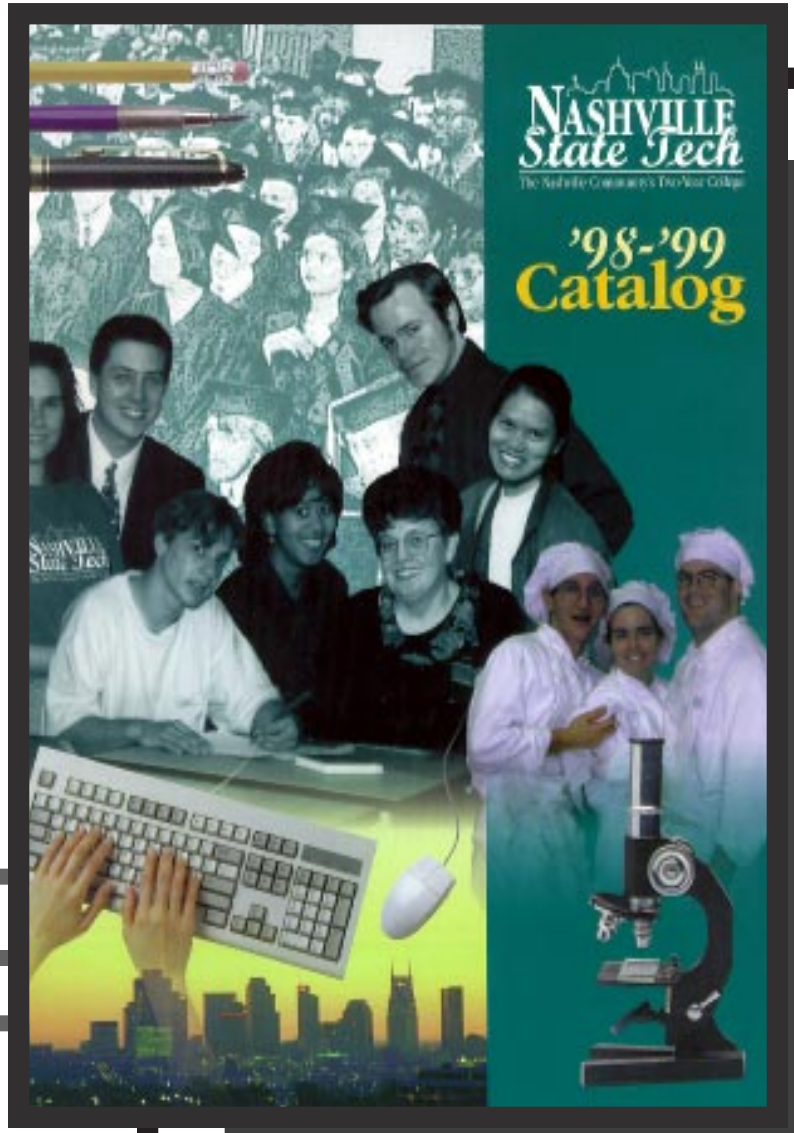

Nashville State Tech

1998-99 Catalog

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NASHVILLE
State Tech
The Nashville Community Two-Years College

1998-1999
Catalog

Volume 26

120 White Bridge Road
Nashville, TN 37209
615-353-3333
800-2727363

Policy statement of nondiscrimination

Nashville State Tech does not discriminate in any form against students, employees, or applicants on the basis of race, sex, national origin, religion, age or disability. Nashville State Tech complies with nondiscrimination laws Title VI, Title IX, Section 504 and the ADA. This discriminatory policy and practice extends to cover all educational programs and activities conducted by Nashville State Technical Institute. Procedures for filing grievances can be obtained from the college's Affirmative Action Officer.

Front cover photographs by Paula L. Southgate, Visual Communications student, Richard Vaughn, Photography adjunct faculty, and Ellen L. Zink, Visual Communications adjunct faculty and Manager of Publications / Media Relations.
Back cover photographs by Richard Vaughn, Photography adjunct faculty.

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Architectural Engineering Technology		✔	
Automotive Service Technology		✔	
Business Management	Customer Service Financial Services Management Small Business Administration	✔ ✔ ✔	
Civil & Construction Engineering Technology		✔	
Communications Technology		✔	
Computer Accounting Technology	Accounting Information Systems Microcomputer Applications	✔ ✔	
Computer Information Systems Technology	Mainframe Microcomputer	✔ ✔	
Computer Technology		✔	
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Surgical Technology			✔
Visual Communications	Graphic Design Photography		
Workforce Readiness	Business Computer Information Office Administration		✔ ✔ ✔

ACADEMIC CALENDAR 1998 - 99

Fall 1998

On Campus Registration Day..	Thursday..	August 20
Weekend Classes Start...	Saturday	August 22
Regular Classes Start..	Monday..	August 24
Last Day of Late Registration..	Wednesday..	August 26
Deadline for filing Spring 99 Graduation Intent	Friday..	September 4
Holiday - Labor Day (no classes)	Monday - Tuesday..	September 7 - 8
Last Day to Remove "I" Grade from Summer 98 Term..	Thursday	September 17
Last Day to Withdraw and receive a "W".	Friday	October 30
Holiday - Thanksgiving (no classes).	Wednesday - Sunday..	November 25 - 29
Weekend Classes End	Saturday	December 5
Regular Classes End	Friday	December 11
Exams Period	Saturday - Wednesday	December 12 - 16

spring1999

On Campus Registration Day..	Wednesday..	January 6
Regular Classes Start	Friday	January 8
Weekend Classes Start	Saturday..	January 9
Last Day of Late Registration	Tuesday	January 12
Holiday - Martin Luther King Day (no classes)	Monday..	January 18
Deadline for filing Summer 99 Graduation Intent	Friday..	January 22
Last Day to Remove "I" Grade from Fall 98 Term	Wednesday	February 3
Spring Break..	Monday - Sunday.	March 15 - 21
Last Day to Withdraw and receive a "W".	Friday	March 26
Holiday - Good Friday (no classes)	Friday - Sunday.	Apri1 2 - 4
Weekend Classes End	Sunday	May 2
Regular Classes End	Monday..	May 3
Exam Period	Tuesday - Saturday..	May 4 - 8

If Nashville State Tech cancels classes because *of inclement weather, make-up sessions will be rescheduled May 4, 5 and/or 6. The final* exam *period will then be rescheduled as needed.*

Summer 1999 (Regular 8-week session)

On Campus Registration Day	Tuesday	June 1
Last Day of Late Registration	Thursday	June 3
Regular Classes Start..	Friday..	June 4
Weekend Classes Start..	Saturday	June 5
Deadline for filing Fall 99 Graduation Intent	Friday..	June 18
Last Day to Remove "I" Grade from Spring 99 Term	Tuesday	June 29
Holiday - Independence Day (no classes).	Saturday - Monday..	July 3 - 5
Last Day to Withdraw and Receive "W"	Friday..	July 9
Regular Classes End and Final Exams End	Friday	July 30
Weekend Classes End and Final Exams End	Sunday	August 1

Summer 1999 (1st session-four-weeks)

On Campus Registration	Tuesday	June 1
Last Day of Late Registration	Thursday	June 3
Regular Classes Start..	Friday..	June 4
Weekend Classes Start..	Saturday..	June 5
Last Day to Withdraw and Receive "W".	Wednesday..	June 23
Weekend Classes and Final Exams End	Sunday..	June 27
Regular Classes and Final Exams End..	Thursday..	July 1

Summer 1999 (2nd session- four-weeks)

On Campus Registration	Tuesday	June 29
Last Day of Late Registration	Thursday..	July 1
Regular Classes Start..	Friday..	July 2
Holiday - Independence Day (no classes)	Saturday - Monday..	July 3 - 5
Weekend Classes Start	Saturday	July 10
Last Day to Withdraw and Receive "W".	Wednesday..	July 21
Regular Classes and Exams End..	Friday	July 30
Weekend Classes and Exams End..	Sunday..	August 1

Fall 1999

On Campus Registration	Tuesday	August 17
Regular Classes Start..	Thursday	August 19
Weekend Classes Start	Saturday..	August 21
Last Day of Late Registration	Monday	August 23
Deadline for filing Spring 00 Graduation Intent	Thursday	September 2
Holiday - Labor Day (no classes).	Monday -Tuesday	September 6 - 7
Last Day to Remove "I" Grade from Summer 99 Term	Tuesday	September 14
Last Day to Withdraw and Receive "W"	Thursday..	October 28
Thanksgiving Break / Holiday (no classes).	Wednesday - Sunday	November 24 - 28
Weekend Classes End	Sunday..	December 5
Regular Classes End..	Wednesday	December 8
Exam Period..	Thursday - Tuesday..	December 9 - 14

This calendar is *subject to change at any time prior to or during an academic term due to emergencies or causes beyond the reasonable control of the institution, including severe weather, loss of utility services,* **or** *orders by* federal *or state agencies.*

"The object of education is
to prepare students to educate themselves
throughout their lives."

Robert H. Hutchins

STATEMENT OF MISSION

Nashville State Technical Institute offers associate's degree and certificate programs, in addition to an extensive series of courses for business and industry. The college provides technical career education programs that prepare first-time and returning adult students for employment; courses, workshops, and seminars for lifelong learning; classes and support services for underprepared students and general education transfer courses. The college also maintains articulation agreements with public and private universities for students who may decide to pursue a bachelor's degree.

