coursework.
Provides student work experience in an off-campus medical environment. Topics include applying classroom knowledge and skills, working cooperatively with co-workers and management, and listening and following directions. Students will be under the supervision of the Business and Office Technology program faculty and/or persons designated to coordinate work experience arrangements. (Quarterly for Day and Evening Classes)

BUS 216 Medical Office Procedures   **Credit Hours: 3**
Prerequisites: BUS 102, 212
Emphasizes essential skills required for the medical office. Topics include medical law and ethics, patient relations, scheduling appointments, medical records management, pegboard accounting, health insurance, and billing/collection. (Fall, Spring for Day Classes; Winter for Evening Classes)

BUS 217 Legal Procedures I   Credit Hours: 7
Prerequisites: ENG 111, BUS 102
Introduces office procedures practiced by the legal secretary. Topics include legal terminology, preparing legal documents and correspondence, transcription, ethics, and performing under pressure. Specific topics covered include general office duties, the courts and court documents, litigation, wills, probate, real estate, corporations, and non court documents. Minimum grade of "C" required to advance to BUS 218. (Winter for Day Classes)

BUS 218 Legal Procedures II   Credit Hours: 7
Prerequisite: ENG 112, BUS 217 with a minimum grade of "C".
A continuation of office procedures practiced by the legal secretary. Topics include legal terminology, transcription, preparing legal documents and correspondence, maintaining client and financial records, ethics, and performing under pressure. Specific topics covered include legal office procedures, the courts and court documents, litigation, wills, probate, real estate, corporations, and non court documents.
(Spring for Day Classes)

BUS 219 Legal Office Specialist Internship   Credit Hours: 12
Prerequisite: Successful completion of all required coursework.
Provides students work experience in an off-campus legal environment. Topics include applying classroom knowledge and skills, working cooperatively with co-workers and management, and listening and following directions. Students will be under the supervision of the Business and Office Technology program faculty and/or persons designated to coordinate work experience arrangements. (Quarterly for Day Classes)

BUS 224 Business Office Specialist Internship   Credit Hours: 12
Provides students work experience in an off-campus office environment. Topics include applying classroom knowledge and skills, working cooperatively with co-workers and management, listening and following directions. Students will be under the supervision of the Office technology program faculty and/or persons designated to coordinate work experience arrangements (Quarterly for Day and Evening Classes)

BUS 225 Office Simulation   Credit Hours: 8
Prerequisite: Successful completion of all course work in a Business and Office Technology specialization area.
Provides realistic patterns of office activities in a simulated office environment. Topics include integrating, developing, and applying a wide range of occupational knowledge and skills; cooperatively interacting with co-workers; and listening and following directions. (Quarterly for Day and Evening Classes)

CIS 103 Operating Systems Concepts   Credit Hours: 5
Prerequisite/Corequisite: SCT 100
Provides an overview of operating systems functions and commands that are necessary in a micro/mainframe computer working environment. Topics include multiprogramming, multi-user systems, resource management, task command/control languages, and operating system utilization. (Winter, Summer for Day Classes; Spring for Evening Classes)

CIS 105 Program Design and Development   Credit Hours: 5
Prerequisite/Corequisite: CIS 106
Provides an emphasis on business problem identification and solution through systems of computer programs using such tools as structure charts, flowcharts, and pseudocode. Topics include problem solving process, fundamentals of structured programming, program development building blocks, fundamentals of file and report structure, and business application structure. (Fall, Spring for Day Classes; Winter for Evening Classes)

CIS 106 Computer Concepts   **Credit Hours: 5**
Prerequisite/Corequisite: SCT 100
Provides an overview of computers and information processing. Topics include computer history and terminology, data representation, data storage concepts, fundamentals of information processing, fundamentals of hardware operation, fundamentals of communications and networking, structured programming concepts, program development methodology, system development methodology, and computer number systems. (Fall, Spring for Day Classes; Summer for Evening Classes)

CIS 112 Systems Analysis and Design   **Credit Hours: 4**
Prerequisite: CIS 105, Programming Language Preferred
Provides a review and application of systems life cycle development methodologies implemented by project teams. Topics include role of systems analysis and design, preliminary investigation, systems analysis phase, systems design phase, systems development phase, implementation and evaluation, and post-implementation systems operation. (Fall, Spring for Day Classes; Winter for Evening Classes)

CIS 113 Cobol I   **Credit Hours: 7**
Prerequisite/Corequisite: CIS 105 preferred
Provides a study of the COBOL programming language to solve business applications. Topics include divisions, arithmetic operations, sequence verbs, conditional control, editing input, and single level control breaks. (Fall, Spring for Day Classes; Spring for Evening Classes)

CIS 114 Cobol II   **Credit Hours: 7**
Prerequisite: CIS 113 with a minimum grade of "C" or better
Reinforces and extends the concepts and applications provided in COBOL I. Topics include multilevel control breaks, elementary table processing , debugging techniques, elementary sorting, and sequential file processing. (Winter, Summer for Day Classes; Summer for Evening Classes)

CIS 122 Microcomputer Installation and Maintenance   **Credit Hours: 7**
Prerequisite: SCT 100, CIS 103
Provides an introduction to the fundamentals of installing and maintaining microcomputers. Topics include identifying components and their functions, safety, installation procedures, troubleshooting techniques, and preventive maintenance. (Spring, Fall for Day Classes; Summer for Evening Classes)

CIS 124 Microcomputer Database Programming   **Credit Hours: 7**
Prerequisite/Corequisite: CIS 105, CIS 128 Recommended
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. (Winter, Summer for Day Classes; Fall for Evening Classes)

CIS 127 Word Processing and Desktop Publishing Techniques   **Credit Hours: 7**
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. (Fall, Spring for Day Classes; Winter for Evening Classes)

CIS 128 Spreadsheet and Database techniques   **Credit Hours: 7**
Prerequisite: SCT 100
Provides a study of spreadsheets and databases. Topics include spreadsheet fundamentals. advanced spreadsheet concepts, development of macros, database management fundamentals, and advanced database management concepts.
(Winter, Summer for Day Classes; Spring for Evening Classes)

CIS 140 Networking Concepts   **Credit Hours: 5**
Prerequisite: SCT 100
Introduces the fundamental concepts involved in selecting and installing a local area network. Topics include: introduction to LANs, networking components, LAN standards, network operating systems (NOS), data communications, and client-server concepts. (Quarterly for Day and Evening Classes)

CIS 142 Multiple Networks and WANS   **Credit Hours 7**
Prerequisites: CIS 140, CIS 258
Provides a study of heterogeneous networks with an emphasis opn Wide Area Network components and the linking of networks with disparate operating system software and/or hardware. Topics include networks, protocols, multiple protocol networks, bridges, routers, and integration of disparate networks. Prepares students for Microsoft Networking Essentials Exam. (Winter, Summer for Day Classes; Winter for Evening Classes)

CIS 143 NetWare Administration   **Credit Hours 7**
Prerequisite: CIS 140
Provides a study of NOVELL NetWare Administration. Topics include NetWare file system, NetWare integrity and security, NetWare system and user account automation, NetWare file server, NetWare workstation, NetWare printing, NetWare communications, and NetWare software installation. (Fall, Spring for Day Classes; Winter for Evening Classes)

CIS 144 NetWare Installation and Configuration   **Credit Hours 7**
Prerequisite: CIS 143
Provides a study of planning, designing, and implementing a NOVELL NetWare network. Topics include, network design, network planning, network implementation, installation of cableing and components, hardware installation, server and client NOS installation, and installation of application software. (Fall, Spring for Day Classes; Summer for Evening Classes)

CIS 145 NetWare Network Doagnostics and Troubleshooting
Credit Hours 7
Prerequisites: CIS 143, CIS 144
Provides a study in NetWare network diagnostics and troubleshoting. Topics include NetWare analysis methodology, troubleshooting the network, file server troubleshooting and analysis, troubleshooting the DOS workstation, troubleshooting network printing, protocol analysis, cable troubleshooting, network organization and disaster recovery, and research tools. (Winter, Summer for Day Classes; Summer for Evening Classes)

CIS 146 Microsoft NT Administration   **Credit Hours 7**
Prerequisite: CIS 140
Provides a study of Microsoft NT administration. Topics include: NT file system, NT integrity and security, NT system and user account automation, NT domains, NT trust relationships, NT directory replication, NT systems optimization, NT clients, NT printing, NT communications, and network software installation. (Fall, Spring for Day Classes; Spring for Evening Classes)

CIS 147 Microsoft NT Installation and Configuration Credit Hours 7
Prerequisite: CIS 146
Provides a study of planning, designing, and implementing a Microsoft NT network. Topics include network design, network planning, network implementation, installation of cabling and components, hardware installation, server and client NOS installation, and installation of applciation software. (Winter, Summer for Day Classes; Summer for Evening Classes)

CIS 148 Microsoft NT Diagnostics and Troubleshooting   Credit Hours 7
Prerequisites: CIS 146, CIS 147
Provides a study in Microsoft NT network diagnostics and troubleshooting. Topics include analysis methodology, troubleshooting the network, NT server troubleshooting and analysis, workstation troubleshooting, troubleshooting network printing, protocol analysis, cable troubleshooting, network organization and disaster recovery, and research tools. (Winter, Summer for Day Classes; Summer for Evening Classes)

CIS 149 Windows Programming in C++   Credit Hours 7
Prerequisite: CIS 105
Introduces object oriented programming. Common elements of Windows applications will be discussed and created using a C++ integrated development environment. Topics include object priented programming, Windows applications, user interface design, capturing and validating input, event-driven programming design, conditional processing, and incorporating graphics. (Winter, Summer for Day Classes)

CIS 155 Working With Microsoft Windows Software   Credit Hours 3
Provides the interface concepts of Microsoft Windows software and the opportunity to develop software application skill 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. (Winter, Summer for Day Classes; Spring for Evening Classes)

CIS 156 Introduction to the Internet and Wide Area Networks   Credit Hours 5
Prerequisite: SCT 100
Introduces the internet, a worldwide computer network that links colleges, businesses, and government agencies. Provides an excellent opportunity to understand, investigate, and explore the Internet and related wide area networks. The student will learn how to connect a PC to the internet as well as how to use communication software to access the many resources available on the network. Topics include: network fundamentals, Internet concepts, electronic mail, file transfer protocol, Telnet, Internet gophers, and information services. (Winter, Summer for Day Classes; Winter for Evening Classes)

CIS 157 Introduction to Windows Programming Using Microsoft Visual Basic Credit Hours 7
Corequisite: CIS 105 Recommended
Introduces Microsoft Windows event-driven programming. Along with the 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. (Fall, Spring for Day CLasses; Fall for Evening Classes)

CIS 214   Database Management   **Credit Hours 6**
Prerequisite: Programming Language Course
Provides an overview of the skills and knowledge of database application systems used in
business, government, and industry. Topics include models, structures, physical database,
logical database, and accessing techniques. (Winter, Summer for Day Classes; Spring for
Evening Clases)

CIS 221   Advanced Microsoft Word   **Credit Hours 5**
Prerequisite: CIS 127
Provides the fundamental, intermediate and advanced Microsoft Word competencies to pro-
vide the user with the skills necessary to obtain the expert user certification. Topics include
workgroup editing, and advanced features such as macros, mailmerge, HTML creation, and
tables.(Summer, Winter for Day Classes; Fall for Evening Classes)

CIS 222   Advanced Microsoft Excel   **Credit Hours 5**
Prerequisite: CIS 128
Provides the fundamental, intermediate, and advanced Microsoft Excel competencies to pro-
vide the user with the skills necessary to obtain the expert user certification. Topics include
spreadsheet creation, financial statements, forecast, amortization schedules, workgroup ed-
iting and advanced features such as macros, using charts, importing and exporting data,
HTML creation, formulas, WEB queries, built-in functionality, templates, and trends and rela-
tionships. (Fall and Spring for Day Classes; Winter for Evening Classes)

CIS 223   Advanced Microsoft Access   **Credit Hours 5**
Prerequisite: CIS 128
Provides the fundamental, intermediate, and advanced Microsift Access competencies to pro-
vide the user with the skills necessary to obtain the expert user certification. Topics include
creating and modifying a database, locating information, macro and module creation and
advanced features such as advanced queries, forms, advanced reports, sub-form creation,
HTML creation, data integrity, and integration with othewr applications. Fall and Spring for
Day Classes; Summer for Evening Classes)

CIS 224   Advanced Microsoft PowerPoint   **Credit Hours 5**
Prerequisite: CIS 127
Provides the fundamental, intermediate, and advanced Microsoft PowerPoint competencies
to provide the user with the skills necessary to obtain experet user certification. Topics in-
clude presentation creation, presentation views, slide shows, templates, animation, HTML
creation, navigation, and presentation transition. (Summer and Winter for Day Classes; Spring
for Evening Classes)

CIS 226   Microsoft FrontPage   **Credit Hours 5**
Prerequisite: SCT 100
Provides the fundamental, intermediate, and advanced Microsoft FrontPage competencies to
provide the user with the skills necessary to obtain the expert user certification. Topics in-
clude web page creation, editing, managing, and publishing tables, frames, forms, graphics,
and web site management. (Summer, Winter for Day Classes; Spring for Evening Classes)

CIS 245   Implementing and Supporting Windows 95   **Credit Hours 7**
Prerequisite: CIS 240
Provides a study of implementing, administering, troubleshooting, and providing technical
support to users of Windows 95. Topics include planning, installation and configuration, con-
figuring and managing, resource access, integration and interoperability, monitoring and op-
timization, and troubleshooting. (Winter, Summer for Day Classes; Spring for Evening Classes)