The public two-year college serves a diverse geographic area comprised of metropolitan Davidson County as well as Cheatham, Dickson, Houston, Humphreys, Montgomery, Stewart counties, and the Upper Cumberland region. Nashville State Tech is a member of the State University and Community College System of Tennessee, which is governed by the Tennessee Board of Regents. It serves as the lead institution for the Tennessee Technology Centers in Nashville and Dickson.

Nashville State Tech serves a student body that is equally diverse in age, race, and educational goals by providing a high-quality, low-cost education. It offers a convenient schedule of day and evening classes, both on and off campus. Its instructional programs emphasize the skills and applications needed for job performance as well as a strong general education component. The college offers the associate's degree in a broad range of business, computer, and engineering technology fields. As a technical college, it is committed especially to providing the most comprehensive and state-of-the-art technology programs.

Nashville State Tech takes pride in its positive and supportive collegiate environment, providing student services which include tutoring, testing, counseling, academic advising, financial assistance, assistance for persons with disabilities, cooperative education, employment placement, automated library, print and electronic information services, campus security, and student activities and organizations.

Accreditation and Memberships

Nashville State Tech is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097; Telephone number 404-679-4501) to award the Associate of Applied Science degree.

The following engineering technology programs have been accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology:

- Architectural Engineering Technology
- Automation-Robotics Technology
- Civil and Construction Engineering Technology
- Computer Technology
- Electrical Engineering Technology
- Electronic Engineering Technology
- Industrial Engineering Technology
- Mechanical Engineering Technology
- The Automotive Programs for both the Ford Motor Company (ASSET) and General Motors Corporation (ASEP) are accredited by the National Automotive Technicians Education Foundation, Inc.

The Occupational Therapy Assistant Technology program is accredited by the Accreditation Council of Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA).

Nashville State Tech holds membership in additional professional organizations, including:

- American Association of Collegiate Registrars and Admissions Officers
- American Association of Community Colleges
- American Society for Engineering Education
- American Technical Education Association
- Association of College and University Auditors
- Association of Collegiate Business Schools and Programs
- Nashville Area Chamber of Commerce
- National Association of College and University Business Officers
- National Association of Student Financial Aid Administrators
- Servicemembers Opportunities Colleges
- Tennessee College Association
- The College Board

History of Nashville State Tech

In 1963, the Tennessee General Assembly passed House Bill No. 633 authorizing the statewide system of regional technical institutes and area vocational-technical schools.

Nashville State Tech opened in 1970 with an enrollment of 398 students. By the Fall of 1997, that number had grown to 6,901; with an enrollment of over 11,000 students during the entire academic year. Nashville State Tech's initial offering of five associate's degree programs has grown to 18 degree programs and three certificate programs. In addition, Nashville State Tech offers continuing education courses ranging from technical skills to management training and programs providing training in such areas as computer-aided drafting and office technology.

Nashville State Tech is authorized to offer the Associate of Applied Science degree, as well as technical and academic certificates. Since 1984, Nashville State Tech has been governed by the Tennessee Board of Regents of the State University and Community College System.

Nashville State Tech shares a 109 acre campus with the Tennessee Technology Center at Nashville. The Nashville State Tech facilities include 239,000 square feet of space for classrooms, labs, offices, student services, and a library.

Admissions to College

Nashville State Tech provides opportunities for collegiate education to all qualified applicants without regard to their race, color, sex, religion, national origin, age, or disability. Information concerning admission is available from:

Admissions Office
Nashville State Tech
120 white Bridge Road
Nashville, TN 37209
Phone: (615) 353-3215

All applications must be accompanied by a $5 nonrefundable application fee. This fee is payable one time only, regardless of the program of study the student intends to follow. The applicant should have the admissions application and other required documents on file early enough to allow ample time for processing and for information to be forwarded to the applicant concerning registration. All admission credentials become the property of the college and cannot be forwarded or returned. The Vice President of Academic Affairs may, upon appeal, waive or modify conditions of admission for individual applicants.

Male students who are required to register for the Selective Service (those between the ages of 18 and 26 years of age) must be registered with the Selective Service System before enrolling for course(s) at Nashville State Tech. Men who have previously served in the military must also meet this requirement. If the student has not registered for the Selective Service System, the student must complete a Selective Service Registration Form in the Admissions Office.

Upon receipt of applications, the Admissions Office will notify applicants concerning the American College Testing (ACT) Program, placement assessment, and registration dates prior to their first semester of attendance. High school graduates under 21 years of age and classified as degree-seeking are required to take the ACT. Information about the ACT may be obtained from the high school counselor, the Admissions Office at Nashville State Tech, or by writing to American College Testing, Inc., P.O. Box 168, Iowa City, Iowa 52243. **Nashville State Tech's ACT** code is 3983. This number should be used when requesting that test scores be sent to Nashville State Tech. Degree-seeking applicants under 21 years of age who have not taken the ACT will be required to take the ACT through the college's Testing Center. AAPP assessment for course placement may be required for applicants under 21 years of age based upon ACT test results. Degree-seeking applicants 21 years of age or older will be required to take the AAPP for course placement.

Students who consider themselves inadequately prepared to pursue a college-level course may request assessment to determine whether they need college-prep courses (R/D) English, mathematics, or reading courses. They must complete the appropriate AAPP pretest and, if scores indicate the need, will be placed in an R/D course. After completing the final developmental studies course, they may proceed to college-level courses.

Placement decisions in R/D courses are the responsibility of the Academic Skills program director. Study skills placement is required for either (1) students who are placed in at least two subject areas at the remedial level or (2) students who are placed in three subject areas of either remedial or developmental levels. Beyond this mandatory placement, students with two deficiencies, either both developmental or one developmental and the other remedial, have the option to elect placement in Study Skills.

The Occupational Therapy Assistant Technology, Surgical Technology, and Automotive Service Technology programs are subject to special admission requirements. Applicants to these programs should request additional materials to become more familiar with these requirements.

Residency Requirements

The following are rules for determination of "in-state" or "out-of-state" status for fees and tuition purposes as defined by the Tennessee Board of Regents:

1. Every person having his or her domicile in Tennessee shall be classified "in-state" for fees, tuition and admission purposes.
2. Every person not having his or her domicile in Tennessee shall be classified "out-of-state" for said purposes.
3. The domicile of an "unemancipated person" is that of his or her parent. "Emancipated person" shall mean a person who has attained the age of eighteen years and whose parents have entirely surrendered the right to the care, custody, and earnings of such person and who no longer are under any legal obligation to support or maintain such deemed "emancipated person." Unemancipated students of divorced parents shall be classified "in-state" when one parent, regardless of custodial status, is domiciled in Tennessee.
4. The spouse of a student classified "in-state" shall also be classified "in-state."
5. Persons who live in another state but are employed full-time in the state of Tennessee may be classified full-time employee/part-time student and pay in-state fees if they are enrolled for less than 12 credit hours. The full-time employment must be documented each semester.
6. Unless the contrary appears from clear and convincing evidence, it shall be presumed that an emancipated person does not acquire domicile in this state while enrolled as a full-time student at any **public or private** higher educational institution in this state, as such status is defined by such institution.

Persons who assert that they have established domicile in Tennessee bear the burden of proving that they have done so. International students and H and J visa students are classified out-of-state for fee payment purposes. Residency Classification brochures and applications are available in the Admissions Office.

Veterans' Benefits

Veterans and eligible dependents of veterans who wish to apply for Department of Veterans Affairs (DVA) educational benefits must contact the Veterans Affairs Program Coordinator in the Records Office for information and completion of necessary forms:

VA benefits cannot be paid until the student has applied for admission to NSTI and the program of training has been certified to DVA by the VA Coordinator. All required documentation must be provided by the student to the Admissions Office and the VA Coordinator **by the end of the first term of enrollment** to avoid overpayment or cancellation of benefits.

To determine specific eligibility requirements, students should direct questions to the VA Coordinator or to the DVA Regional Office at 1-800-827-1000.

Servicemembers Opportunity College (SOC)

Nashville State Tech is a member of Servicemembers Opportunity Colleges (SOC), a consortium of colleges and universities which provides a full range of associate, baccalaureate and graduate degrees to military servicemembers, civilian employees of the Department of Defense, and their family members throughout the world. As a SOC member, Nashville State Tech recognizes the unique nature of the military lifestyle and is committed to easing the transfer of relevant course credits, providing flexible academic residency requirements, and crediting learning from appropriate military training and experiences.

Admissions Requirements for Degree-Seeking Students

Technical Certificate Students

Students admitted to technical certificate programs must be high school graduates or its equivalent (GED). Documents showing proof of graduation with regular high school diploma or GED must be submitted to the Admissions Office. Technical certificate programs emphasize skills needed by business and industry located in Nashville and surrounding counties. Technical Certificate programs are offered in Electrical Maintenance, Photography, Workforce Readiness and Surgical Technology (special admission requirements).

First-Time Students: Degree-Seeking

An applicant with no previous college enrollment who seeks admission to Nashville State Tech for an associate's degree program must have earned a high school diploma or its equivalent (GED). Applicants must do the following:

1. Submit a completed application for admission.
2. Submit a $5 nonrefundable application fee with the application.
3. Submit an official transcript of credits showing graduation from an approved or accredited high school. Students who graduated from a Tennessee public high school in 1983 and after must submit an official transcript verifying:

   a. Graduation with a regular high school diploma.

   b. Passing score on the State proficiency exams.

   Home-schooled students or high school graduates from a school not accredited by the appropriate regional accrediting agency or the State Department of Education may be admitted by taking the General Educational Development (GED) Test. The GED score must be a minimum average standard score of 45 with no subscore less than 35. This GED requirement is waived for graduates from high schools not regionally accredited or state approved if they submit an official high school transcript and earn a minimum Enhanced ACT composite score of 19. This GED requirement is waived for graduates from high schools not regionally accredited or state approved if they submit an official high school transcript and earn a minimum Enhanced ACT composite score of 19 and sub-scores of 19 in both English and Mathematics.

4. Report ACT (or SAT) scores. High school graduates under 21 years of age who are seeking a degree will not be admitted unless they have taken the ACT (or SAT) and reported their scores to the Admissions Office. If ACT (or SAT) scores are more than three (3) years old the test must be taken again. Applicants who have not taken the ACT may do so at Nashville State Tech.
5. Complete all necessary assessment for the purpose of course placement:

   a. Students under 21 years of age and whose ACT composite score is 18 or lower must complete the AAPP reading comprehension test.

   b. Students under 21 years of age and whose ACT mathematics sub-score is 18 or lower must take the appropriate AAPP mathematics tests as determined by level of high schools preparation in mathematics.

   c. Students under 21 years of age and whose ACT English sub-score is 18 or lower must complete the AAPP writing sample.

   d Students 21 years of age or older are required to complete the entire AAPP test. Students 21 years of age or older are not required to present ACT scores, but may do so provided the test was completed within three years prior to the first day of the first term of enrollment. Students with valid ACT scores will then be screened for AAPP assessment according to the regulations applied to students under 21 years of age. The institution may require students who have earned the GED to take the AAPP regardless of ACT (or SAT) scores.

   e. Students that require assessment for course placement will need to contact the Testing Center at 353-3564 or 353-3565 to make an appointment to take the AAPP test. The **operating hours for the Testing Center are: Monday through Thursday,** 8:00 AM to 7:30 PM **and Friday, 8:00 AM to 4:30** PM.

Degree-seeking applicants who have academic deficiencies based on assessment may be limited in the number of courses they are allowed to take. These applicants must remove deficiencies through the Academic Skills Department prior to enrolling in college-level courses. Educational records, academic and career goals, and personal interviews, in addition to ACT and assessment scores, are considered when placing students in appropriate courses.

High school students who are planning to pursue a college degree can best prepare themselves for college-level courses by completing two units of algebra, one unit of geometry, and four units of English. At the high school level, successful completion of these classes may eliminate the need for remediation. It is recommended that students planning to major in a **Business Technologies** program also complete one unit of bookkeeping or accounting at the high school level. **Engineering Technologies** majors will need a strong background in mathematics and science.

International Students and F-l Visa

Nashville State Tech is authorized under federal law to enroll nonimmigrant students on **F-l** student visas in the associate degree programs. Applicants should have the following credentials on file in the Admissions Office **one month prior to the starting of the semester** in which they wish to enroll:

1. A completed application for admission.
2. A $5 nonrefundable application fee submitted with the application.
3. Official copies of academic records of attendance from secondary schools, colleges, or universities accompanied by **a** notarized or certified English translation of these documents.
4. Official scores of the Test of English as a Foreign Language (TOEFL). A minimum score of 500 is required for admission. Course work completed at another United States institution may be used in lieu of standardized examination scores. Additional institutional placement assessment is required of all international students. Any academic skill deficiencies must be removed through enrollment in the Academic Skills Department. Our **TOEFL code number is 1149.**
5. Satisfactory evidence of the financial capability to meet the expense involved while studying at Nashville State Tech. Applicants on F-l status must complete the form, provided by the college, showing financial capability. Completion of this form includes the student's intent to attend the college full time (12 or more credit hours per semester) and states that no employment will be required to meet expenses. International students will pay out-of-state fees.
6. A certificate from a licensed physician or other medical authority verifying freedom from tuberculosis. This certificate must be submitted to the Admissions Office 30 days from the first day of classes in order to continue enrollment. If the student either has tuberculosis or has potential tuberculosis requiring medical treatment, continued enrollment depends upon the decision of a licensed physician that enrollment is not a risk to others, and upon the student's compliance with any prescribed medical treatment.
7. All foreign nonimmigrant students with F visas must enroll in the TBR **Student/Scholar Health & Accident Insurance Plan** as a condition of admission and continued enrollment at the institution. In the event that a student has "adequate coverage," the required enrollment in TBR's S/S H&A Insurance Plan will be waived. For the purpose of this policy, "adequate coverage" shall mean that the student's coverage meets or exceeds the level of coverage provided to participants in the TBR's **Student/Scholar Health & Accident Insurance Plan.**

Students Whose First Language is not English

These students are required to take the Michigan Plus Language Proficiency Test to be eligible for special accommodation such as extended test time and other language assistance. See the ESL specialist for additional information.

Students whose first language is not English are protected under Title Vl of the Civil Rights Acts and are guaranteed language assistance once a language deficiency is documented.

Readmission of Former Students

A student who has previously attended Nashville State Tech, but has not been enrolled for two semesters (excluding summer), and seeks readmission to an associate's degree program must apply for readmission and meet the following requirements:

1. Submit a completed application for admission.
2. Submit an official transcript from each college or university attended since leaving Nashville State Tech. (Degree-seekers and students taking math or English)
3. Be eligible for readmission under the college's retention policies.
4. Be assessed if they do not meet one of the following requirements: Enhanced ACT math, English scores and composite scores of 19 or above or previously earned college credit for the first-term math and English courses. Those who are identified as not meeting these requirements will be assessed and placed in appropriate course work.

Students Transferring to Nashville State Tech

An applicant who has attended another college or university and is applying for admission to an associate's degree program must meet the following requirements:

1. Submit a completed application for admission
2. Submit a $5 nonrefundable application fee with the application.
3. Submit official transcripts from all previously attended colleges, regardless of credits earned and regardless of whether transfer credit is desired. GED scores are required for those who have earned the GED. These **transcripts must be sent directly to the**

Admissions Office and cannot be accepted from the applicant. Students whose academic records do not meet the academic retention standards of Nashville State Tech may be admitted conditionally based on satisfactory academic performance during their first semester of attendance.

4. Be assessed if they do not meet one of the following requirements: Scores less than three years old of Enhanced ACT math, English and composite scores of 19 or above, or previously earned college credit for first-term math and English courses. Those who are identified as not meeting these requirements will be assessed and placed in appropriate course work.
5. Submit ACT/SAT scores and AAPP scores, taken at another institution.

Credit may be awarded to transfer students when the following standards are met:

1. All previous college or university records are on file in the Admissions Office.
2. The coursework transferred or accepted for credit toward an undergraduate degree must represent collegiate coursework relevant to the degree, with course content and level of instruction resulting in student competencies at least equivalent to those of students enrolled in the institution's own undergraduate degree programs.
3. Credits earned more than six years prior to enrollment at Nashville State Tech are reviewed and evaluated by the appropriate department head and transfer credit/graduation analyst.
4. Courses are judged to be equivalent to those offered at Nashville State Tech and are required for the student's declared major.

If a student has earned credit for a course at a prior institution with fewer than the number of hours required for the equivalent course at Nashville State Tech, credit may be given for that course if the material covered is sufficiently equivalent to the Nashville State Tech course. In all cases a student must have earned a minimum of 64 semester hours to meet the graduation requirements for the Associate of Applied Science degree. Grades earned at another institution are not used to compute a student's grade point average at Nashville State Tech.

Students Transferring to Other Colleges and Universities

Many students enroll at Nashville State Tech for the purpose of transferring to a four-year college or university. Most four-year degree programs are designed so that students complete general education requirements during the first two-years of study. Nashville State Tech provides general education courses in humanities, social sciences, natural sciences and mathematics, speech and English that will transfer to four-year colleges or universities.

Nashville State Tech has articulation agreements with Austin Peay State University, East Tennessee State University, Middle Tennessee State University, Tennessee State University, Tennessee Tech, Western Kentucky University, University of Memphis, University of Tennessee-Knoxville and Belmont University. Other colleges and universities also work with Nashville State Tech on a course by course evaluation of credits.

Students who are interested in completing general education requirements at Nashville State Tech should speak with an advisor in the Student Development Office to develop a program of study.

Degree-seeking students who are pursuing an Associate of Applied Science degree may transfer many of their major courses to a four-year college or university. After completing the Associate of Applied Science degree, these students should work with the department head of the receiving institution about transferability of the coursework.

Admissions Requirements For Non-Degree-Seeking Student

Academically Talented Students

Academically talented or gifted students enrolled in grades 9, 10, 11, or 12 in state-approved high schools in Tennessee may, with the recommendation and approval of the high school principal and appropriate higher education institutional personnel, enroll in and receive regular college degree credit from a Tennessee postsecondary institution if such a student has a grade point average equivalent to 3.2 on a 4.0 maximum basis and if such placement is a part of the student's planned Individual Education Program (IEP) as established by the multidisciplinary team process.