CIS 250   RPG Programming   Credit Hours: 7
Prerequisite/Corequisite: 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. (Winter, Summer for Day Classes; Summer for Evening Classes)

CIS 251 Advanced RPG Programming   Credit Hours: 7
Prerequisite: CIS 250 with a minimum grade of "C" or better
Provides an emphasis on designing and writing programs using the RPG programming language. Topics include table and array processing, data validation, data structures, interprogram communcation, random file access methods, file updating, and interactive processing. (Fall, Spring for Day Classes; Fall for Evening Classes)

CIS 253 BASIC Programming I   Credit Hours: 7
Prerequisite: CIS 105
Provides a study of the BASIC programming language on a microcomputer to solve business applications. Topics include programming from stated problems using BASIC language, array processing/sorting, string manipulation, and interactive processing. (Fall, Spring for Day Classes; Winter for Evening Classes)

CIS 242 TCP/IP on Microspft Windows   Credit Hours: 7
Prerequisites: CIS 142, CIS 146, CIS 148
Provides students with the knowledge and skills required to set-up, configure, use, and supporTransmission Protocol/Internet Protocol (TCP/IP) on Microsoft Windows NT. Topics include planning a TCP/IP network, installing and configuring TCP/IP, using DHCP manage,r, Windows name resolution techniques, subnetting and supernetting, and DNS name resolution

CIS 258 Introduction to Data Communication   Credit Hours 4
Prerequisite: SCT 100
Provides an introduction to data communication and networks. Topics include data formats, data trransmission techniques, protocol and networks, codes and terminals, modem control, basic network concepts, and methods and standards. (Spring, Fall for Day Classes; Summer for Evening Classes)

SCT 100 Introduction To Microcomputers   Credit Hours: 3
Introduces 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, intoduction to word processing, introduction to spreadsheets, and introduction to databases.   (Quarterly for Day and Evening Classes)

COS 100 Introduction to Cosmetology Theory   Credit Hours: 5
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; hygiene and grooming; personality development and professional ethics; sterilization, sanitation, and bacteriology; chemistry fundamentals, safety; anatomy and physiology; and Hazardous Duty Standards Act compliance. (Fall, Spring for Day Classes; Quarterly for Evening Classes)

COS 101 Introduction to Permanent Waving and Relaxing   **Credit Hours: 2**
Prerequisite/Corequisite: COS 100
Introduces the chemistry and chemical reactions of permanent wave solutions and relaxers.
Topics include permanent wave techniques, safety procedures, chemical relaxer techniques,
and permanent wave and chemical relaxer application procedures on mannequins. (Fall,
Spring for Day Classes; Quarterly for Evening Classes)

COS 102 Introduction to Hair Color   **Credit Hours: 4**
Prerequisite/Corequisite: COS 100
Introduces the fundamental theory of color, predisposition tests, color selection, and color
application. Topics include basic color concepts, skin reactions, the color wheel, and color
selection and application. (Fall, Spring for Day Classes; Quarterly for Evening Classes)

COS 103 Introduction to Skin, Scalp, and Hair   **Credit Hours: 2**
Prerequisite: COS 100
Introduces the theory, procedures, and products used in the care and treatment of the skin,
scalp, and hair. Topics include treatment theory, basic corrective hair and scalp treatments,
plain facials, products and supplies, and diseases and disorders. (Fall, Spring for Day Classes;
Quarterly for Evening Classes)

COS 104 Introduction to Manicuring and Pedicuring   **Credit Hours: 1**
Prerequisite: COS 100
Introduces the theory, procedures, and products used in the care of nails and cuticles. Topics
include treatment theory, hand and foot anatomy, nail care implements, nail care supplies,
plain manicure, and cuticle care. (Fall, Spring for Day Classes; Quarterly for Evening Classes)

COS 105 Introduction to Shampooing and Styling   **Credit Hours: 3**
Prerequisite: COS 100
Introduces the fundamental theory and skills required to shampoo and create shapings, pincurls,
fingerwaves, roller placement, and combouts. 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, pincurls, roller place-
ment, fingerwaves, combout techniques, skipwaves, ridgecurls, and safety precautions. (Fall,
Spring for Day Classes; Quarterly for Evening Classes)

COS 106 Introduction to Hair Cutting   **Credit Hours: 2**
Prerequisite/Corequisite: COS 100
Introduces the theory and skills necessary to apply haircutting techniques. Safe use of hair-
cutting implements will be stressed. Topics include haircutting terminology, safety and sanita-
tion, cutting implements, and haircutting techniques. (Fall, Spring for Day Classes; Quarterly
for Evening Classes)

COS 107 Haircutting Techniques   **Credit Hours: 2**
Prerequisite: COS 106
Continues the theory and application of haircutting techniques. Topics include client consul-
tation, head and body analysis, hair analysis, and haircutting techniques. Students will prac-
tice haircutting techniques in the laboratory setting. (Winter, Summer for Day Classes; Quar-
terly for Evening Classes)

COS 108 Permanent Waving and Relaxing   **Credit Hours: 3**
Prerequisite: COS 101
Presents precautions and difficulties involved in applying permanent waves and relaxers.
Application of permanent waves and relaxers on live models is included. Topics include timed
permanent wave, timed relaxer application, safety precautions, and Hazardous Duty Stan-
dards Act compliance. (Winter, Summer for Day Classes; Quarterly for Evening Classes)

COS 109 Hair Color   **Credit Hours: 2**
Prerequisite: COS 102
Presents the application of temporary, semi-permanent, and permanent hair coloring products. Topics include lash and brow tints, coloring products, safety precautions and tests, mixing procedures, and color selection and application. (Winter, Summer for Day Classes; Quarterly for Evening Classes)

COS 110 Skin, Scalp, and Hair   **Credit Hours: 2**
Prerequisite: COS 103
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, and safety precautions. (Winter, Summer for Day Classes; Quarterly for Evening Classes)

COS 111 Styling   **Credit Hours: 3**
Prerequisite: COS 105
Continues the theory and application of hairstyling and introduces thermal techniques. Topics include blow dry styling, thermal curling, thermal pressing, thermal waving, braiding, safety, and cleaning and styling wigs and hairpieces. (Winter, Summer for Day Classes; Quarterly for Evening Classes)

COS 112 Manicuring and Pedicuring   **Credit Hours: 1**
Prerequisite: COS 104
Provides manicuring and pedicuring experience on live models. Topics include implements, products and supplies, diseases and disorders, manicure techniques, and plain pedicure. (Winter, Summer for Day Classes; Quarterly for Evening Classes)

COS 113 Practicum I   **Credit Hours: 4**
Prerequisites: COS 107, COS 108, COS 109, COS 110, COS 111, COS 112
Prerequisites/Corequisites: ENG 111, MAT 101, PSY 100
Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is prescribed by the Georgia State Board of Cosmetology. This course includes a portion of the hours required for licensure. Topics include permanent waving and relaxers; hair color and bleaching; skin, scalp, and hair; haircutting; styling; dispensary; manicure/pedicure; reception; safety precautions; and Hazardous Duty Standards Act compliance. (Fall, Spring for Day Classes; Quarterly for Evening Classes)

COS 114 Practicum II   **Credit Hours: 5**
Prerequisite/Corequisite: COS 113
Provides laboratory experiences necessary for the development of skill levels required to be a competent cosmetologist. The allocation of time to the various phases of cosmetology is prescribed by the Georgia State Board of Cosmetology. This course includes a portion of the hours required for licensure. Topics include permanent waving and relaxers; hair color and bleaching; skin, scalp, and hair; haircutting; styling; dispensary; manicure/pedicure; reception; safety precautions; and Hazardous Duty Standards Act compliance. (Fall, Spring for Day Classes; Quarterly for Evening Classes)

COS 115 Practicum/Internship I   **Credit Hours: 4**
Prerequisites: COS 113, COS 114
Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The requirements for this course may be met in a laboratory setting or in a combination of a laboratory setting and an approved internship facility. Topics include perma-

nent waving and relaxers; hair color and bleaching; skin, scalp, and hair; haircutting; styling; dispensary; manicure/pedicure; reception; safety precautions; and Hazardous Duty Standards Act compliance. (Winter, Summer for Day Classes; Quarterly for Evening Classes)

COS 116 Practicum/Internship II   **Credit Hours: 5**
Prerequisites: COS 113, COS 114, COS 115
Provides experience necessary for professional development and completion of requirements for state licensure. Emphasis will be placed on the display of professional conduct and positive attitudes. The requirements for this course may be met in a laboratory setting or in a combination of a laboratory setting and an approved internship facility. Topics include permanent waving and relaxers; hair color and bleaching; skin, scalp, and hair; haircutting; styling; dispensary; manicure/pedicure; reception; safety precautions; Hazardous Duty Standards Act compliance; and state licensure preparation. (Winter, Summer for Day Classes; Quarterly for Evening Classes)

COS 117 Salon/Shop Management   **Credit Hours: 4**
Prerequisites: COS 100, Program admission
Emphasizes the steps involved in opening and operating a privately owned cosmetology salon. Topics include planning a salon/shop, business management, retailing, public relations, sales skills, and client retention. (Winter, Summer for Day Classes; Quarterly for Evening Classes)

DDF 100 Introduction to CAD   **Credit Hours: 5**
This course introduces fundamental concepts and operations necessary to utilize microcomputers. Emphasis is placed on basic concepts, terminology, and techniques necessary for CAD applications. (Quarterly for Day and Evening Classes)

DDF 101 Introduction to Drafting   **Credit Hours: 6**
Emphasizes the development of fundamental drafting techniques. Topics include terminology, drafting equipment care and use, lettering, line relationships, and geometric construction. (Quarterly for Day and Evening Classes)

DDF 102 Size and Shape Description I   **Credit Hours: 5**
Prerequisites/Corequisites: DDF 101, MAT 103
Provides multiview and dimensioning techniques necessary to develop views that completely describe machine parts for manufacture. Topics include multiview drawing and sketching in pencil and/or ink, precision measurement, tolerances and fits, and basic dimensioning procedures and practices. (Quarterly for Day and Evening Classes)

DDF 103 Size and Shape Description II   **Credit Hours: 5**
Prerequisites/Corequisites: DDF 101, DDF 102
Continues dimensioning skill development and introduces sectional views. Topics include advanced dimensioning practices and development of section views in pencil and/or ink. (Quarterly for Day and Evening Classes)

DDF 105 Auxiliary Views   **Credit Hours: 3**
Prerequisites/Corequisites: DDF 103, MAT 104
Introduces techniques necessary for auxiliary view drawings. Topics include primary and secondary auxiliary views in pencil and/or ink. (Quarterly for Day and Evening Classes)

DDF 106 Fasteners   **Credit Hours: 3**
Prerequisite/Corequisite: DDF 105
Provides knowledge and skills necessary to draw and specify fasteners. Topics include types, representations, and specification of threads; drawing of fasteners; use of technical reference sources; and use of welding symbols. (Quarterly for Day and Evening Classes)

DDF 107 Introduction to CAD   **Credit Hours: 5**
Prerequisites/Corequisites: SCT 100 or CIS 102, DDF 103, MAT 104
Introduces basic concepts, terminology, and techniques necessary for CAD applications. Topics include terminology, CAD commands, basic entities, and basic drafting applications. (Quarterly for Day and Evening Classes)

DDF 108 Intersections and Development   **Credit Hours: 5**
Prerequisites/Corequisites: 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 intersections of line, planes, prisms, pyramids, curved surfaces, and cylinders and cones. (Quarterly for Day and Evening Classes)

DDF 109 - Assembly Drawings I   **Credit Hours: 5**
Prerequisites/Corequisites: DDF 104, DDF 107
Provides knowledge and skills necessary to make working drawings. Topics include technical reference source use, detail drawings, orthographic assembly drawings, and pictorial assembly drawings executed using drafting board and/or CAD equipment. (Quarterly for Day and Evening Classes)

DDF 111 Intermediate CAD   **Credit Hours: 6**
Prerequisites: DDF 107, MAT 104
Continues developing CAD utilization skills in discipline-specific applications. Topics include: intermediate CAD commands, entity mManagement, advanced line construction, block construction and management, command reference customization, advanced entity manipulation, and system variables. (Quarterly for Day and Evening Classes)

DDF 112 3-D Drawing and Modeling   **Credit Hours: 6**
Prerequisites DDF 111
Continues developing CAD utilization skills in discipline-specific applications. Topics include: advanced CAD commands, CAD applications, macro applications, macro utilization, application utilization, 3-D modeling, rendering, advanced application utilization, and pictorial drawings. (Quarterly for Day and Evening Classes)

DDS 201 Strength of Materials   **Credit Hours: 5**
Prerequisites: ENG 111, MAT 104
Provides a non-calculus based overview of the behavior of materials when subjected to different loadings and restraints and the prediction of materials behavior in different situations. Topics include stress, strain, tension, moments of inertia, and beam bending. (Winter, Summer for Day and Evening Classes)

DDS 203 Surveying I   **Credit Hours: 3**
Prerequisites: DDF 107, MAT 104
Introduces fundamental plane surveying concepts, instruments, and techniques. Topics include linear measurement; angles, bearings, and directions; and use of instruments such as transits, theodolites, levels, and electronic distance meters. (Quarterly for Day and Evening Classes)