An applicant who wishes to be admitted under this classification must complete a special form available from the Admissions Office and submit the following:

1. A completed application for admission.
2. A $5 nonrefundable application fee.
3. Official verification from the high school of a minimum cumulative grade point average of 3.2 on a 4.0 scale.
4. Recommendation and approval from the high school principal.

College/High School Concurrent Enrollment

High school students who have completed the tenth grade or its equivalent may register for college course(s) each semester. It is not the intent that a Nashville State Tech course substitute for any required course or elective pursuant to graduation from high school. Whether or not a Nashville State Tech course substitutes for any required course or elective leading to graduation from high school is solely determined by that school's principal. Credits earned may be applied to a certificate or degree when regular admissions requirements are met.

An applicant who wishes to be admitted for dual or joint enrollment must meet the following requirements:

1. Submit a completed application for admission along with a nonrefundable $5 application fee.
2. Show competency in the basic skills of arithmetic, reading, and English composition as reported on the ACT (or SAT) score report.
3. Provide written permission from the parents and the high school principal.
4. Meet all prerequisites for courses.

The Residual ACT may be taken at Nashville State Tech. Residual ACT means that the scores are used exclusively at Nashville State Tech and cannot be used for admission to another college or university.

Special Students

A special student is one who is not enrolled in a degree program. Students in this classification desire to take one or more courses in order to gain employment skills, professional growth, or personal enrichment. In order to apply, special students should:

1. Submit a completed application for admission.
2. Submit a $5 nonrefundable application fee with the application.
3. Students under 21 years of age must be high school graduates or have the GED equivalent. Documents showing graduation or GED must be submitted to the Admissions Office. One exception to this requirement is that students 18 years of age or older who have not earned a high school diploma, are not enrolled in high school, and are seeking admission only to pursue study in GED preparatory courses will not be high school graduates.

There is no limit on the number of hours a special student can pursue. Although special students are not required to complete normal assessment procedures, they should realize that the content of college-level courses assumes mastery of fundamental knowledge, skills, and aptitudes required for the course. **Special students may not enroll in a college-level English or mathematics course, or in a course that has an English or mathematics prerequisite, until they have provided evidence of adequate preparation for** these courses. This evidence may consist of college transcripts or AAPP assessment.

If a special student decides to pursue an associate's degree, the student must meet all admission requirements for the degree-seeking student. Credit hours accumulated as a special student are not applicable to the final 24 semester hours required for an associate's degree.

Campus Telephone Directory

General Information	353-3333
Academic Skills Dept.	353-3399
Admissions Office	353-3214
Advising/Student Development Dept.	353-3267
Bookstore	353-3316
Career Employment Center	353-3248
Financial Aid Office	353-3250
JTPA Program	353-3257
Learning Center	353-3551
Library	353-3555
Metropolitan Transit Authority	862-5969
Personnel Office	353-3304
Records Office	353-3216
Security/Lost and Found	353-3273
Single Parents Program	353-3229
Testing Center	353-3564
TVPPA Center	353-3459

Division Offices

Arts and Sciences Division
Dean Pamela Munz 353-3347

Workforce & Community Education Services
Jill S. Johnson 353-3574

Technologies Division
Dean Sydney Rogers 353-3203

Student Services Division
Dean Richard Weeks 353-3261

Academic Standards

ACADEMIC STANDARDS AND PROCEDURES

Associate Degree and Technical Certificate Requirements

It is the student's responsibility to insure that all requirements for graduation are met. Students pursuing an associate degree or technical certificate must satisfy the general and specific requirements as outlined below. No student will be issued a degree or certificate until all debts and obligations to the college have been satisfied.

CATALOG OPTION. A student's program requirements are determined by the catalog in effect the term the student is initially admitted into the degree or certificate program. If a student elects to change programs, or to change to a different area of concentration within a major, the requirements of the catalog currently in effect at the time of the change will apply. Any student may elect to graduate in accordance with the requirements of a catalog published after the student's initial program catalog. However, the option for change of catalog must be declared by the student **no later than** the deadline for filing his/her *Intent to Graduate.* A student who does not remain active and re-applies for admission into a program will be subject to the catalog in effect at the time of re-application.

CREDIT HOURS. All candidates for an associate degree must complete a minimum of 64 semester hours to be eligible for the degree. The credits received by transferring courses from another institution may be counted to meet this requirement of 64 semester hours. Credit hours earned in remedial or developmental courses **cannot** be used to satisfy the minimum credit hour requirement.

MINIMUM RESIDENCY CREDIT. For an associate degree the last 20 credit hours preceding graduation must be completed at Nashville State Tech. For the technical certificate, the last nine credit hours preceding graduation must be completed at Nashville State Tech.

GRADE POINT AVERAGE. A minimum cumulative grade point average of 2.0 based on all college-level course work completed at NST is required to earn an associate's degree or certificate. Remedial and developmental coursework is not calculated in the requirements for graduation.

APPLICATION TO GRADUATE. Each prospective candidate is required to apply for a degree or technical certificate by submitting an **Intent to Graduate** form to the Records Office not later than the deadline published in the Academic Calendar. Students are responsible for notifying the Records Office of any change in their graduation date. A student who fails to apply for a degree or technical certificate by the posted deadline must wait until the next degree-conferring period to be awarded the degree or certificate. Each candidate for graduation must pay a $25 graduation fee at the time of filing the *Intent to Graduate.* All candidates are submitted for approval of the faculty before they are awarded a degree or certificate.

GRADUATION EVALUATION. Each student who applies for graduation will be evaluated according to the provisions of the declared catalog, provided graduation is within six years from the date of admission and the student has maintained continuous enrollment at Nashville State Tech. Continuous *enrollment* is defined as, "Completion of at least one Nashville State Tech course during each academic year after the first term of enrollment." Credit which was earned earlier than six years prior to graduation will be subject to review and evaluation by the appropriate academic department. Students completing all program requirements will be issued a diploma or certificate accordingly.

END-OF-PROGRAM ASSESSMENT TESTING. All students are required, as a prerequisite for graduation, to take one or more tests to assess the effectiveness of Nashville State Tech's program instruction. All associate degree candidates for graduation must complete the ACT-COMP test, which measures achievement in general education. Those students enrolled in Engineering Technology programs must see the Department Head for program assessment testing requirements. Students in other degree majors may be required to complete an Exit Examination prior to graduation. No minimum score or level of achievement is needed for graduation; however, minimum score requirements may be required for licensure, certification, or specific individual degree majors. Check with your advisor for further information.

Students must complete all required tests and must authorize release of their scores to Nasbville State Tech to fully comply with this requirement.

GRADUATION EXERCISES. Nashville State Tech graduation exercises are held each year at the end of the spring term. All students who fulfill the requirements for an associate degree or technical certificate during the academic year are required to participate in the graduation exercises unless excused by the Dean of Student Services.

COMPLETION OF A SECOND MAJOR. Students who have completed an A.A.S. degree with Nashville State Tech may earn a second major by completing all requirements for the additional major that have not already been fulfilled by the A.A.S. degree. A Certificate of Completion will be awarded to students completing a second major. To receive the certificate, the student must submit an *Intent to Complete a* Second *Major* to the Records Office by the end of the first week of classes of the term in which the student intends to complete all requirements

REQUESTS FOR ACADEMIC WAIVER. Students who wish to request a waiver or exception to any academic regulation or requirement must submit the request in writing to the Vice President of Academic Affairs.

Statement of Critical Outcomes

A Nashville State Tech education plays a vital role in preparing students for the workplace, family life and community involvement. This preparation requires more than the specialized expertise specific to a particular technical field. Therefore, courses in arts and sciences as well as courses in the specialized areas stress the importance of problem-solving, critical thinking, interpersonal skills, communication, flexibility and adaptability.

The arts and sciences courses at Nashville State Tech satisfy English, humanities, social sciences, and mathematics/natural sciences requirements for associates' degrees. These courses also prepare students for transfer to other colleges and universities and for personal growth and lifelong learning.

The general education curriculum prepares students to:

- Apply critical thinking skills to problem solving in all aspects of life.
- Communicate effectively through reading, writing, speaking and listening.
- Understand major concepts and principles of social sciences, mathematics, natural sciences, and humanities.
- Understand their own culture and other cultures and be able to establish positive relationships with individuals who have different ethnic and racial identities.
- Analyze, use, and adapt to changing technology and its impact on the individual, society and natural environment.

Preparation for a career encompasses both technology and general education knowledge; Nashville State Tech supports the rationale that general education focuses on application of knowledge and skills with particular emphasis on equipping adults for productive, satisfying and challenging careers. Integrating these Foundation Skills into the specialized courses at Nashville State Tech allows the Nashville State Tech graduate to possess the Workplace Competencies needed for quality job performance.