DDS 205 Residential Architectural Drawing I   **Credit Hours: 6**
Prerequisites: DDF 110, DDS 201, ENG 111, MAT 104
Introduces architectural drawing skills necessary to produce a complete set of construction drawings given floor plan information. Topics include floor, footing, and foundation plans; interior and exterior elevations; sections and details; window, door, and finish schedules; site plans; and specifications. (Quarterly for Day and Evening Classes)

DDS 208 Residential Architectural Drawing II   Credit Hours: 6
Prerequisite/Corequisite: 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 sched-
ules; site plans; specifications; and mechanical and electrical systems. (Quarterly for Day
and Evening Classes)

DDS 209 Structural Steel Detailing   Credit Hours: 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 re-
action; framed connections; seated connections; and columns, base plates, and splices.
(Quarterly for Day and Evening Classes)

DDS 225 Principles of Metallurgy   Credit Hours: 4
Prerequisites: ENG 111, MAT 104
Introduces the fundamental physical properties of metals. Topics include materials
properties and limitations, materials processing techniques, treating materials, testing
materials, and microstructural characteristics. (Quarterly for Day and Evening Classes)

DDS 226 Manufacturing Processes   Credit Hours: 4
Prerequisites/Corequisites: ENG 111, MAT 104
Introduces basic industrial manufacturing processes. Topics include measuring processes;
gauging and inspecting processes; hot processes such as welding, forging, and forming; cold
processes such as cutting, forming, and rolling; and finishing processes. (Fall, Spring for Day
and Evening Classes)

DDS 229 Gears and Cams   Credit Hours: 6
Prerequisites: DDS 201, DDS 226, MAT 104
Emphasizes calculation, specification development, and drawing of gear and cam systems to pro-
duce desired results. Topics include reference utilization, solution for two unknowns, standard gear
applications, standard cam applications, and gear ratios. (Quarterly for Day and Evening Classes)

DDS 230 Mechanisms I   Credit Hours: 7
Prerequisite/Corequisite: DDS 229
Emphasizes familiarization with and utilization of common linkage types. Students apply link-
age concepts to specific problems. Topics include direct linkages, multi-linkages, standardized
gear boxes, and fundamental robotic concepts. (Quarterly for Day and Evening Classes)

DDS 232 Mechanical Power Transmissions   Credit Hours: 6
Prerequisite/Corequisite: 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. (Quarterly for Day and Evening Classes)

DMM 161 Just-In-Time   Credit Hours: 3
In this course, students will learn how to understand the implications of total quality manage-
ment in a JIT environment; implement shop floor control systems; use cycle time, kanban,
demand-pull, order-push, and other concepts; structure operations to support and reap the
benefits of JIT; design systems that involve employees, set up a synchronous operations
flow; build supplier relations for JIT; and affect and sustain the cultural change needed for JIT.
(Annually for Evening Classes)

DMM 162 Production Activity Control   **Credit Hours: 3**
In this course, students will learn how to relate production activity control to the other elements of manufacturing planning and control; calculate capacity and balance load with capacity; level load and material; perform operations scheduling and project scheduling; identify and manage the factors that affect actual lead times; schedule and control outside suppliers; collect and mange data to analyze production; measure shop performance at various job shops and flow production. (Annually for Evening Classes)

DMM 163 Material And Capacity Requirements Planning   **Credit Hours: 3**
This course teaches students how to classify different manufacturing environments and recognize how to apply MRP and capacity requirements planning (CRP) to different production situations; identify the inputs to MRP; run the MRP process; use MRP records to manage conditions that are exceptions to the norm; use CRP to create a workable schedule for factory production; calculate and analyze CRP; take performance measurements to determine whether MRP and CRP are working effectively. (Annually for Evening Classes)

DMM 164 Inventory Management   **Credit Hours: 3**
This course presents techniques to teach differentiation among types of inventory, performance of ABC inventory analysis, alternative costing methods used for inventory accounting, inventory replenishment systems and determination of reorder points, order quantity decisions, determination of optimum levels of safety stock, and distribution of resource planning. (Annually for Evening Classes)

DMM 165 Master Planning   **Credit Hours: 3**
This course will present material to teach students how to forecast using various quantitative and qualitative methods; evaluate different forecasting techniques; perform effective production planning in different environments; integrate production planning and resource planning; develop mater production schedules; use interrelated mater scheduling techniques; judge the effectiveness of master planning; and balance the diverse and conflicting responsibilities of a master planner. (Annually for Evening Classes)

DMM 166 Systems And Technologies   **Credit Hours: 3**
This course teaches students to anticipate how corporate strategy decisions will affect the production and inventory management area; analyze the company's manufacturing strategy and its applications; analyze strategic issues in quality and information systems; configures your production and inventory management system to fit the strategic decisions of your company and use the principles of MRPII and JIT; configure the master schedule, the rough-cut capacity plan, the material requirements plan, and the shop floor plan; define top management's role and responsibilities in implementing systems and technologies; manage project initiation, deliverables, and human and financial resources; measure the planning and control process. (Annually for Evening Classes)

DMM 167 Customers And Products   **Credit Hours: 3**
Customers and Products teaches the student how to integrate marketing and sales, filed service, and product design and development. The student will learn how to use the results of marketing research and competitive analysis to define the strategy for capturing a customer base. Students will learn how price, quality levels, service levels, and delivery performance affects a company. They will also learn how to select and develop distribution channels based on product attributes and human resource capabilities. The use of field service representatives, interdisciplinary design teams, and supplier partnerships will also be addressed. (Annually for Evening Classes)

DMM 168 Logistics   **Credit Hours: 3**
In Logistics the student will learn how to integrate production and inventory control, procurement and distribution; apply both the fundamental and emerging concepts of production and inventory control, including their terms; make business partners out of suppliers; implement critical performance measures; integrate distribution with the total business mission and strategic plan; and minimize distribution costs and inaccuracies while maximizing customer service. (Annually for Evening Classes)

DMM 169 Manufacturing Processes   **Credit Hours: 3**

Through this course the student will learn how to integrate industrial facilities management, manufacturing, and process design and development; manage and monitor facilities to comply with regulations, increase resource availability, and limit unplanned losses in capacity; identify the appropriate type of manufacturing process, layout, technology, and workforce needed for a given product; use JIT, TQM, concurrent engineering, and supplier involvement to enhance production; profit from such initiatives as focused factories, reduction of variability, simplified work flows, and improved layouts; and improve quality, response time, cost, value added, and human resource capability on a continuous basis.
(Annually for Evening Classes)

DMM 170 Support Functions   **Credit Hours: 3**
In this course the student will learn how to integrate information systems, human resources, total quality management, finance, and accounting; improve internal and external processes and product performance; use tqm principles such as benchmarking and the cost of quality measurements; identify trends in organizational design and their effects on employees; establish human resource systems that foster employee involvement and include measurement mechanisms; define and change operating performance measures; trace the flow of accounting information; construct information systems that allow for integration for future technologies and trends. (Annually for Evening Classes)

ECO 191 Principles of Economics   **Credit Hours: 5**
Co/Prerequisite: ENG 191
Provides a description and analysis of economic operations in contemporary society. Emphasis is placed on developing an understanding of economic concepts and policies as they apply to everyday life. Topics include basic economic principles; economic forces and indicators; capital and labor; price, competition, and monopoly; money and banking; government expenditures, federal and local; fluctuations in production, employment, and income; and the United States economy in perspective. (Fall, Spring for Day Classes; Winterand Summer for Evening Classes)

ELC 104 Soldering Technology   **Credit Hours: 2**
Develops the ability to solder and desolder connectors, components, and printed circuit boards using industry standards. Topic include safety practices, soldering, desoldering, anti-static grounding, and surface mount techniques. (Summer, Winter for Day Classes; Winter for Evening Classes)

ELC 106 Direct Current Circuits I   **Credit Hours: 4**
Prerequisite/Corequisite: MAT 103
Introduces direct current (DC) concepts and applications. Topics include fundamental electrical principles and laws; direct current test equipment; series, parallel, and combination circuits; and basic laboratory procedures and safety practices. (Fall, Spring for Day Classes; Fall for Evening Classes)

ELC 108 Direct Current Circuits II   **Credit Hours: 4**
Prerequisite/Corequisite: ELC 106
Continues direct current (DC) concepts and applications. Topics include complex series/ parallel circuits and DC theorems. (Fall, Spring for Day Classes; Fall for Evening Classes)

ELC 109 Alternating Current I   **Credit Hours: 4**
Prerequisites/Corequisites: ELC 108, MAT 104
Introduces the theory and application of varying sine wave voltages and current. Topics include AC wave generation, oscilloscope operation, inductance, and capacitance. (Winter, Summer for Day Classes; Winter for Evening Classes)

ELC 110 Alternating Current II   **Credit Hours: 4**
Prerequisite/Corequisite: ELC 109
Continues development of AC concepts with emphasis on constructing, verifying, and trouble-shooting reactive circuits using RLC theory and oscilloscopes. Topics include simple RLC circuits, AC circuit resonance, passive filters, transformer theory and applications, and non-sinusoidal wave forms. (Winter, Summer for Day Classes; Winter for Evening Classes)

ELC 114 Solid State Devices I   **Credit Hours: 4**
Prerequisite/Corequisite: ELC 110
Introduces the physical characteristics and applications of solid state devices. Topics include PN diodes, power supplies, voltage regulation, and special applications. (Fall, Spring for Day Classes; Spring for Evening Classes)

ELC 115 Solid State Devices II   **Credit Hours: 4**
Prerequisite/Corequisite: ELC 114
Continues the exploration of the physical characteristics and applications of solid state de-vices. Topics include bipolar junction theory and bipolar junction applications. (Summer, Winter for Day Classes; Spring for Evening Classes)

ELC 117 - Linear Integrated Circuits   **Credit Hours: 7**
Prerequisite/Corequisite: ELC 125
Provides in-depth instruction on the characteristics and applications of linear integrated cir-cuits. Topics include operational amplifiers, timers, and three-terminal voltage regulators. (Winter, Summer for Day Classes; Fall for Evening Classes)

ELC 118 Digital Electronics I   **Credit Hours: 4**
Prerequisite/Corequisite: ELC 108
Introduces the basic building blocks of digital circuits. Topics include binary arithmetic, logic gates and truth tables, Boolean algebra and minimization concepts, logic families, and digital test equipment. (Fall, Spring for Day Classes; Winter for Evening Classes)

ELC 119 Digital Electronics II   **Credit Hours: 7**
Prerequisite/Corequisite: 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, display drivers, and analog to digital and digital to analog conversions. (Winter, Summer for Day Classes; Spring for Evening Classes)

ELC 120 Microprocessors I   **Credit Hours: 4**
Prerequisite/Corequisite: ELC 119
Introduces the fundamentals of current microprocessors. The course focuses on current generation microprocessors. Topics include microprocessor architecture, instruction set, ad-dressing schemes, debugging, and memory devices. (Spring, Fall for Day Classes; Spring for Evening Classes)

ELC 121 Microprocessors II   Credit Hours: 4
Prerequisite/Corequisite: ELC 120
Continues in-depth study of current microprocessors. Emphasis is placed on application and operation of current generation microprocessors. Topics include instruction set, assembler, addressing schemes, debugging, and memory devices. (Fall, Spring for Day Classes Only)

ELC 122 Microprocessor Interfacing   Credit Hours: 4
Prerequisite/Corequisite: ELC 121
Develops skills in using fundamental microprocessor interfacing with memory and programmable interface adapters. Topics include interfacing, memory circuits, input/output, programmable peripheral interfaces, and use of diagnostic programs. (Fall, Spring for Day Classes Only)

ELC 125   Solid State Devices III   Credit Hours: 4
Prerequisite/Corequisite: ELC 115
Continues the exploration of the physical characteristics and applications of solid state devices. Topics include field effect transistors, power control and switching devices, and display devices. (Winter, Summer for Day Classes; Fall for Evening Classes)

ELC 201 Computer Peripherals   Credit Hours: 4
Prerequisite/Corequisite: ELC 121
Provides a study of the computer system level architecture and functional operation of computer peripherals. Topics include software and hardware interfacing techniques, display terminals, printers, mass storage, and console devices. (Spring, Fall for Day Classes Only)

ELC 204 High-Level Languages   Credit Hours: 3
Prerequisite/Corequisite: ELC 111
Introduces computer programming using a high-level language such as BASIC, Pascal, FORTRAN, "C," or others. Topics include flowcharting and problem analysis while developing programming skills, solution design and coding, program execution, and debugging procedures. (Winter, Summer for Day Classes Only)

ELC 205 Data Communications   Credit Hours: 2
Prerequisite/Corequisite: ELC 119
Introduces the fundamentals, terminology, protocols, and applications of data communications. Topics include principles of operation, functions, internal circuitry, and troubleshooting techniques of both synchronous and asynchronous interfaces and modems. (Fall, Spring for Day Classes Only)

ELC 208 Computer System Troubleshooting   Credit Hours: 3
Prerequisite/Corequisite: ELC 121
Emphasizes the use of diagnostics to isolate failures, replace the defective module or subsystem, and verify proper operation. Topics include operating systems use, diagnostic programs, preventive maintenance, subsystem isolation, system preparation and verification, and service reports completion. (Winter, Summer for Day Classes Only)

ELC 211 Process Control   Credit Hours: 7
Prerequisite/Corequisite: ELC 125
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.   (Summer, Winter for Day Classes Only)

ELC 212 Motor Controls
Credit Hours: 7

Prerequisite/Corequisite: ELC 125
Introduces the application of motor controls in the industrial environment. Topics include AC/DC motors, AD/DC drives, MCC and contactors, NEC and NEMA standards, ladder diagrams, and power sources. (Winter, Summer for Day Classes Only)

ELC 213 Programmable Controllers
Credit Hours: 7

Prerequisite/Corequisite: ELC 212
Provides the basic skills and techniques used in industrial application of programmable controls. Topics include controller hardware, programming, PC applications, and troubleshooting. (Winter, Summer for Day Classes Only)

ELT 113 Programmable Logic Control I
Credit Hours: 4

Prerequisites/Corequisites: ELT 111, ELT 112, ELT 118
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. (Winter, Summer, Alternating Years for Day Classes Only)

ELT 114 Programmable Logic Control II
Credit Hours: 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 PLC program. Topics include program control information/data manipulation, report generation (outputs), peripheral devices, field wiring/installation, start-up, troubleshooting, and program enhancement/optimization. (Winter, Summer, Alternating Years for Day Classes Only)

EMS 100 Emergency Medical Services I
Credit Hours: 7

Introduces the student to emergency medical services and emengency medical technicians' skills, emergency medical services and the law, introduction to emergency vehicle operations and equipment; introduction to blood and airborne pathogens, universal precautions, introduction to hazardous materials, introductory anatomy and physiology; patient assessment, and radio communications (Fall for Evening Classes Only)

EMS 101 Emergency Medical Services II
Credit Hours: 7

Prerequisites: EMS 100
Introduces the student to written documentation; basic life support, use of an automated external defibrillator; the use of airway adjuncts and oxygen therapy, wounds, bleeding bandaging, shock, MAST as am invasive procedure, general pharmacology and the use of epinephring-SQ/IM 1:1,000 in anaphylaxis. (Winter for Evening Classes Only)

EMS 102 Emergency Medical Services III
Credit Hours: 7

Prerequisites: EMS 101
Covers the invasive procedure of IV therapy and treatment and management of injuries to soft tissue, the abdomen, the musculoskeletal system, the head, neck, chest, and spine. Covers environmental and behavioral emergencies as well as disaster/triage and patient lifting, moving, and handling. (Spring for Evening Classes Only)

EMS 104 Emergency Medical Services IV   **Credit Hours: 9**
Prerequisites: EMS 102
Introduces procedures in assessment and management of medical emergencies, pediatrics, obstetric, environmental and behavioral emergencies. Sessions invloving patient management and mechanical aspects of extrication are included. Supervised experience with patients in clinical facilities is included. (Summer for Evening Classes Only)

ENG 095 Developmental English I   **Institutional Credit Hours: 5**
Prerequisite: Placement by Diagnostic Testing

Introduces basic grammar . Topics include basic vocabulary, simple sentences, sentence capitalization, end punctuation marks, and spelling. (Quarterly for Day and Evening Classes)

ENG 096 Developmental English II   **Institutional Credit Hours: 5**
Prerequisites: ENG 095 or Placement by Diagnostic Testing
Emphasizes standard English usage. Topics include capitalization, subjects and predicates, punctuation, sentence structure, correct verb tenses, standard spelling, and basic paragraph development. (Quarterly for Day and Evening Classes)

ENG 097 Developmental English III   **Institutional Credit Hours: 5**
Prerequisite: ENG 096 or placement by diagnostic testing
Emphasizes the rules of grammar, punctuation, and spelling in order to ensure a smooth transition into communicating orally and in writing. Topics include basic grammar review, use of punctuation, use of capitalization, recognition of clauses and phrases, spelling, writing sentences, and writing simple paragraphs. (Quarterly for Day and Evening Classes)

ENG 098 Developmental English IV   **Institutional Credit Hours: 5**
Prerequisite: ENG 097 or placement by diagnostic testing
Emphasizes the ability to communicate using written and oral methods. Topics include basic paragraph construction, proofreading, the essay format, written reports, oral reports, and review of grammar and usage. (Quarterly for Day and Evening Classes)

ENG 111 Business English   **Credit Hours: 5**
Prerequisites: ENG 097 and RDG 097 or Program Ready Status in Writing and Reading Skills. Emphasizes a functional and comprehensive review of English usage. Topics include English grammar, sentence structure, and composition. The course includes an introduction to library resources and the research process. Minimum grade of "C" is required to advance to ENG 112, Business Communications. (Quarterly for Day and Evening Classes)

ENG 112 Business Communications   **Credit Hours: 5**
Prerequisites: Keyboarding proficiency, ENG 111with a Grade of "C" or better
Provides knowledge and application of written and oral communications found in business situations. Topics include writing fundamentals and speaking fundamentals. (Quarterly for Day and Evening Classes)

ENG 191 Composition and Rhetoric I   **Credit Hours: 5**
Prerequisites: ENG 098 and RDG 098 or program ready status in writing and reading skills. 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. The course includes an introduction to library sources, foundations of research, and writing the research paper.   Topics include writing analysis and practice, revision, and research. An introduction to literary fiction is also included. Minimum grade of "C" required to advance to ENG 193, ENG 195, or HUM 191. (Fall, Winter, Spring for Day Classes; Fall, Spring for Evening Classes)

ENG 193 Composition and Rhetoric II   **Credit Hours: 5**
Prerequisite: ENG 191 with a C or better
Emphasizes the student's ability to read literature analytically and meaningfully and to communicate clearly. Students analyze the form and content of literature and practice various modes of writing. Topics include reading and analysis of fiction, poetry, and drama; research; and writing about literature. (Offered on Demand)

ENG 195 Technical Communications   **Credit Hours: 5**
Prerequisite: ENG 191 with a C or better
Emphasizes practical knowledge of technical communications techniques, procedures, and reporting formats used in industry and business. Topics include research, device and process description, formal technical report writing, business correspondence, and oral technical report presentation. (Offered on Demand)

HUM 191 Introduction to Humanities   **Credit Hours: 5**
Prerequisite: ENG 191 with a Grade of "C" or better
Explores the philosophic and artistic heritage of humanity expressed through a historical perspective on visual arts, music, drama, and literature. The humanities are presented as a source of subjective insights for the understanding of people and society. The course emphasizes the connection of science and technology to culture and the arts. Topics include historical and cultural developments and contributions of the humanities. (Fall, Spring for Day Classes; Winter for Evening Classes)

IMT 101 Industrial Maintenance Safety Procedures   **Credit Hours: 2**
Provides in-depth study of the health and safety practices required for maintenance of industrial production equipment. Topics include traffic safety, ladder safety, fire safety, safe work in confined spaces, electrical safety, emergency procedures, an introduction to OSHA regulations, MSDS Right-to-Know Law, hazardous materials safety, and safety equipment. (Fall, Spring, Alternating Years, for Day Classes Only)

IMT 118 DC and AC Motors   **Credit Hours: 4**
Prerequisites/Corequisites: ELC 106, ELC 109, IMT 106, MAT 104
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 (series, shunt, and compound), scheduled preventive maintenance, troubleshooting and failure analysis, and Article 430 of the National Electrical Code. (Winter, Summer, Alternating Years, for Day Classes Only)

IMT 119 Fundamentals of Motor Controls   **Credit Hours: 4**
Prerequisite/Corequisite: IMT 118
Introduces the fundamental concepts, principles, and control 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 N.E.C. (Fall, Spring, Alternating Years, for Day Classes Only)

IMT 120 Magnetic Starters and Braking   **Credit Hours: 4**
Prerequisite/Corequisite: IMT 119
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. (Fall, Spring, Alternating Years, for Day Classes Only)

IMT 121 Two-Wire Control Circuits   **Credit Hours: 3**
Prerequisite/Corequisite: IMT 120
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. (Fall, Spring, Alternating Years, for Day Classes Only)

IMT 122 Advanced Motor Controls   **Credit Hours: 3**
Prerequisite/Corequisite: IMT 121
Continues instruction in 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. (Winter, Summer, Alternating Years, for Day Classes Only)

IMT 123 Variable Speed Motor Control   **Credit Hours: 4**
Prerequisite/Corequisite: IMT 122
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 and DC motors, solid state controls, installation procedures, and ranges. (Fall, Spring, Alternating Years, for Day Classes Only)

IMT 126 Programmable Logic Control Practicum   **Credit Hours: 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 hardwiring PLC equipment, writing and executing programs, and troubleshooting PLC circuits. (Fall, Spring, Alternating Years, for Day Classes Only)

IMT 127 Industrial Maintenance Internship   **Credit Hours: 4**
Prerequisite: All non-elective courses required for program completion
Provides students with occupation-based instruction that applies learned skills to actual work experience. Emphasizes students' opportunities to practice programmable logic control skills and troubleshooting techniques on industrial equipment. Topics include application of industrial maintenance skills, appropriate employability skills, problem solving, adaptability to job equipment and technology, progressive productivity, and acceptable job performance. (Winter, Summer, Alternating Years, for Day Classes Only)

IMT 129 Industrial Wiring I   **Credit Hours: 5**
Prerequisites/Corequisites: ELC 106, ELC 109
Provides instruction in the fundamental concepts of industrial wiring with an emphasis on NEC requirements. Topics include wiring devices and materials; symbols and blueprint reading; branch and feeder circuits; switches, receptacles, and cord connectors; grounding; wire sizing; overcurrent protection; and NEC requirements. (Fall, Spring, Alternating Years, for Day Classes Only)

IMT 130 Industrial Wiring II   **Credit Hours: 5**
Prerequisite/Corequisite: IMT 129
Continues instruction in the study of industrial wiring. Topics include raceway installation, three phase systems, transformers (single phase and three phase), industrial lighting systems, and NEC requirements. (Winter, Summer, Alternating Years, for Day Classes Only)

IMT 132 Industrial Maintenance (Electrical) Review   **Credit Hours: 3**
Prerequisites: All required Industrial Maintenance (Electrical) courses
Provides an instructional review of the Industrial Maintenance (Electrical) course of study with a comprehensive assessment of each area. The assessment will consist of a written, identification, and hands-on examination. Topics include math, alternating current, direct current, motor controls, safety, programmable logic controllers, AC-DC motors, and industrial wiring. (Winter, Summer, Alternating Years, for Day Classes Only)

IMT 152 National Electric Code   **Credit Hours: 4**
Prerequisites: ELC 108, ELC 108, ELC 109, ELC 110

Provides students with an in depth review of the National Electric Code (NEC) as applied to electrical equipment installation in the industrial plant setting. Emphasis is placed on understanding the format and organization of content presented in Chapters I through IV of the NEC. Topics include: presentation format of the NEC; code definitions and requirements; wiring and protection; wiring methods and materials; and equipm,ent ionstallation and maintenance. (Annually for day and evening classes)

MAS 101 Medical Law and Ethics   **Credit Hours: 2**
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, the physician-patient-assistant relationship, the medical office in litigation, and ethics. (Summer for Day Classes Only)

MAS 103 Pharmacology   **Credit Hours: 5**
Prerequisites: AHS 101, MAT 101
Introduces drug therapy with emphasis on safety, classification of drugs, their action, side effects, and/or adverse reactions. Also introduces the basic concept of mathematics used in the administration of drugs. Topics include introduction to pharmacology, sources and forms of drugs, drug classification, commonly prescribed medications according to body systems, effects of drugs on the body systems, systems of measurement, and calculating adult and pediatric dosages. (Summer for Day Classes Only)

MAS 104 Medical Administrative Procedures I   **Credit Hours: 3**
Prerequisites: MAS101, BUS 101
Emphasizes essential skills required for the typical medical office. Topics include accounting procedures and insurance preparation and coding. (Fall for Day Classes Only)

MAS 105 Medical Administrative Procedures II   **Credit Hours: 5**
Prerequisites: MAS 103, MAS 104, BUS 101
Emphasizes essential skills required for the typical medical office in the areas of computers and medical transcription. Topics include introduction to the computer and medical transcription. (Winter for Day Classes Only)

MAS 108 Medical Assisting Skills I   **Credit Hours: 5**
Prerequisites: AHS 101, AHS 109, BUS 101, MAS 101, MAS 103
Introduces the skills necessary for assisting the physician with a complete history and physical in all types of practices. The course includes skills necessary for sterilizing instruments and equipment and setting up sterile trays. The student also explores the theory and practice of electrocardiography. Topics include infection control, prepare patients/assist physician with examinations and diagnostic procedures, vital signs/mensuration, minor office surgical procedures, and electrocardiograms. (Fall for Day Classes Only)

MAS 109 Medical Assisting Skills II   **Credit Hours: 5**
Prerequisites: MAS 103, MAS 108
Furthers the student's knowledge of the more complex activities in a physician's office. Topics include collection/examination of specimens; venipuncture; urinalysis; administration of medication including oral, topical, subcutaneous, intramuscular, and intradermal medication; first aid and CPR; physical therapy procedures; and principles of radiology and safety. (Winter for Day Classes Only)

MAS 112 Human Diseases   **Credit Hours: 5**
Prerequisites: AHS 101, BUS 212, MAS 103
Provides clear, succinct, and basic information about common medical conditions. Taking each body system, the disease condition is highlighted following a logical formation consisting of description, etiology, signs and symptoms, diagnostic procedures, treatment, prognosis, and prevention. Topics include introduction to disease and diseases of body systems including the nutritional and pharmacological implications. (Fall for Day Classes Only)

MAS 113 Maternal and Child Care   **Credit Hours: 5**
Prerequisites: AHS 101, BUS 212, MAS 103, MAS 112
Focuses on the reproductive system, care of the mother in all stages of pregnancy, the normal and emotional growth of the healthy child, and care of the sick child. Topics include introduction to obstetrics, female and male reproductive systems, intrauterine development, prenatal care, labor and delivery, and stages of child development/newborn through adolescence. (Winter for Day Classes Only)

MAS 117 Medical Assisting Externship   **Credit Hours: 6**
Prerequisite: Permission of instructor
Provides students with an opportunity for in-depth application and reinforcement of principles and techniques in a medical office job setting. This clinical practicum allows the student to become involved in a work situation at a professional level of technical application and requires concentration, practice, and follow through. Topics include application of classroom knowledge and skills, functioning in the work environment, and listening and following directions. (Spring for Day Classes Only)

MAS 118 Medical Assisting Seminar   **Credit Hours: 4**
Prerequisite: Permission of instructor
Seminar focuses on job preparation and maintenance skills and review for the certification examination. Topics include letters of application, resumes, job interviews, letters of resignation, and review for the certification examination. (Spring for Day Classes Only)

MAS 151 ICD9 Coding I   **Credit Hours 4**
Prerequisites: AHS 101, AHS 109, or BUS 212, ENG 101, BS 101, MAS 112, Mas 153
ICD-9 Coding I focuses on the purpose, use, and arrangement of ICD-9 CM coding. Topics include symbols, punctuation, abbreviations, basic coding principles, and accurate diagnosis and procedure codes. Disease and complications for the systems are also included.