The arts and sciences and technologies curricula reinforce each other to assure that students acquire the following competencies recommended by the Secretary of Labor 1992 SCANS (Secretary's Commission on Achieving Necessary Skills) Report of Recommendations for Workplace Competencies. These include the ability to use:

- **RESOURCES:** time, money materials, facilities, and human resources with an emphasis on high quality and in accordance with ethical principles.
- **INTERPERSONAL COMMUNICATION:** skills which contribute to group and team work, teach others, provide leadership, and work successfully with diverse people.
- **INFORMATION:** acquiring, organizing and evaluating data, interpreting and communicating information, and utilizing computers to process information.
- **SYSTEMS:** social, organizational and technological systems to monitor and continually improve the performance of the system and of individuals.
- **TECHNOLOGIES:** selection of appropriate equipment and tools, applying technology appropriately, and maintaining and troubleshooting technical equipment.

Honors Program

The Honors Program at Nashville State Tech provides opportunities for highly motivated, academically accomplished students to pursue courses in composition, psychology, sociology, ethics, speech, literature, and history. The goals of the honors program are to encourage intellectual growth, to promote new understanding, to enhance scholarship, and to instill a sense of academic and personal excellence.

The Honors Program is open to new and currently enrolled students. First-semester freshmen should have satisfactory scores on the ACT or SAT. Returning or continuing students must have completed twelve hours with a GPA of 3.0 or higher. All applicants must submit an application form, which includes a writing sample, and may be asked to participate in an interview with an honors committee representative.

Transcripts of Honors Program students will indicate successful participation in the program. Students will also receive a certificate and may be eligible for other benefits.

For more information and an application form, contact the English and Social Sciences department at 353-3531.

Grading Standards and Records

Grades reflect student progress in course content. Nashville State Tech grades on a four-point system as follows:

Credit Grade		Quality Points Per Semester Credit Hour
A	Superior	4
B	Excellent	3
C	Average	2
D	Passing, but below average	1
F	Failure	0
WF	Failure for non-attendance; administratively withdrawn	0

Other Marks

W	Withdrawal	Withdrawal from course initiated by the student.
WD	Withdrawal	Non-punitive withdrawal (Remedial and Developmental courses only.)
I	Incomplete	The I indicates that the student has not completed all of the course work due to such extenuating circumstances as personal illness, death in the family or other justifiable reasons. The I must be removed within four weeks from the published date of registration of the following semester or a grade of F is entered on the permanent record.
X	Continuation	The X indicates the student attempted a course, but progress was not sufficient to warrant a grade. It carries no connotation of failure. It indicates the student, upon the advice of the instructor, should register for the same course and take more time to earn a grade. The X grade is restricted to use in remedial and developmental courses. An overall maximum of 15 semester hours of X is allowed. Veterans who are receiving benefits cannot be awarded an X grade 'in any course.

S Satisfactory	Satisfactory performance has been demonstrated by the student.
U Unsatisfactory	Unsatisfactory performance.
AU	Audit

Grades of W, WD, I, X, S, U and AU have no grade point value and are not used in computing grade point average. Final grades of A, B, C, F or WF only are given in remedial and developmental studies. Students receiving VA educational benefits cannot be given an "X" grade.

Appeal of a Grade

A student who believes that an error has been made in the grade assigned for a given course has 30 days **after the end of the semester in which the grade was earned to request a review of the grade in question.**

Grade appeals are allowed only when the instructor has not used stated criteria, applied criteria unfairly, or made alleged errors in the calculation or recording of a grade. A student shall first confer with the instructor. If the problem cannot be resolved, the student may initiate the appeal procedure. Information is available from the office of the Vice President of Academic Affairs.

Grade Point Average

The minimum cumulative grade point average required for an associate degree or technical certificate is 2.0 based on all college-level course work completed at NST.

The following grade point system is used in determining the grade point average (GPA):

For each credit hour of A: .....4 quality points
For each credit hour of B: .....3 quality points
For each credit hour of C: .....2 quality points
For each credit hour of D:.....1 quality point
For each credit hour of F/WF: .....0 quality points

The scholastic standing of a student is expressed in terms of grade point average, which is calculated by dividing the total number of quality points earned by the total number of credit hours attempted. Following is an example:

Course	Credit Hours Attempted	Value of Grade/Points	Quality Points
ENG 1111	3	C (2)	6
ACT 1160	5	B (3)	15
MAT 1140	5	B (3)	15
SOC 1111	3	A (4)	12
	16		48
			GPA = 3.0

To get the quality points listed in the last column, multiply the number of credit hours for each course (column 2) by the point value of the grade earned (column 3). Then divide the point total (48) by the credit hour total (16) for a GPA of 3.0.

The section on Repeated Courses explains the computation of the GPA for students who repeat courses.

Probation and Suspension

Academic probation and suspension will be based on the cumulative quality point average for all course work, including remedial and developmental, shown below:

Associate Degree Programs:

Semester Credit Hours Attempted	Minimum Required QPA
0.0 - 14.0	No Minimum
14.1 - 26.0	1.0
26.1 - 40.0	1.4
40.1 - 48.0	1.7
48.1 - 56.0	1.9
56.1- and above	2.0

Technical Certificate Programs:

Semester Credit Hour Attempted	Minimum Required QPA
0 - 8	No Minimum
9 - 16	1.50
17 - 24	1.75
25 and above	2.0

A student whose cumulative quality point average (QPA) falls below the minimum required level in any term will be placed on **academic probation** for the subsequent term of enrollment. During the probationary term, the student must attain the minimum acceptable cumulative QPA, or a 2.0 QPA for that term. If the student achieves a 2.0 for the term but the cumulative QPA remains below the minimum required, the student will remain on probationary status until the minimum cumulative QPA is attained. If a student on probation does not achieve either a 2.0 term QPA or the minimum cumulative QPA, the student will be placed on **suspension** for one term. The summer term is **not** counted as a term of suspension.

Upon returning from a suspension, the student will be on probationary status and must attend an Academic Counseling session through the Department of Student Development prior to registering for courses. The student will remain on probationary status until the minimum acceptable cumulative QPA is achieved. The student must receive a 2.0 term QPA or higher for each term while on probation. The student who fails to met probation requirements for a second time will be suspended for one calendar year.

Returning students who have experienced a one year suspension are required to go through a Career and Life Planning counseling program with a Student Services Counselor to assess career and education options prior to course registration.

Probation and suspension for Special Students (students not pursuing a degree or certificate) will be based on the same policy as degree seeking students.

Academic Action Appeals: A student who believes extenuating circumstances or unusual hardship affected his or her ability to achieve the minimum academic standard may appeal the academic action. **A written appeal must be submitted to the Records Office within seven days of receiving the notice of suspension.** The appeal must outline the reasons for the request and any supporting documentation should be attached. The Academic Review Committee will review the appeal and make a final determination on the action. The Registrar will notify the student of the Committee's decision.

Students receiving Veterans Education benefits will not be certified to the Department of Veterans Affairs if enrollment is based on a second consecutive waiver of Academic Suspension.

Remedial and Developmental

Students who fail to meet course exit criteria after one attempt will be placed on probation. Students on probation who fail to meet exit criteria after a second attempt will be suspended and denied admission to the college for a minimum of one term. The summer term is not counted as a semester of suspension. Students failing to meet exit criteria after a third attempt are denied admission for one full year.

Remedial/Developmental students who fail to receive an A, B, or C in a remedial/developmental class after a second attempt will be placed on one semester's suspension from the college. The summer term is **not** counted as a semester of suspension. Grades of W, F, WF, or X count as attempts when determining suspension. Students appealing a remedial/developmental suspension must submit a written request for review of the suspension to the **Academic Skills Department** within seven days of receiving the notice of suspension. Students receiving Veterans Education benefits will not be certified to the Department of Veterans Affairs if enrollment is based on a second consecutive waiver of Academic Suspension.

Transcript of Academic Record

Permanent academic records for each student are maintained by the Records Office. All transcript requests must be in writing; they will not be taken by telephone. Faxed requests with required information and student signature are acceptable. Transcript requests received via E-Mail/Internet will be honored if the student PIN number is included with the request. In all cases, obligations to the college must be fulfilled before a transcript will be issued.

Normally, transcripts will be sent within 24 - 48 hours after receiving the request from a student. Students may obtain up to five copies of their transcripts at one time without paying a fee. Additional transcripts will cost $3 each. Students may obtain an unofficial (student) copy by request in person at the Records Office. Proper identification will be required when requesting transcripts in person.

Student records are maintained for academic purposes. The materials therein allow the college to validate a student's academic performance. All requests to review a student's record require the student's written authorization, except as provided by the Family Educational Rights and Privacy Act of 1974, as amended. With the student's permission, copies of student records are available at $1 for the first page and $0.50 for each additional page.

Options for Earning Advanced Standing

Students at Nashville State Tech may meet some course requirements for graduation through course waivers and substitutions; college transfer credit; credit by examination; the college-level examination program; advanced placement examinations; prior work experience; high, school, career, and vocational education experience; and U.S. Military training and experience. Documentation of any of these alternate methods of meeting requirements must be filed in the Records Office prior to the beginning of the semester in which the student will graduate. If this documentation is not on file, the student's graduation date will be delayed.

Articulation Credit

Nashville State Tech has articulation agreements with many area high schools and also the Tennessee Technology Centers at Nashville and Dickson. Graduates of these schools who have successfully completed certain courses or programs may be eligible to receive credit toward several degree or certificate programs at Nashville State Tech.