MAS 152 ICD9 Coding II   **Credit Hours 4**
Prerequisites: AHS 101, AHS 109 or BUS 212, ENG 101, BUS 101, MAS 112, MAS 151, MAS 153
This course focuses on the ICD-9 CM coding for symptoms, signs and ill defined conditions. Coding II also focuses on V codes, E codes, procedural coding, DRG's and Hospital based outpatient services. The body systems covered in this course are respiratory, integumentary, endocrine, and genitourinary. Immunity and neoplasms are also covered.

MAS 153 CPT4 Coding   **Credit Hours 2**
Prerequisites: AHS 101, AHS 109 or BUS 212, ENG 101, BUS 101, MAS 112\
This course focuses on the background, development and purpose for CPT coding. Topics include sumbols, punctuations, differences in the coding systems (CPT and ICD-9-CM), and guidelines for coding.

MAT 095 Developmental Mathematics I   **Institutional Credit Hours: 5**
Prerequisite: Placement by Diagnostic testing
Introduces elementary arithmetic needed for advancement to the level of basic mathematics. Topics include place value, reading and writing numbers, addition facts, subtraction facts, multiplication facts, division facts, and simple word problems. (Quarterly for Day and Evening Classes)

MAT 096 Developmental Mathematics II   **Institutional Credit Hours: 5**
Prerequisites: MAT 095 or placement by diagnostic testing
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. (Quarterly for Day and Evening Classes)

MAT 097 Developmental Mathematics III   **Institutional Credit Hours: 5**
Prerequisite: MAT 096 or placement by diagnostic testing
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 number theory, fractions, decimals, ratio/proportion, percent, measurement/geometric formulas, and word problems. Homework assignments reinforce classroom learning. (Quarterly for Day and Evening Classes)

NOTE: Use of the electronic calculator is an integral part of all math classes above the MAT 097 level.

MAT 098 Developmental Prealgebra   **Institutional Credit Hours: 5**
Prerequisite: MAT 097 or placement by diagnostic testing
Introduces prealgebra concepts and operations which will be applied to the study of beginning algebra. Topics include number theory, arithmetic review, signed numbers, algebraic operations, and introduction to algebra word problems. Homework assignments reinforce classroom learning. (Quarterly for Day and Evening Classes)

MAT 099 Developmental Algebra   **Institutional Credit Hours: 5**
Prerequisite: MAT 098 or placement by diagnostic testing
Introduces concepts and operations which can be applied to the study of algebra. Course content emphasizes use of variables, manipulation of algebraic expressions, solution of linear and quadratic functions, and solution of systems of linear equations. Class includes lecture, applications, and homework to reinforce learning. (Quarterly for Day and Evening Classes)

MAT 101 General Mathematics   **Credit Hours: 5**
Prerequisite: MAT 097 or Program Ready Status in Numerical Skills.
Emphasizes mathematical skills that can be applied to the solution of occupational and technical problems. Topics include properties of numbers, fractions, decimals, percents, ratio and proportion, measurement and conversion, exponents and radicals, and geometric and technical formulas. Class includes lectures, applications, and homework to reinforce learning. (Quarterly for Day and Evening Classes)

MAT 103 Algebraic Concepts   **Credit Hours: 5**
Prerequisites: MAT 098 or program ready status in numerical and elementary algebra skills.
Introduces concepts and operations which can be applied to the study of algebra. Course
content emphasizes basic mathematical concepts, basic algebraic concepts, and intermedi-
ate algebraic concepts. Class includes lecture, applications, and homework to reinforce learn-
ing. Minimum grade of "C" required to advance to MAT 104, MAT 191, MAT 196, or MAT 198.
(Quarterly for Day and Evening Classes)

MAT 104 Geometry and Trigonometry   **Credit Hours: 5**
Prerequisite: MAT 103 with a grade of "C" or better
Introduces and develops basic geometric and trigonometric concepts. Course content empha-
sizes measurement using English and metric systems, angle measure, similar triangles, right
triangles, two and three-dimensional geometric formulas, right triangle trigonometry, oblique
triangles, and laws of sines and cosines. (Spring for Day Classes; Spring, Alternating Years for
Evening Classes)

MAT 111 Business Mathematics   **Credit Hours: 5**
Prerequisites: MAT 097 or program ready status in numerical skills.
Emphasizes basic 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.
(Quarterly for Day and Evening Classes)

MAT 191 College Algebra   **Credit Hours: 5**
Prerequisites: MAT 099 or MAT 103 with a grade of "C" or better or program ready status in
Numerical and Intermediate Algebra Skills.
Emphasizes techniques or problem solving using algebraic concepts and graphing calcula-
tors. Topics include algebraic concepts and operations, linear and quadratic equations and
functions, simultaneous equations, inequalities, exponents and powers, graphing techniques,
and analytic geometry. Minimum grade of "C" required to advance to MAT 193. (Fall, Winter,
Spring for Day Classes; Fall, Spring for Evening Classes)

MAT 193 College Trigonometry   **Credit Hours: 5**
Prerequisites: MAT 191 with a Grade of "C" or Better
Emphasizes techniques of problem solving using trigonometric concepts and graphing calcu-
lators. Topics include trigonometric functions, properties of trigonometric functions, vectors
and triangles, inverse of trigonometric functions/graphing, logarithmic and exponential func-
tions, and complex numbers. (Spring for Day Classes; Winter for Evening Classes)

MAT 196 Contemporary Mathematics   **Credit Hours: 5**
Prerequisite: MAT 099 or MAT 103 with a grade of "C" or better or Program Ready Status in
Numerical and Intermediate Algebra Skills.
Emphasizes techniques of problem solving in the areas of algebra, sets and logic, probability,
statistics, and mathematics of finance. Topics include linear and quadratic equations, linear
and quadratic inequalities, systems of linear equations, linear programming, set operations,
counting, probability, descriptive statistics, normal distribution, interest, and annuities. (Fall
for Day Classes; Spring for Evening Classes)

MAT 198 Introduction To Statistics   **Credit Hours: 5**
Prerequisites: MAT 099 or MAT 103 with a Grade of "C" or better or Program Ready Status in
Numerical and Intermediate Algebra Skills.
Discusses the concepts and methods fundamental to utilizing and interpreting commonly
used statistics including extensive use of the graphing cal culator. Topics include descriptive
statistics, basic probability, discrete and continuous distributions, linear regression, and chi
square test. (Offered on demand)

MCA 201 Advanced Mill I   **Credit Hours 7**
Prerequisite: MCH 115
Provides instruction in advanced techniques of milling machine operations. Emphasis is placed
on skill development through laboratory practice. Topics include verticle milling, horizontal
milling, compound angles, and gear cutting.
(Offered on Demand)

MCA 203 Advanced Mill II   **Credit Hours 6**
Prerequisite: MCA 201
Provides instruction in advanced techniques of milling machine operations. Topics include
indexing, rotary tables, boring, facing, and turning and straddle milling. (Offered on Demand)

MCA 205 Advanced Lathe Operations I   **Credit Hours: 7**
Prerequisites: MCH 109, MCH 110
Provides instruction in advanced lathe operations and procedures. Emphasis is placed on
skill development through laboratory experiences. Topics include thread cutting, precision
boring, precision knurling, and tapers. (Quarterly for Day and Evening Classes)

MCA 207 Advanced Lathe Operations II   **Credit Hours: 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, and tolerance turning. (Quarterly for Day and Evening Classes)

MCA 208 Advanced Grinding I   **Credit Hours: 4**
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, and grinding theory. (Quarterly for Day and Evening Classes)

MCA 209 Advanced Grinding II   **Credit Hours: 3**
Prerequisite: MCA 208
Provides instruction in advanced grinding techniques and procedures. Emphasis is placed
on skill development through laboratory experiences. Topics include grinding theory, abra-
sives, wheel preparation, and form grinding. (Quarterly for Day and Evening Classes)

MCA 211 CNC Fundamentals   **Credit Hours: 7**
Prerequisite: MCH 118
Provides a comprehensive introduction to computer numerical controller (CNC) machining
processes. Topics include math review, safety, jugs and fixtures, tooling and tool holders, refer-
ence points, tool offset, and program loading and editing. (Quarterly for Day Classes Only)

MCA 213 CNC Mill Manual Programming

Credit Hours: 7

Prerequisite: MCA 211

Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) milling machines. Topics include machine safety, command codes, program loading, machine setup, process control, and practical application. (Quarterly for Day Classes Only)

MCA 215 CNC Lathe Manual Programming

Credit Hours: 7

Prerequisite: MCA 211

Provides instruction for the safe operation and manual programming of computer numerical controlled (CNC) lathes. Topics include machine safety, command codes, program loading, machine setup, process control, and practical application. (Quarterly for Day Classes Only)

MCA 217 CNC Practical Applications

Credit Hours: 6

Prerequisites: MCA 211, MCA 213, MCA 215

Provides instruction in specialty tooling and multi-axis machining. Students will also gain experience in process control. Topics include specialty tooling, EDM/ECM, multi-axis machining, process control, and laboratory practice. (Quarterly for Day Classes Only)

MCA 219 CAD/CAM Programming

Credit Hours: 6

Prerequisite: MCA 211

Emphasizes the development of skills in computer aided design (CAD) and computer aided manufacturing (CAM). The student will design the program parts to be machined on computer numerical controlled machines. Topics include hardware and software, digitizer, pen plotter, drawing manipulations, tool path generation, and program uploading and downloading. (Quarterly for Day Classes Only)

MCH 101 Introduction to Machine Tool

Credit Hours: 6

Introduces the fundamental concepts and procedures necessary for the safe and efficient use of basic machine tools. Topics include use of hand and bench tools and use of power tools, analysis of measurements, saw and blade selection, feed and speed determination, use of coolant, saw operations, drilling setup, and maintenance operation. (Quarterly for Day and Evening Classes)

MCH 102 Blueprint Reading for Machine Tool I

Credit Hours: 5

Introduces the fundamental concepts and techniques necessary to interpret drawings and produce sketches for machine tool applications. Topics include interpretation of blueprints and sketching. (Quarterly for Day and Evening Classes)

MCH 104 Machine Tool Math I

Credit Hours: 5

Prerequisite/Corequisite: MAT 101

Develops mathematic competencies as applied to machine tool technology. This course emphasizes manipulation and use of machining formulas and the discussion of machining geometry. Topics include machining algebra and machining geometry. (Quarterly for Day and Evening Classes)

MCH 105 Machine Tool Math II

Credit Hours: 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. (Quarterly for Day and Evening Classes)

MCH 107 Characteristics of Metal/Heat Treatment   **Credit Hours: 4**
Prerequisite: Provisional admission
Introduces the properties of various metals, production methods, and identification of ferrous and non-ferrous metals. Topics include metallurgy and heat treatment. (Quarterly for Day and Evening Classes)

MCH 109 Lathe Operations I   **Credit Hours: 7**
Provides opportunities for students to develop skill in the use of bench grinders and lathes. Topics include lathes, bench grinders, bench grinder operations, lathe calculations, lathe setup, and lathe operations. (Quarterly for Day and Evening Classes)

MCH 110 Lathe Operations II   **Credit Hours: 6**
Prerequisite: MCH 109
Provides further instruction for students to develop skill in the use of lathes. Topics include lathes, lathe setup, and operations. (Quarterly for Day and Evening Classes)

MCH 112 Surface Grinder Operations   **Credit Hours: 6**
Provides instruction in the setup, operations, maintenance, and assembly operations of surface grinders. Topics include surface grinder, maintenance, surface grinder setup, surface grinder operations, and assembly operations. (Quarterly for Day and Evening Classes)

MCH 114 Blueprint Reading II   **Credit Hours: 5**
Prerequisite/Corequisite: MCH 104
Continues the development of blueprint reading competencies as applied to Machine Tool Technology. Topics include geometric dimensioning and tolerancing, advanced sectioning, and assembly drawings. (Quarterly for Day and Evening Classes)

MCH 115 Mill Operations I   **Credit Hours: 7**
Provides instruction in the setup and use of the milling machine. Topics include milling machines, milling machine calculations, milling machine setup, and milling machine operation. (Quarterly for Day and Evening Classes)

MCH 116 Mill Operations II   **Credit Hours: 6**
Prerequisite: MCH 115
Provides further instruction for students to develop skills in the use of milling machines. Topics include vertical and horizontal mill calculations, vertical and horizontal mill setup, and vertical and horizontal mill operations. (Quarterly for Day and Evening Classes)

MCH 118 Computer/CNC Literacy   **Credit Hours: 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. (Quarterly for Day and Evening Classes)

MCH 152 Industrial Machine Applications   **Credit Hours: 6**
Prerequisites: MCH 110, MCH 112, MCH 116
Provides students 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. (Quarterly for Day and Evening Classes)

MKT 100 Introduction to Marketing   Credit Hours: 5

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 acting on the market. (Summer for Day Classes Only)

MKT 101 Principles of Management   Credit Hours: 5

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 special challenges and demands of supervising employees. Topics include management theories; employee morale; motivating, supervising, and evaluating employees; recruitment, screening, and selection of employees; supervision techniques; and functions of management. (Fall, for Day Classes; Fall for Evening Classes)

MKT 103 Business Law   Credit Hours: 5

Introduces the study of contracts and other business obligations and the legal environment. Topics include creation and evolution of laws, court decision process, sales contracts, commercial papers, risk-bearing devices, and the Uniform Commercial Code. (Winter or Day Classes; Summer for Evening Classes)

MKT 104 Principles of Economics   Credit Hours: 5

Prerequisite: Program admission level math competency
Provides a study of micro and macro economic principles, policies, and applications. Topics include economic systems, supply and demand, money and the banking system, and the business cycle. (Fall for Day Classes; Summer for Evening Classes)

MKT 105 Accounting for Marketing Applications   Credit Hours: 5

Prerequisite: MAT 111
Develops an awareness of the financial aspects of business. Topics include forecasting and budgeting, stock records, costs of overtime and job improvements, basic accounting principles (bookkeeping, ledger, and journal), basic accounting cycle, financial statements such as balance sheets and income statements, and financial ratios. (Summer, Winter for Day and Evening Classes)

MKT 161 Service Industry Business Environment   Credit Hours: 2

Introduces the student to the service industry. Topics include an introduction to the service industry business environment, an introduction to lifelong learning, work ethics and positive behaviors required for exceptional customer service, an introduction to customer relations, working together successfully on teams, and basic business principles. (Quarterly for Day Classes)

MKT 162 Customer Contact Skills   Credit Hours: 6

Provides students with skills necessary to communicate with customers and successfully manage that relationship in both telephone and face-to-face situations. Topics include skills to effectively communicate with customers, developing rapport with customers, problem-solving in customer service, telephone skills, sales skills in the service environment, managing the difficult customer, and managing the multicultural customer. Computer based training is used to allow students to practice skills using simulated business situations. (Quarterly for Day Classes)

MKT 163 Computer Skills for Customer Service   Credit Hours: 3

Provides students with the fundamentals of computer skills in a customer service environment. Topics include introduction to computer technology, introduction to the Windows environment, introduction to word processing, introduction to spreadsheets, introduction to databases, introduction to E-mail, and credit card processing. (Quarterly for Day Classes)

MKT 164 Business Skills for the Customer Service Environment   Credit Hours: 3
Provides students with the fundamentals of basic business skills in the customer service environment. Topics include introduction to business correspondence, basic business calculations, change management, managing multiple tasks and priorities, and tools for team problem-solving and service improvement. (Quarterly for Day Classes)

MKT 165 Personal Effectiveness in Customer Service   Credit Hours: 1
Provides students with skills that will allow them to present a positive image to both co-workers and customers. Topics include personal wellness and stress management, positive image, and job interview skills. (Quarterly for Day Classes)

MSD 101 Interpersonal Employee Relations   Credit Hours: 5
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. (Winter for Day Classes; Winter for Evening Classes)

MSD 102 Legal Environment for Supervisors   Credit Hours: 5
Develops a working knowledge of the legal environment of business necessary for supervisors. Topics include the legal system and public policy making, administrative law and business contracts, individual accountability and liability, debtor-creditor relationships, interpreting and understanding federal protective laws relating to consumers and competition, the Uniform Commercial Code, Title VII of the Civil Rights Acts, OSHA (Occupational Safety and Health Administration) regulations, and employee protective laws. (Fall, Spring for Day Classes; Fall, Spring for Evening Classes)

MSD 103 Leadership and Decision Making   Credit Hours: 5
Familiarizes the student with the principles and methods of sound leadership and decision making. Topics include basic leadership principles and how to use them to solicit cooperation, use of leadership to develop the best possible senior-subordinate relationships, the various decision-making processes, the ability to make sound and timely decisions, leadership within the framework of the major functions of management, and delegation of authority and responsibility. (Summer for Day Classes; Winter for Evening Classes)

MSD 104 Personnel Administration for Supervisors   Credit Hours: 5
Acquaints the student with the authority, responsibility, functions, and problems of the personnel administrator. Topics include the relationship between the personnel administrator and the line manager; analysis and development of job descriptions; interview of prospective employees; diagnosis of organizational health from the personnel perspective; laws and guidelines which dictate personnel actions; the basic concepts, guidelines, and responsibilities for training employees; and employability skills. (Winter for Day Classes; Summer for Evening Classes)

MSD 105 Labor Law and Labor Relations   Credit Hours: 5
Acquaints the student with labor laws and labor relations principles which define the proper conduct of labor relations. Topics include widely applicable labor laws, collective bargaining, contract negotiations, Taft-Hartley and Wagner Acts, labor union practices and law, unfair labor practices, the Disclosure Act of 1959, and arbitration procedures. A series of case studies and contract negotiations exercises are used to reinforce labor law and labor relation concepts. (Summer for Day and Evening Classes)

MSD 106 Counseling and Disciplinary Actions   **Credit Hours: 5**
Develops an understanding of the proper counseling and disciplinary techniques to use in various workplace situations. Topics include the approaches to counseling and when each technique is appropriate; the use of good interpersonal communications to make counseling more effective; how to recognize when counseling is needed; and handling disciplinary problems in a fair and impartial manner, counseling for discipline, common causes of disciplinary problems, and positive discipline. (Spring for Day Classes; Spring for Evening Classes)

MSD 107 Training and Performance Evaluation   **Credit Hours: 5**
Shows the student how to recognize when training is needed and how to properly use the performance evaluation system. Topics include training principles; training techniques for maximum effectiveness; the supervisor's responsibilities for training; steps in training; the importance and impact of performance evaluation and use of the performance evaluation as a management tool; and fairness and equity in preparing the performance evaluation. (Spring for Day Classes; Spring for Evening Classes)

MSD 108 Management and Supervisory Seminar   **Credit Hours: 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. (Summer for Day Classes; Winter for Evening Classes)

MSD 110 Management and Supervision O.B.I. I   **Credit Hours: 3**
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. (Quarterly for Day Classes Only)

MSD 113 Ethical Management   **Credit Hours: 5**
Provides students with an overview of ethical management practices with emphasis on the axiology of contemporary managerial ethics. Topics include the roots of ethics, traditional and contemporary definitions of good, personal values, moral development, ethics in the workplace, the ethical orientation of organizations, ethics and society, managerial ethics and the rule of law, managerial ethics and normative philosophy, managerial ethics and individual decision making, and managerial ethics and organizational design. (Winter for Day and Evening Classes)

MSD 151 Personal Development for Supervisors   **Credit Hours 5**
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. (Spring for Day and Evening Classes)

MSD 152 Project Management   **Credit Hours 5**
This course provides a basic understanding of project management functions and processes.
Topics include team selection and management, project planning, definition and sc heduling
of tasks, resource negotiation, allocation, and leveling, project control, monitoring and report-
ing, computer tools for project planning and scheduling, managing complex relationships be-
tween project team and other organizations, critical path methodology, and total quality man-
agement.
(Summer for Day Classes; Fall for Evening Classes)

MSD 154 Organizational Communication and Information Technology Credit Hours 5
This course focuses on communication, supervisions, and organizations in the age of tech-
nology. It builds on the basic computer skills introduced in SCT 100 using computer-based
technology. The student will create written, verbal, and electronic communication aplied to
supervisory functions in the workplace. Topics include word processing applications, spread-
sheet applications, database applications, presentation technology and applications, graphi-
cal interface applications, interpersonal communications, group communications and team
building, organizational communications, and global, intercultural, and ethical issues in com-
munication. (Winter for Day Classes; Summer for Evening Classes)

NPT 112 Medical Surgical I Practicum   **Credit Hours: 7**
Prerequisites: AHS 102, AHS 103, NSG 111
Corequisite: NSG 112
Practicum 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 oncology; cardiovascular,
respiratory, endocrine, urinary, and gastrointestinal systems and associated illness; pharma-
cology; nursing procedures/techniques; and utilizing the nursing process. (Winter, Summer
for Day Classes; 1/2 Spring, 1/2 Summer for Evening Classes)

NPT 113 Medical Surgical Nursing Practicum II   **Credit Hours: 7**
Prerequisites: AHS 102, AHS 103, NSG 111, NSG 112, NPT 112
Corequisite: NSG 113
Practicum 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 musculoskeletal, neurological,
oncology, fluids, electrolytes, integumentary, and sensory systems; mental health and associ-
ated illness; pharmacology and nursing procedures/techniques; and utilizing the nursing pro-
cess. (Fall, Spring for Day Classes; Winter for Evening Classes)

NPT 214 Maternal-Child Nursing Practicum   **Credit Hours: 4**
Prerequisites: AHS 102, AHS 103, NSG 111,NSG 112, NPT 112, NSG 113, NPT 113
Prerequisites/Corequisites: NPT 215, NSG 215
Corequisite: NSG 214
Practicum focuses on wellness and the prevention of illness, care of the individual as a whole,
and deviations from the normal state of health of mother, neonate, and child. Topics include
the reproductive system, obstetrics, maternal/child and associated illness; pharmacology and
nursing procedures/techniques; and utilizing the nursing process. (Winter, Summer for Day
Classes; 1/2 Fall, 1/2 Spring for Evening Classes)

NPT 215 Nursing Leadership Practicum   **Credit Hours: 2**
Prerequisites: AHS 102, NPT 112, NPT 113, NSG 112, NSG 113, NSG 111, AHS 103
Corequisites: NPT 214, NSG 214, NSG 215
Builds on the concepts presented in NPT 112, NPT 113, NSG 111, NSG112, and NSG 113
and develops the skills necessary for successful performance in the job market. Topics in-
clude leadership skills, management skills, and employability skills. (Winter, Summer for Day
Classes; Spring for Evening Classes)

NSG 111 Nursing Fundamentals   Credit Hours: 13
Prerequisites: AHS 101, ENG 111, MAT 101, PSY 101, SCT 100
Corequisites: AHS 102, AHS 103, AHS 150, PSY 101 or 191
An introduction to the nursing process. Topics include ethics and law, professional orienta-
tion, community health, infection control, patient care, application of therapeutic procedures
and treatment, first aid, CPR, geriatrics, oncology, and utilizing the nursing process. (Fall,
Spring for Day Classes; Winter for Evening Classes)

NSG 112 Medical Surgical Nursing I   Credit Hours: 9
Prerequisites: AHS 102, AHS 103, AHS 150, NSG 111
Corequisites: 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, endo-
crine, urinary, and gastrointestinal systems and associated illness; pharmacology; nursing
procedures/techniques; and utilizing the nursing process. (Winter, Summer for Day Classes;
Spring for Evening Classes)

NSG 113 Medical Surgical Nursing II   Credit Hours: 9
Prerequisites: AHS 102, AHS 103, NPT 112, NSG 111, NSG 112
Corequisite: NPT 113
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 musculoskeletal, neurological,
oncology, fluids, electrolytes, integumentary, and sensory systems; mental health and associ-
ated illness; pharmacology; nursing procedures/techniques; and utilizing the nursing process.
(Fall, Spring for Day Classes; Summer for Evening Classes)

NSG 214 Maternal-Child Nursing   Credit Hours: 10
Prerequisites: AHS 102, AHS 103, NSG 111, NSG 112, NPT 112, NSG 113, NPT 113
Corequisites: NPT 214, NPT 215, NSG 215
Focuses on wellness and the prevention of illness, care of the individual as a whole, and
deviations from the normal state of health of mother, neonate, and child. Topics include the
reproductive system; obstetrics; maternal/child and associated illness; pharmacology and
nursing procedures/techniques; and utilizing the nursing process. (Fall, Summer for Day
Classes; Fall for Evening Classes)

NSG 215 Nursing Leadership   Credit Hours: 2
Prerequisites: NPT 112, NPT 113, NSG 112, NSG 113, NSG 111, AHS 102, AHS 103
Corequisites: NPT 214, NPT 215, NSG 214
Builds on the concepts presented in Nursing Fundamentals (NSG 111) and Medical/Surgical
Nursing I and II (NSG 112, NSG 113) and develops the skills necessary for successful perfor-
mance in the job market. Topics include leadership skills, management skills, and employ-
ability skills. (Winter, Summer for Day Classes; Spring for Evening Classes)

OTA 101 Introduction to Occupational Therapy   Credit Hours: 3
Prerequisite: Program admission
This course 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 (field trip); role of OTA within
various practice sites; definition of OT; introduction of AOTA code of ethics and standards of
practice; introduction to OT frames of reference; introduction to the OT process; and role
delineation. (Fall for Day Classes Only)