Students interested in articulation credit should check with the principal, director, or counselor at their school. An approved Application for Articulation Credit must be submitted to Nashville State Tech along with the student's transcript.

Tech Prep

Tech Prep is part of a national effort to bridge the move from high school to a two-year college. Nashville State Tech and high schools in Cheatham, Davidson, Dickson, Houston, Humphreys, Montgomery and Stewart counties have agreements that help students begin preparing for rewarding technical careers while still in high school. Credit by Articulation Agreement at Nashville State Tech is a part of this program. High school students should see their principal or counselor concerning enrollment in Tech Prep. Eligible programs in this catalog are marked with TECHPREP PROGRAM ELIGIBILITY.

College Board Advanced Placement Examinations

Students who complete College Board Advanced Placement Examinations with a scores of 3.0 or higher may receive credit toward their program of study. Students take the Advanced Placement exams at their high schools. No fees are charged for awarding this credit. Inquiries concerning Advanced Placement should be forwarded to the Records Office.

College-Level Examination Program (CLEP)

CLEP is a program of credit by examination which offers the student an opportunity to earn college credit without enrolling in a college course. College level competency may have been acquired through personal reading, formal study, job experience, volunteer experience, correspondence courses, military training, or advanced high school courses.

A student interested in participating in the College-Level Examination Program should contact the Student Development Center at Nashville State Tech or write to College Board Publications, Dept. N98, Box 886, New York,

NY 10101-0886. Final determination of acceptable credits will be made by the appropriate department head with approval by the academic administrator for the division and submitted in writing to the Records Office. There is a fee for CLEP examinations.

Course Waivers and Substitutions

An advisor may recommend that a student request a course waiver if the student has had training or experience in a subject area. A course waiver is appropriate if the material has been mastered through means other than formal academic course work or in a course closely related to the course in question. A **course substitution** is appropriate only if material has been mastered through a similar course within the college, or if co-op credit has been earned as defined in the college catalog. There is no fee for course waivers and substitutions. Course waivers may reduce the total credit hours or number of courses required for the degree or certificate, but in no case can the number of credit hours required for the Associate of Applied Science degree be fewer than sixty-four (64).

To process a course waiver or substitution, students should initiate the appropriate form through the Records Office. The department head and division head in the academic area in which the course is offered must approve the waiver or substitution.

Credit by Examination

Any student enrolled at Nashville State Tech, upon demonstration of adequate mastery of the theoretical and practical content of a course, may take a comprehensive examination and receive credit if the examination is passed satisfactorily based on departmental criteria. To qualify, a student must be currently enrolled in classes at Nashville State Tech and have a declared major. Credit by examination is designed to assess the knowledge of a student enrolled in a Nashville State Tech program, not to serve as transfer credit.

A student may not pursue credit by examination in a course where credit in an equivalent or more advanced course has been earned, a course previously audited, or a course successfully completed. A student must meet any prerequisite requirement. Credit for the examination is recorded on the student's transcript by "Credit by Examination" and does not affect the student's GPA. Credit by examination is limited to a maximum of twenty (20) hours.

In order to pursue credit by examination, a student must obtain and complete the necessary application form from his or her advisor. The student submits the form to the department and division heads and to the Vice President of Academic Affairs for approval and pays a fee prior to taking the examination. If the student is not enrolled in the course, the fee is 50 percent of the full course fee. If enrolled in the course, the credit by examination fee is $15 per credit hour. If the student passes the exam, the instructor giving the exam submits the appropriate form to the Records Office for processing. If the student is currently enrolled in the course, a drop form must then be processed. If the student does not pass the exam, the department head notifies the student by mail.

Credit for Prior Work Experience (Portfolio Assessment)

If students pursuing a degree or certificate have work experiences that have provided a background similar to that of a course in their major curriculum, they may request that the department responsible for the course evaluate the work experience for credit purposes. Students should provide the department with evidence of work performed, e.g., copies of drawings, reports, or other documents which would verify the type of work performed and/or a letter from the employer verifying the time that they were employed and did perform the work. A maximum of 10 hours of credit can be obtained for prior documented work experience. If the work experience is adequate for credit, the department head will submit the necessary form for approval through the academic division administrator.

High School and Vocational Education Experience

A student who has high school, vocational, or other credit which may relate to the program of study being pursued at Nashville State Tech may be eligible for advanced standing. Nashville State Tech has formal articulation agreements with many high schools which outline the possibilities for credit for work at the high school level.

The student must request review by the department head responsible for the course which relates to the previous educational experience. This educational experience will be evaluated by the department head to determine if the experience provides mastery of 80 percent of the competencies contained in the course required in the student's major. A maximum of 21 semester credit hours may be earned through these experiences. The student must provide proper documentation, such as articulation application, high school transcript and/or documentation of the type of work performed in the course.

The National Program on Noncollegiate Sponsored Instruction (PONSI)

Credit may also be granted for appropriate educational experience listed in the Directory of the National Program on Noncollegiate Sponsored Instruction and in The *National Guide to Educational Credit for Training Programs* by the American Council on Education. If the educational experience is adequate for credit, the department head will submit the necessary form for approval through the academic division administrator.

U.S. Military Schools

Nashville State Tech recognizes and awards credit for military service schools which the student has satisfactorily completed and for which Nashville State Tech has an equivalent course. The training is evaluated using the American Council on Education's *Guide to the Evaluation of Educational Experiences in the Armed Services.* Other recognized publications may be consulted, if necessary, in the evaluation of armed services schools. No more than 50 percent of the credit hours required to obtain an associate degree or certificate may be earned through military service schools.

The student must provide the Admissions Office the required documentation for the evaluation of military training.

REGULATIONS AND PROCEDURES

Academic Advising Policy

Students must personally assume the responsibility for completing all requirements established by the college for their degree or certificate. A student's advisor may not assume these responsibilities. Any substitution, waiver or exemption from any established requirement or academic standard may be accomplished only with appropriate approval.

All entering degree-seeking students work with a faculty advisor in their major after completion of two semesters. First-year students are advised in the Student Development Office unless otherwise specified.

Absence from Class

A student is expected to attend all scheduled classes and laboratories. Each faculty member will formulate an attendance policy and provide it on the course syllabus. Absences are counted from the first scheduled meeting of the class, and it is the responsibility of each student to know the attendance policy of each instructor. Absences and tardiness in a course may affect a student's final grade. Prior to any absence, the student should, if possible, inform the instructor. The student is responsible for all material covered and assigned in the course regardless of absences.

A student who misses class for two consecutive weeks without contacting the instructor or who violates the instructor's stated attendance policy will be administratively withdrawn from the course and given a grade of 'WF'

Academic Fresh Start

"Academic Fresh Start" is a plan of academic forgiveness provided for undergraduate students who have demonstrated academic responsibility following their return to school after having been separated from all institutions of higher education for a minimum of four years. The Academic Fresh Start allows the calculation of the quality point average and credit hours toward graduation. to be based only on work done after returning to college. A student may request Academic Fresh Start through the Records Office. Following an application for Fresh Start, the student must complete at least 15 semester hours of degree course work with a minimum QPA of 2.0 for all work attempted

Once the above requirements have been satisfied, the student may be awarded Academic Fresh Start. The student may be granted a Fresh Start only once. The student's permanent record will remain a record of all work; however, upon granting of the Fresh Start, the student will forfeit the use for degree or certification purposes all college or university degree credit (including transfer credit) earned prior to the four-year separation.

The student's transcript will note that the Fresh Start was made and the date of the Fresh Start. The record sill also carry the notation: "QPA and credit totals are based only on the work beginning [with the date of the Fresh Start]."

A student who plans to transfer to another institution should contact that institution to determine the impact of Academic Fresh Start prior to implementing the program at Nashville State Tech. If assistance is needed, a student should contact the Records Office.

Adding or Dropping Courses

A student desiring to add or drop a course must must do so by the add/drop deadlines listed in the Academic Calendar in the front of this catalog. Courses dropped through the fourteenth calendar day of each semester will not be entered on the student's permanent record.. Courses dropped after this period will be entered on the permanent record and assigned a grade of W. Students may not withdraw from a' remedial or developmental course except for extraordinary reasons and only with special permission from the department head of the Academic Skills Department or the department heads representative. If a student stops attending class without officially dropping the class, the student will receive a failing grade (WF). Add/drop forms are available in the Student Services Center.

Add/drops may be initiated by the college for changes resulting from cancelled classes, section splits, balancing enrollment in sections of the same courses, and any computer entry error that is deemed beyond the student's control.

Audits

An audit student may enroll in classes on the first day of late registration if space is available. No changes are permitted after this time. No late registration fee is assessed. If students are officially registered in a class for credit, they cannot change that class to audit. The auditor is expected to attend class but does not receive a letter grade or credit for the course. "AU" will appear on the student's record for completion of an audit course. Audit hours are counted in determining a student's maximum load. Remedial and developmental courses cannot be audited. State employees may not use a fee waiver to audit courses.

Classification of Students

A student who has completed fewer than 32 credit hours shall be classified as a freshman. A sophomore must have completed 32 or more hours of college-level course work at Nashville State Tech, or a combination of course work at Nashville State Tech and transfer credit.