OTA 102 Growth and Development   Credit Hours: 5
Prerequisite: BUS 212, OTA 101

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 enhance human performance. (Winter for Day Classes Only)

OTA 103 Developmental Tasks   Credit Hours: 3
Co/Prerequisite: OTA 102

This course provides a study of the continual human tasks and activities. Skills that enhance daily living are learned. Emphasis is placed on activity analysis of daily living work and play/leisure, performance and teaching selected life tasks and activities, uniform terminology, and grading and adapting purposeful activity (occupation) for therapeutic intervention. (Winter for Day Classes Only)

OTA 105 Kinesiology   Credit Hours: 6
Prerequisite: BUS 212, OTA 101

Introduces the phenomenon of human motion. Topics include introduction to motion, survey of skeletal system, articular system, muscular system, nervous system, muscle origins, muscle insertions, and muscle functions and innervations. May include instruction in goniometric measurements within the framework of OT. (Fall for Day Classes Only)

OTA 201 Psycho Social Dysfunction   Credit Hours: 7
Prerequisite: PSY 201

Introduces the psychiatric disorders occuring in different stages of human life. Concepts of OT treatment and evaluation principles are included. Topics include knowledge of psycho social conditions commonly referred to occupational therapy; knowledge of screening, assessment, and standardized procedures for psychosocial OT; participation in the development of the OT treatment plan; collaboration with OTR on treatment implementation reassessment and treatment termination; and psycho social dysfunction treatment documentation procedure. Students perform nine (9) hours of field work while taking this course. (Spring for Day Classes Only)

OTA 202 Psycho Social Dysfunction Treatment Methods   Credit Hours: 3
Prerequisite: PSY 201
Corequisite: OTA 201

Introduces the psychiatric disorders occuring in different stages of human life through practical methods. Concepts of OT treatment and evaluation principles are included. Topics include assistance with data collection which may include administration of standardized and non standardized tests and evaluations appropriate to the role of COTA in the practice area of psycho social dysfunction; contribution to the formation of the OT goals and objectives upon assessment; use of self; dyadic and group interaction; and provision of the therapeutic intervention related to occupational performance areas in psycho social dysfunction. (Spring for Day Classes Only)

OTA 204 Pediatric Issues   Credit Hours: 5
Prerequisite: PSY 201

Covers the childhood and adolescence occupational therapy related issues. Topics include participation in the assesment, program planning, and therapeautic intervention with the pediatric population. (Spring for Day Classes Only)

OTA 206 Physical Dysfunction   **Credit Hours: 7**

Prerequisite: All program curriculum 100 level courses should be taken before the core courses. This course provides a study of the physical disorders occurring in different stages of human life. Emphasis is placed on knowledge of physical conditions commonly referred to occupational therapy; knowledge of screening, assessment, and standardized procedures of OT; participation in the development of the OT treatment plan; collaboration with OTR on treatment implementation reassessment and treatment termination; and physical dysfunction treatment documentation procedure. Students perform nine (9) hours of field work while taking this course. (Summer for Day Classes Only)

OTA 207 Pediatric Dysfunction Treatment Methods   **Credit Hours: 3**

Corequisite: OTA 206

This course introduces the concepts of OT treatment and evaluation principles through practical applications. Topics include assistance with data collection, which may include administration of standardized and non standardized tests and evaluations appropriate to the role of COTA in the practice of physical dysfunction, contribution to the formation of the OT goals and objectives on assessment; use of self; dyadic, and group interaction; and provision of the therapeutic intervention related to occupational performance areas in physical dysfunction. (Summer for Day Classes Only)

OTA 209 Geriatric Issues   **Credit Hours: 5**

Prerequisite: All program curriculum 100 level courses should be taken before the core courses. Covers the geriatric occupational therapy related issues. Topics include participation in the assessment, program planning, activity programs, and therapeutic intervention with geriatric population. (Summer for Day Classes Only)

OTA 212 Occupational Therapy Trends & Issues   **Credit Hours: 5**

Prerequisite: OTA 209

Teaches the roles and responsibilities in the administration of occupational therapy services. Emphasis is placed on assisting with the management of departmental operations; developing values, attitudes, and behaviors congruent with OT standards and ethics; the role of OTA in occupational therapy; research publication; program evaluation; supervisory requirements; certification and licensure; reimbursement issues; personnel training and supervision; continued learning; and promotion of OT. The requirements are fullfilled together with nine (9) hours of field work. (Fall for Day Classes Only)

OTA 213 Advanced Treatment Methods   **Credit Hours: 3**

Prerequisite: OTA 202, OTA 207

Through class demonstration and practical acitivities, occupational therapy issues that promote human quality of life are addressed. Topics include applications of therapeutic adaptation for accomplishment of purposeful activities; family training; environmental adjustment; basic orthoticsand prosthetics; assistive devices; equipment and other OT technologies; and assist with planning and implementation of group and individual programs to promote health, function, and quality of life. (Fall for Day Classes Only)

OTA 221 Level II Fieldwork A   **Credit Hours: 12**

Prerequisite: Successful completion of all the essential core classes.

Provides the opportunity to practice occupational therapy for eight (8) weeks in a supervised health care facility. Practical experience during this period is documented in the form of a special project. The twenty (20) class hours project could be filled by correspondence. Topics include application of learned skills through presentation of a case study or special project (which may be accomplished at the clinical site) and supervised clinical applications of principles learned in the curriculum and appropriate to the learning needs of the student. (Winter for Day Classes Only)

OTA 222 Level II Fieldwork Fieldwork B   **Credit Hours: 12**
Prerequisite: OTA 202
Provides the opportunity to practice occupational therapy for eight (8) weeks in a supervised health care facility. Practical experience during this period is documented in the form of a special project. Topics include application of learned skills through presentation of a case study or special project (which may be accomplished at the clinical site) and supervised clinical application of principles learned in the curriculum and appropriate to the learning needs of the student. The twenty (20) class hours project could be fulfilled by correspondence. (Spring for Day Classes Only)

PHL 102 Introduction to Venipuncture   **Credit Hours 4**
Prerequisite: AHS 101, BUS 212
Provides the student with the skills necessary to perform venipuncture and micropuncture procedures. Class includes an emphasis on sterile procedures, equipment terminology, and acceptable techniqies and procedures

PHL 105 Clinical Practice   **Credit Hours 8**
Prerequisite: PHL 102
Provides the student with the opporunity to practice clinical skills in a real world atmosphere. Students are assigned to an area health care facility where they work closely with licensed Phelebotomy Techs.

PHR 101 Pharmacy Technology Fundamentals   **Credit Hours 5**
Prerequisites: AHS 101, AHS 102
Provides an overview of the Pharmacy Technology field and developes fundamental concepts and principles necessary for successful participation in the pharmacy field. Topics include: safety, orientation to the pharmacy technology field, health care organiztional structure, prarmacy policies and procedures, cardiopulmonary resuscitation (CPR), infecxtion control, quality control, ethics, laws, and definitions and terms.

PHR 102 Principles of Dispensing Medications   **Credit Hours 6**
Prerequisites: PHR 101
Introduces the student to principles of receiving, storing, and dispensing medications. Topics include: purchasing, packaging, and labeling drugs, dispensing responsibilities, distribution systems, documentation, inventory and filing systems, specific drugs, compounding, reference sources, pharmacy math, contamination control, stirage and control, and pharmacy equipment. Class includes laboratory and clinical practice.

PSY 100 Interpersonal Relations and Professional Development   **Credit Hours: 3**
Prerequisite: Program Ready Status in Reading and Writing Skills
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, job retention skills, job advancement skills, and professional image skills. (Quarterly for Day and Evening Classes)

PSY 191 Introductory Psychology   **Credit Hours: 5**
Co/Prerequisite: Required English Course
A survey of psychology which emphasizes the theoretical and methodological approaches important to psychologists. Topics include biological underpinnings; social environment; life span development; personality development and testing; abnormal behavior; and perception, learning, and intelligence. Minimum grade of "C" required to progress to PSY 201. (Quarterly for Day and Evening Classes)

PSY 201 Abnormal Psychology   **Credit Hours: 5**
Prerequisite: PSY 191 with a grade of "C" or better
An examination of the varieties of abnormal behavior, psychopathology, and mental illness. Treatment options, prevention, and assessment are discussed. The student will be taught how to classify disorders according to the DSM-IV. (Fall, Winter, Spring for Day Classes Only)

QCT 113 Metrology   **Credit Hours: 5**
Prerequisite: Program admission
Introduces the student into the selection, care, calibration, and use of precision measuring equipment. It prepares the student into developing measurement tracability requirements for the assurance of quality and the techniques used to assure the conformity of product to the specification. (Spring for Day Classes; Winter for Evening Classes)

QCT 114 Statistical Process Control   **Credit Hours: 3**
Prerequisite: MAT 103
Introduces the student to the basic concepts of statistics as related to quality. Covers process variation as will be present in normal manufacturing operations. Includes the selection of the proper analytical procedures and the development of control charts for monitoring of the selected process. Covers the techniques used to analyze the data found on the control chart. It gives guidance on the techniques to be used to take proper corrective action. (Winter for Day Classes; Fall for Evening Classes)

QCT 115 Quality Cost Control   **Credit Hours: 5**
This course introduces the role of cost control in the context of quality control. The goal of any quality system is to facilitate quality improvement efforts that will lead to operating cost reductions. (Summer for Day Classes; Spring for Evening Classes)

QCT 123 Quality Audit Systems   **Credit Hours: 5**
Prerequisite: QCT 114
Introduces the student to the process of preparing a quality audit. This is a management tool used to evaluate, confirm or verify activities related to quality. The course helps prevent problems in the organization being audited through the identification of activities liable to create future problems. (Fall for Day Classes; Summer for Evening Classes)

QCT 211 Statistical Quality Control   **Credit Hours: 5**
Prerequisites: QCT 114, MAT 191
This course provides a fundamental yet comprehensive coverage of quality control concepts. Included within the coverage are sections on improvement techniques, sampling techniques, and product liability. (Winter for Day Classes; Fall for Evening Classes)

QCT 212 Industrial Statistics for Quality   **Credit Hours: 5**
Prerequisites: MAT 198, ACT 211
This course is a study of many statistical tools and tests used in quality control. The course covers many of the statistical tools and tests used by quality professionals. Topics include a practical coverage of statistical methods, assumptions for testing and examples. (Spring for Day Classes; Winter for Evening Classes)

QCT 213 Design of Experiments   **Credit Hours: 5**
Prerequisite: MAT 198
This course introduces the student to the process, logic and discipline necessary to conduct quality research and experimentation covering experimental design. It introduces the student to various analytical methods used to analyze experiments including ANOVA and the Taguchi approach to experimental design. (Summer for Day Classes; Spring for Evening Classes)

QCT 221 Quality Planning and Reliability
Credit Hours: 5

Prerequisites: MAT 198, QCT 211

The process of reliability quantification involves the following three phases: (1) the process of developing and locating reliability objectives among the various elements which collectively make up a product; (2) the analysis of performance data to calculate expected failure rates; (3) to identify the strong and weak portions of any design to serve as a guide for further action. (Fall for Day Classes, Summer for Evening Classes)

QCT 222 Problem Solving and Decision Making
Credit Hours: 5

Prerequisites: MAT 198, QCT 211

This course introduces the common methods used to solve typical industrial problems using statistical methods. Topics include statistical sampling., estimating production time and determining manufacturing costs. (Winter for Day Classes, Fall for Evening Classes)

QCT 224 Procurement in Quality Control
Credit Hours: 5

Prerequisite: QCT 115

Intoduces the student to the dynamic role of procurement in industry. It stresses the relationship which must be established between the vendor and the purchaser especially in the areas of quality, schedule, tangible and intangible services, and price. (Spring for Day Classes; Winter for Evening Classes)

QCT 235 Seminar in Quality Auditing
Credit Hours: 5

Prerequisites: QCT 123, QCT 224

Quality auditing is a systematic evaluation to establish, monitor, and review the quality activities of an organization. This course, in seminar form, is for just such an effort. It is designed to prepare the student for the Certified Quality Auditors examination. (Winter for Day Classes Only)

QCT 240 Quality Technician Seminar
Credit Hours: 5

Prerequisites: QCT 221, QCT 222

The course helps the student interpret the knowledge learned previously in the discipline. It helps prepare the student for certification at the technical level. (Summer for Day Classes; Spring for Evening Classes)

QCT 245 Quality Engineering Seminar
Credit Hours: 5

Prerequisites: QCT 213, QCT 221, QCT 22
Corequisite: QCT 212

This course is designed to provide the student with the necessary knowledge to design and administer quality control programs at any levell, It is further designed to enhance the professional development of those who work in this profession. (Spring for Evening Classes Only)

RDG 095 Developmental Reading I
Institutional Credit Hours: 5

Prerequisite: Placement by Diagnostic Testing

Provides instruction for the development of reading readiness with emphasis on primary and practical reading skills for the adult learner. Topics include phonics, structural analysis, basic sight words, sentence meaning, and survival reading. (Quarterly for Day and Evening Classes)

RDG 096 Developmental Reading II
Institutional Credit Hours: 5

Prerequisite: RDG 095 or placement by diagnostic testing

Emphasizes the strengthening of fundamental reading competencies. Topics include vocabulary development, comprehension skills, study skills, and occupational/survival reading skills. (Quarterly for Day and Evening Classes)

RDG 097 Developmental Reading III   **Institutional Credit Hours:** 5
Prerequisites: RDG 096 or placement by diagnostic testing
Emphasizes basic vocabulary and comprehension skills development. Topics include vocabulary development, comprehension skills development, critical reading skills, and study skills, test-taking techniques, and occupational reading (Quarterly for Day Classes; Fall, Winter for Evening Classes)

RDG 098 Developmental Reading IV   **Institutional Credit Hours:** 5
Prerequisite RDG: 097 or placement by diagnostic testing
Provides instruction in vocabulary and comprehension skills with emphasis on occupational applications. Topics include vocabulary development, comprehension skills development, critical reading skills, and study skills. (Quarterly for Day Classes; Fall, Winter for Evening Classes)

SCT 100 Introduction to Microcomputers   **Credit Hours:** 3
Introduces fundamental concepts and operatons necessary to use microcomputers. Emphasis is placed on basic functions and familiarity with computer use. Topics include computer terminology, computer operating systems; data storage; file management; equipment care and operation; and an introduction to word processing, database, and spreadsheet applications, and networking.