Credit Hours

The unit of credit at Nashville State Tech is the semester credit hour (SCH). A minimum of 750 minutes of classroom instruction (excluding registration and final exams) is required per SCH. For one SCH of credit, the average student will complete three hours of work each week throughout a semester of approximately fifteen weeks. This includes class time and out-of-class work.

Non-credit instruction is recorded in continuing education units (CEUs). One CEU requires ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction.

Final Exams

Final exams are customarily held in all subjects at the end of each semester. Dates for the final exam period are listed in the front of this catalog. A schedule for the final examination period is published during each semester. Absence from an examination without permission from the instructor may result in a failing grade for the course.

Honors

DEAN'S LIST: Degree-seeking students who achieve a term QPA of at least 3.5 based on college-level course work, during any semester in which they enroll for at least six semester hours will be listed on the Dean's List. Students on probationary status or Remedial/ Developmental 2-Attempt Suspension are not eligible for the Deans List.

GRADUATION HONORS: Candidates for the associate's degree or technical certificate who attain a final 3.5-3.74 cumulative grade point average will be graduated **With Honors;** candidates who attain a final 3.75-4.0 cumulative grade point average will be graduated **With Highest Honors.**

Repeating Courses

For the purpose of raising a grade point average, a student may only repeat a course in which the previous grade earned is C or lower. Any exception to this must be approved by the Vice President of Academic Affairs before the student registers to repeat the course. When a course is attempted one or two times, only the last grade earned is used in the calculation of the student's grade point average. If a student attempts a course more than twice, (three attempts) the grade earned in the third and subsequent attempts will be used in calculating the QPA. The credit hours earned by repeating a course will be counted only one time in the cumulative total hours earned.

In all instances, the last grade earned is used to determine whether the student meets graduation requirements.

Student Course Load

A part-time student carries an academic load of fewer than 12 hours. Twelve or more hours is considered full time for certification purposes for veterans benefits, vocational rehabilitation and other similar benefit programs.

If a student has low academic achievement when entering the college, or is placed on probation while attending the college, the student will be advised to carry 'a maximum of 14 semester credit hours.

Students employed full or part-time should reduce their course loads accordingly to assure satisfactory academic performance.

The maximum load for a student is 21 credit hours. When a student wishes to register for more than 21 credit hours, the approval of the advisor or academic department head is required.

Waiver of Prerequisites

Under special circumstances a student may be permitted to waive a prerequisite and take a course out of sequence. Approval to waive a prerequisite shall be the responsibility of the academic advisor. Waiver, as used here, simply means a change in the order in which the courses will be taken. The student must complete all courses required in the curriculum.

Withdrawing From the College

A student desiring to withdraw from the college (reduce the total hours carried to 0) must secure the required signatures of approval as indicated on the **Add/Drop/Withdrawal Form** obtained from the Student Services Center. The last day to withdraw from the college is listed in the front of this catalog in the calendar for each semester. Normally, this is the fiftieth day that classes meet. Students enrolled in Continuing Education special interest courses that are not in sequence with the academic term will be informed of the established withdrawal date during the first class meeting. A student withdrawing after the official published withdrawal date will receive an F in the course unless there is documented evidence of extreme personal hardship or such mitigating circumstances as the following:

1. Injury or illness as verified by the student's personal physician.
2. Death in the family or other severe personal hardships as verified by the student's parents, minister, physician, etc.
3. Change in employment status (work schedule) as verified by the student's employer, if no other class is available.
4. Job relocation as verified by the student's employer.

Such exceptions to the withdrawal policy must be approved by the student's instructor and the Dean of Student Services, or the Vice President of Academic Affairs.

A student has not officially withdrawn until the student submits the required form to the Records Office. If for any reason a student stops attending class and does not officially withdraw from the college, he or she will receive a grade of WF in the course.

Department of Veterans Affairs regulations allow veterans to withdraw from class or the college until the last day of unrestricted change (last day to add classes). Withdrawals beyond this date may result in overpayment with the veteran being responsible for repayment to the DVA.

Withdrawal, Administrative

An administrative withdrawal is a grading standard in which a student may be withdrawn from class by his/her instructor for non-attendance and/or violation of the instructor's stated attendance policy. Students receive a grade of "WF," withdrawn failure. A "WF" counts as attempted semester hours and carries zero quality points per semester hour. The following standards will be followed in administering this grade standard:

1. Students earn a "WF" grade in one of two ways: (a) when a student has missed class for two (2) consecutive weeks without contacting the instructor, the instructor must report the non-attendance immediately to the Records Office by using the proper form and assign a grade of WF for the course; (b) when a student has violated the instructor's stated attendance policy a grade of WF will be submitted to the Records Office. This grade may be assigned anytime during the semester and applies to both day and evening students.
2. Faculty will indicate administrative withdrawal, "WF" on the proper designated form and will note the last date of attendance by the student. The form will be sent to the Records Office for posting and distribution.
3. The "WF' grading standard counts as an attempt for remedial and developmental studies.

"Our progress as a nation can be no swifter than our progress in education. The human mind is our fundamental resource."

-John F. Kennedy

Student Issues

CATALOG SCOPE AND LIMITS

The course offerings and requirements of the college are continually under examination and revision, This catalog presents the offerings and requirements in effect at the time of publication but there is no guarantee they will not be changed or revoked. However, adequate and reasonable notice will be given to students affected by any changes. This catalog is not intended to state contractual terms and does not constitute a contract between the student and the college.

The college reserves the right to make changes as required in course offerings, curricula, academic policies and other rules and regulations affecting students, to be effective whenever determined by the college. These changes will govern current and formerly enrolled students. Enrollment of all students is subject to these conditions.

Current information may be obtained from the following sources:

Admission Requirements . . . . . .Admissions Office

Course Offerings.. . . .Department or Division Offering Course

Degree Requirements . . . . . .Vice President of Academic Affairs

Fees and Tuition... . . . . Business Office

Nashville State Tech provides the opportunity for students to increase their knowledge by providing programs of instruction in the various disciplines through faculty who, in the opinion of Nashville State Tech, are qualified for teaching at the college level. The acquisition and retention of knowledge by any student is, however, contingent upon the student's desire and ability to learn and upon application of appropriate study techniques to any course or program. Thus, Nashville State Tech must necessarily limit representation of student preparedness in any field of study to that competency demonstrated at that specific point in time at which appropriate academic measurements were taken to certify course or program completion.

College Liability

Nashville State Tech is not responsible for bodily harm and/or death to participants in any voluntary organizations or activities, including activities in which risk is incurred. Nashville State Tech, as an agency of the State of Tennessee, is not liable for claims resulting from injury and/or death incurred in such participation.

Members of college faculty and staff may not be held liable unless personal negligence occurs.

Confidentiality of Student Records

It is the policy of Nashville State Tech to comply with the Family Educational Rights and Privacy Act of 1974, as amended, and, in so doing, to protect the confidentiality of personally identifiable educational records of students and former students. Students have the right to inspect and review information contained in their educational records, to challenge the contents of their educational records, to have a hearing if the outcome of the challenge is unsatisfactory, and to submit explanatory statements for inclusion in their files if the decision of the hearing panel is unacceptable.

Directory information concerning students is treated as public information and may be released to the public unless otherwise requested by the student. A student who desires that any or all of the listed "Directory Information" not be released must complete the appropriate form in the Records Office. This request shall remain in effect unless or until revoked by the student.

Graduating/transferring students desiring non-disclosure after leaving NST must complete the request prior to the end of their last term; the request for non-disclosure will remain in effect until revoked by the student.

Directory Information includes: Student name, address, telephone number, date and place of birth, major field of study, recognized activities, dates of attendance, full-time/part-time status, degrees and awards received, and the most recent previous educational agency or institution attended by the student.

Students are informed of their rights through the Nashville State Tech Student Handbook.

Rights and Responsibilities of Nashville State Tech

The college shall have such rights and responsibilities as are necessary and desirable for the college to achieve its purposes. The Tennessee Board of Regents specifically confirms the following rights to the college:

1. To establish regulations concerning the use and abuse of college property and to assess students with claims of damage of such abuse.
2. To withhold grades and transcripts of credit until all claims have been paid.
3. To dismiss, in the absence of specific regulations, any student, at any time, for cause deemed by the college to be in the best interest of the student's emotional or physical safety or the well-being of the college community.
4. To establish standards of conduct and manners on the campus within range of convention of good taste.
5. To establish traffic regulations on campus, provide for registration of all vehicles using the campus, and enforce such regulations as established.
6. To supervise the scheduling of meetings and activities of student organizations.

This list is not all-inclusive and in no way limits the rights, responsibilities, and authority the college now has. It simply describes some of the rights, responsibilities, and authority which have been vested in it.

Security Procedures

Nashville State Tech makes available to all students information relative to the institution's security policies and procedures. Upon request, crime statistics and policies may be obtained by contacting the Chief of Security.

Student Appeals or Grievances

There is a procedure to handle bona fide student grievances and appeals. Normally, grievances and appeals are appropriate when a student has experienced discrimination, violation of constitutional rights, or violation of policy. Information about the procedure is available in the Nashville State Tech Student Handbook or from the Student Services Center.