SOC 191 Introduction to Sociology   **Credit Hours:** 5
 Co/Prerequisite: ENG 191
A general introduction to the sociological perspective, its origins, structure, change,and problems. Emphasis on multiculturalism, social class, power, conflict, and change, content of culture, the individual in society, and social interaction. (Fall for Day Classes Only)

SPC 191 Fundamentals of Speech   **Credit Hours:** 5
Prerequisite: ENG 191 with a grade of "C" or better
Introduces the fundamentals of oral communication. Topics include selection and organization of materials, preparation and delivery of individual and group presentations, and analysis of ideas presented by others. (Fall, Winter for Day Classes; Fall, Spring for Evening Classes)

SUR 101 Introduction to Surgical Technology   **Credit Hours:** 12
Prerequisites MAT 100 , PSY 100, ENG 111, SCT 100;
Corequisite AHS 101
Provides an overview of the surgical technology profession and develops the fundamental concepts and principles necessary to successful participation on a surgical team. Topics include: orientation to surgical technology, cardiopulmonary resuscitation (CPR) introduction to microbiology, and asepsis and the surgical environment. (Winter for Day Classes Only)

SUR 102 Principles of Surgical Technology   **Credit Hours:** 8
Prerequisites: SUR 101, AHS 101; Corequisite SUR 112
Introduces the student to patient care concepts and practices and provides continued study of surgical team participation. Topics include: patient care concepts such as preoperative routine, positioning, preparation, draping, and related nursing procedures; introduction to pharmacology; and supplies and equipment. (Spring Quarter for Day Classes)

SUR 103 Surgical Procedures I   **Credit Hours:** 6
Prerequisite: SUR 102, SUR 112; Corequisite SUR 113

Introduces students to surgical procedures, incisions, would closure, operative pathology, and common compliucations as applied to general and specialty surgery. Topics include: introduction to surgical procedures, general surgery, gynecological surgery, gastrointestinal surgery, genitourinary surgery, and head and neck surgery. (Summer for Day Classes)

SUR 104 Surgical Procedures II   **Credit Hours: 6**
Prerequisites: SUR 103, SUR 113; Corequisites SUR 114, SUR 124
Continues the development of student knowledge and skills applicable to specialty surgery areas. Topics include: ophthalmic surgery, orthopedic surgery, plastic surgery, thoracic surgery, vascular surgery, cardiovascular surgery, and neurosurgery. (Fall for Day Classes)

SUR 112 Introduction To Surgical Practicum   **Credit Hours: 7**
Prerequisite: AHS 101, SUR 101, Corequisite: SUR 102
Orients students to the clinical environment and provides experience with basic skills necessary to the surgical technologist. Topics include scrubbing, gowning, gloving, and draping; assistance with patient care; processing of instruments and supplies; creation and maintenance of a sterile field; basic instrumentation; and environmental sanitation. (Spring for Day Classes)

SUR 113 Specialty Surgical Practicum   **Credit Hours: 8**
Prerequisites: SUR 102, SUR 112; Corequisite: SUR 103
Continues development of surgical team participation through clinical experience. Emphasis is placed on participation in routine procedures and procedures for general and specialty surgery. Topics include participation in general surgery, obstetrical and gynecological surgery, head and neck surgery, plastic and reconstructive surgery. (Summer for Day Classes)

SUR 114 Advanced Specialty Surgical Practicum   **Credit Hours: 8**
Corequisites: SUR 104, SUR 124
Provides opportunity for students to complete all required surgical technology procedures through participation in surgery in the hospital environment or simulations in the technical institute. Topics include primary scrub on general and specialty surgical procedures; secondary scrub on expanded specialty procedures; plastic, thoracic, vascular, cardiovascular, and neurosurgery procedures; and completion of all required surgical technology clinical competencies. (Fall for Day Classes)

SUR 124 Seminar in Surgical Technology   **Credit Hours: 3**
Corequisite: SUR 114
Prepares students for entry into careers as surgical technologists and enables them to effectively review for the national certification examination. Topics include professional preparation, certification review, and test-taking skills. (Fall for Day Classes)

WLD 100 Introduction To Welding Technology   **Credit Hours: 6**
Provides an introduction to welding technology with an emphasis on basic welding laboratory principles and operating procedures. Topics include safety practices, hand tool and power machine operations, measurement, laboratory procedures, introduction to codes and standards, welding career potentials and certification eligibility; basic electricity and power sources, and metals characteristics, preparation, and testing procedures. Laboratory demonstrations parallel class work. (Quarterly for Day and Evening Classes)

WLD 101 Oxyfuel Cutting
Prerequisite/Corequisite: 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 oxyfuel cutting torch and flame cutting apparatus, metal heating and cutting techniques, cutting with manual and automatic cutting machines, and oxyfuel pipe cutting. Practice in the laboratory is provided. (Quarterly for Day and Evening Classe)

WLD 102 Oxyacetylene Welding   Credit Hours 1
Prerequisite/Corequisite: WLD 100
Introduces the fundamental theory, safety practices, equipment, and techniques necessary to perform basic oxyacetylene welding operations. Topics include welding theory, safety procedures and practices, proper use of gas cylinders, regulators, torches, tips, and other oxyacetylene welding apparatus, welding without filler rods, running beads with filler rods, joint design and making butt lap, and open butt joints, and brazing and soldering. Practice in the laboratory if provided. (Quarterly for Day and Evening Classes)

WLD 103 Blueprint Reading   Credit Hours 3
Prerequisite/Corequisite: WLD 100
Introduces the knowledge and skills necessary for reading welding and related blueprints and sketches. Topics include basic lines, sketches, basic views, joint design, and detail and assembly prints. (Quarterly for Day and Evening Classes)

WLD 104 Shielded Metal Arc Welding
Prerequisite/Corequisite: WLD 100
Introduces the fundamental theory, safety practices, equipment, and techniques required for shielded metal arc welding (SMAW) in the flat position. Qualification tests, flat position, are used in the evaluation of student progress toward making industrial standard welds, Topics include SMAW safety and health practices; SMAW theory; basic electrical principles; introduction to SMAW machines; equipment setup; identification and selections of low hydrogen, mild steel, and other common electrodes; joint design; selection and preparation of materials; and production of beads and joints in the flat position. (Quarterly for Day and Evening Classes)

WLD 103 Blueprint Reading I   **Credit Hours: 3**
Prerequisite/Corequisite: MAT 101
Introduces the knowledge and skills necessary for reading welding and related blueprints and sketches. Topics include basic lines, sketches, basic views, joint design, and detail and assembly prints. (Quarterly for Day and Evening Classes)

WLD 105 Shielded Metal Arc Welding II   **Credit Hours: 6**
Introduces the fundamental theory, safety practices, equipment, 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 SMAW safety and health practices and procedures; production of welds; horizontal joints; and uses of low hydrogen, mild steel, and other common electrodes in horizontal position welding. Quarterly for Day and Evening Classes.

WLD 106 Shielded Metal Arc Welding III   **Credit Hours: 6**
Prerequisite/Corequisite: WLD 100
Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the verticle position. Qualification tests, vertical position, are used in the evaluation of student progress toward making industrial standard welds. Topics include SMAW safety and health practices, production of welds of uniform width and height; manipulation of electrodes to produce specification welds; vertical joints; and applications of low hydrogen, mild steel, and other common electrodes in vertical position welding. (Quarterly for Day and Evening CLasse)

WLD 107 Shielded Metal Arc Welding IV   **Credit Hours: 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 SMAW safety and health practices; production of welds of uniform width and height; manipulation of electrodes to produce specification welds; overhead joints; and applications of low hydrogen, mild steel, and other common electrodes in overhead position welding. (Quarterly for Day and Evening Classe)

WLD 108 Blueprint Reading II   **Credit Hours: 3**
Prerequisite: WLD 103
Emphasizes welding symbols and definitions through which the engineer or designer com municates with the welder. Welding symbols are considered an integral part of blueprint reading for the welder. Topics include weld symbols and abbreviations; basic joints for weldment fabrications; fillet welds, groove welds; back or backing and melt-thru welds; plug and slot welds; surfacing welds; flash welds and upset welds; and flange, spot, projection, and seam welds. (Quarterly for Day and Evening Classes)

WLD 109 Gas Metal Arc Welding (GMAW/MIG)   **Credit Hours: 6**
Prerequisite: WLD 100
Provides knowledge of theory, safety practices, equipment, and techniques required for suc cessful gas metal arc welding. Qualification tests, all positions, are used in the evaluating of student progress toward making industrial standard welds. Topics include GMAW safety and health practices, GMAW theory; machines and set-up; wire specifications; joint design; shielding gases; and production of GMAW beads, bead patterns, and joints in all positions. (Quarterly for Day and Evening Classe)

WLD 110 Gas Tungsten Arc Welding (GTAW-TIG)   **Credit Hours: 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 evaluating of student progress toward making industry standard welds. Topics include safety and health practices, metals weldable using GTAW; shielded gases; metal cleaning procedures; GTAW machines and equipment setup; selection of filler rods; GTAW weld posi tions; and production of GTAW beads, bead patterns, and joints in all positions. (Quarterly for Day and Evening Classes)

WLD 112 Preparation for Industrial Qualification   **Credit Hours: 4**
Prerequisites: WLD 101, WLD 102, 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 qualification test methods and procedures, codes and standards, fillet and groove weld test specimens, and national industrial student preparation for qualification and job entry. (Quarterly for Day and Evening Classes)

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ACADEMIC CALENDAR
1999-00

SUMMER QUARTER

Registration .... June 8, 1999
First Day of Class .... July 6, 1999
Last Day for Late Registration...July 2, 1999
Last Day to Add a Class .... July 12, 1999
Last Day to Drop a Class .... July 12, 1999
Midterm .... August 4, 1999
Holiday .... September 6, 1999
Final Examination Period .... September 16&17, 1999

FALL QUARTER

Registration .... September 15, 1999
First Day of Class .... October 4, 1999
Last Day for Late Registration .... October 1, 1999
Last Day to Add a Class .... October 11, 1999
Last Day to Drop a Class .... October 11, 1999
Midterm .... November 3, 1999
Holiday .... November 25 & 26, 1999
Final Examination Period .... December 16 & 17, 1999

WINTER QUARTER

Registration .... December 15,1999
First Day of Class .... January 5, 2000
Last Day for Late Registration .... January 4, 2000
Last Day to Add a Class .... January 11, 2000
Last Day to Drop a Class .... January 11, 2000
Holiday. .... January 17, 2000
Midterm .... February 2, 2000
Final Examination Period .... March 21 & 22, 2000

SPRING QUARTER

Registration .... March 20, 2000
First Day of Class .... April 3, 2000
Last Day for Late Registration .... March 31, 2000
Last Day to Add a Class .... April 10, 2000
Last Day to Drop a Class .... May 10, 2000
Midterm .... May 3, 2000
Holiday .... May 29, 2000
Final Examination Period .... June 14 & 15, 2000
Graduation. .... June 16, 2000

ACADEMIC CALENDAR
2000-01

SUMMER QUARTER

Registration .... June 13, 2000
First Day of Class .... July 10, 2000
Last Day for Late Registration................................June 30, 2000
Last Day to Add a Class .... July 17, 2000
Last Day to Drop a Class .... July 17, 2000
Midterm .... August 9, 2000
Holiday .... September 4, 2000
Final Examination Period .... September 20 & 21, 2000

FALL QUARTER

Registration .... September 19, 2000
First Day of Class .... October 2, 2000
Last Day for Late Registration .... September 29, 2000
Last Day to Add a Class .... October 9, 2000
Last Day to Drop a Class .... October 9, 2000
Midterm .... November 1, 2000
Holiday .... November 23 & 24, 2000
Final Examination Period .... December 14 & 15, 2000

WINTER QUARTER

Registration .... December 13,2000
First Day of Class .... January 3, 2001
Last Day for Late Registration .... January 2, 2001
Last Day to Add a Class .... January 9, 2001
Last Day to Drop a Class .... January 9, 2001
Holiday. .... January 15, 2001
Midterm .... February 7, 2001
Final Examination Period .... March 20 & 21 , 2001

SPRING QUARTER

Registration .... March 19, 2001
First Day of Class .... April 2, 2001
Last Day for Late Registration .... March 30, 2001
Last Day to Add a Class .... April 9, 2001
Last Day to Drop a Class ....May 9, 2001
Midterm ....May 9, 2001
Holiday .... May 28, 2001
Final Examination Period .... June 13 & 14, 2001
Graduation. .... June 15, 2001

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