Student Code of Conduct

Nashville State Tech students are citizens of the community and are expected to maintain acceptable standards of conduct. Admission to Nashville State Tech carries with it privileges and responsibilities. The Tennessee Board of Regents has authorized institutions under its jurisdiction to take action as may be necessary to maintain campus conditions and preserve the integrity of the institution and its educational environment.

In an effort to provide a secure and stimulating atmosphere, Nashville State Tech has developed a Student Code of Conduct which is contained in the Nashville State Tech Student Handbook. The Student Code of Conduct is intended to govern student conduct on the campus of Nashville State Tech.

Additionally, students are subject to all local, state, and national laws and ordinances. Should a student violate such laws or ordinances in a manner which adversely affects the institution's pursuit of its educational objectives, the college may enforce its own regulations regardless of any proceedings instituted by other authorities. Conversely, violation of any section of the Code of Conduct may subject a student to disciplinary measures by the institution whether or not such conduct is simultaneously a violation of local, state, or national laws.

Generally, through appropriate due process procedures, institutional disciplinary measures shall be imposed for conduct which adversely affects the institution's pursuit of educational objectives, which violates or exhibits a disregard for the rights of other members of the academic community, or which endangers property or persons on college or college-controlled property.

When students are unable to pursue their academic work effectively, when their behavior is disruptive to the educational process of the college or detrimental to themselves or others, they may voluntarily withdraw, be involuntarily withdrawn, or be temporarily suspended from the college. Disruptive or detrimental behavior may, for example, be due to drug and/or alcohol abuse, apparent physical disturbance, and/or psychological disturbance.

STUDENT SERVICES

Campus Visitation

The Student Development Office is responsible for conducting tours of the campus as well as providing information to prospective students. Campus visits may be scheduled by calling the "Campus Tour Line" at 353-3267.

CLASS ORGANIZATIONS

Each year, freshman and sophomore classes organize through the election of class officers. Class organizations are under the sponsorship of the Student Government Association and the election of class officers occurs after the first four weeks of the fall semester.

English as a Second Language

Students who speak English as a second language may receive special assistance in the Learning Center and from the full-time ESL specialist on staff. Special college-preparatory courses as well as courses in the continuing education area provide non-native speakers with the language skills they need to be successful in the workplace and in college.

FINANCIAL AID

A variety of federal, state, and local financial aid programs are available to qualified students who might otherwise find it difficult or impossible to attend Nashville State Tech. Fair and equal consideration is given to applicants without regard to race, color, sex, national origin, religion, age or disability. Students are encouraged to obtain a free copy of The *Student* Guide from the Financial Aid Office. This federal publication provides an excellent overview of federal programs and eligibility requirements. Students may also inquire at the Financial Aid Office regarding individual circumstances that need to be considered when packaging financial aid. Please note that the following information is subject to change and is based on federal regulations and institutional policies and procedures at the time of writing.

Federal/State Assistance

There are several federal and state programs available to students at Nashville State Tech. These Title IV Programs include the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG), Federal Work-Study (FWS), Federal Subsidized and Unsubsidized Stafford Loans, Federal Parent Loan for Undergraduate Students (FPLUS), and Tennessee Student Assistance Award (TSAA). These programs have a wide range of eligibility requirements. Even so, there are a number of **general eligibility requirements** common to each of these programs:

1. Students must have "financial need" which is determined by subtracting the "expected family contribution" as determined by federal methodology from the "cost of attendance." Though the Federal Unsubsidized Stafford Loan and FPLUS are non-need-based loans, eligibility for need-based programs must first be determined before students can make application for these programs.
2. Students must be U.S. citizens or eligible non-citizens. Students in the U.S. on an Fl or F2 student visa, Jl or J2 exchange visitor visa, or a G series visa are not eligible for Title IV Programs.
3. Students must have a valid Social Security number.
4. Students must be enrolled as regular students in an eligible program of study.

5. Students must maintain satisfactory academic progress as measured by the Financial Aid Office. A copy of the "Standards of Satisfactory Academic Progress" is available at the Financial Aid Office.
6. Students must be registered with Selective Service (if applicable).
7. Students must have a high school diploma or GED.
8. Students cannot receive Title IV funds for more than the first 30 credit hours attempted in remedial and developmental classes.
9. Students cannot be in default on a student loan or owe a federal/state grant refund.

Application Process for Federal/State Programs: Students must complete the Free Application for Federal Student Aid (FAFSA) or a Renewal Application mailed from the U.S. Department of Education. The FAFSA can be obtained at the Financial Aid Office. The FAFSA or Renewal Application must be completed each year by students who wish to be considered for federal/state financial aid assistance for the subsequent academic year. Students should include Nashville State Tech as a recipient of their information when completing Section G of the FAFSA or Renewal Application. **Our institutional code number is 007534.**

Students are encouraged to file their federal tax return prior to completing the FAFSA or Renewal Application. Nashville State Tech uses a priority filing date of May 1 when awarding FSEOG and FWS funds. Students will receive a Student Aid Report approximately four weeks after mailing a completed FAFSA or Renewal Application. It should be reviewed for accuracy and corrections should be made as necessary. Some students may be selected for a process called verification. In such cases, a verification worksheet and applicable tax returns must also be provided. If corrections are needed to the Student Aid Report, the Financial Aid Office can make them electronically.

Information regarding a student's financial aid history is obtained through the National Student Loan Data System (NSLDS) when the FAFSA is being processed by the Federal Central Processing System. However, students who transfer during the 1998 - 99 award year must obtain a Financial Aid Transcript from all schools attended during the 1998 - 99 award year whether or not financial aid was received and whether or not they plan to transfer academic credit.

Students must obtain financial aid transcripts from all post-secondary schools previously attended, whether or not financial aid was received and whether or not they plan to transfer academic credit. Hand-delivered financial aid transcripts are not accepted.

Students must also complete the Nashville State Tech Financial Aid Application and provide other information as requested by the Financial Aid Office. Failure to submit requested information in a timely manner may delay receipt of financial aid funds and/or preclude students from being considered for some financial aid programs.

A Financial Aid Award Notification will be sent to students after their financial aid file is complete. The awarding process generally does not begin until approximately mid-June prior to each award year.

It is the **student's responsibility** to notify the Financial Aid Office of any changes to the FAFSA or Renewal Application information.

Sources of Federal/State Assistance

FEDERAL PELL GRANT: A need-based non-repayable grant for undergraduate students. Eligibility is based on the student's "expected family contribution," cost of attendance," "enrollment status," and whether or not the student attends a full academic year. The maximum yearly grant for 1998-99 is expected to be $3,000 for a full-time student. Eligible students may receive this grant if enrolled in one or more credit hours.

FEDERAL SUPPLEMENTAL EDUCATIONAL. OPPORTUNITY GRANT (FSEOG): A non-repayable grant to students with exceptional financial need. Priority is given to Federal Pell Grant recipients with the lowest "expected family contribution." Priority is also given to students who make application prior to May 1 preceding an award year. Average awards are $200 per semester. Funding is limited. Eligible students must be enrolled in one or more credit hours.

TENNESSEE STUDENT ASSISTANCE AWARD: A non-repayable grant to Tennessee residents whose "expected family contribution" is $1900 or less. Students must be enrolled in at least six credit hours. Priority is given to students whose FAFSA is processed by May 1 prior to the award year. The maximum yearly award covers up to 50 percent of the cost of registration fees. For example, the maximum yearly award for 1997-98 was $552.

FEDERAL WORK-STUDY This program provides jobs for students who have financial need. Priority is given to students who make application prior to May 1 preceding an award year and who have the lowest "expected family contribution." Students work an average of 15 hours per week at a pay rate of $5.50 per hour. An average yearly award is $2,640. Funding is limited. Though most jobs are on campus, some jobs are available off campus in community service positions. A higher rate of pay is provided to assist with transportation expenses related to off campus positions. Eligible students must be enrolled in one or more credit hours.

FEDERAL SUBSIDIZED STAFFORD LOAN: A need-based low-interest loan for eligible students enrolled in at least six credit hours. Loan applications may be obtained from the Financial Aid Office or from a bank, credit union, or savings and loan association. Students must attend a pre-loan workshop for each loan application submitted, except in cases when a supplemental loan application is being submitted for the same payment period. Eligibility for a Federal Pell Grant must first be established. Maximum awards are based on financial need and whether the student is classified as a freshman or sophomore. Students are also subject to annual and aggregate limits. Interest does not accrue while the student is in school. Repayment begins (as well as interest) six months after the student drops below half-time status. There are a number of deferment and forbearance options available to students. Refer to The Student *Guide* available in the Financial Aid Office. Students must attend an exit-loan

workshop prior to graduation or at which point they otherwise plan to drop below half-time status.

FEDERAL UNSUBSIDIZED STAFFORD LOAN: A non-need-based low-interest loan for eligible students enrolled in at least six credit hours. Loan applications may be obtained from the Financial Aid Office or from a bank, credit union, or savings and loan association. Students must attend a pre-loan workshop for each loan application submitted, except in cases when a supplemental loan application is being submitted for the same payment period. Eligibility for a Federal Pell Grant and Subsidized Stafford Loan must first be established. Maximum awards are based on whether the student is classified as a freshman or sophomore. Students are also subject to annual and aggregate limits. Interest accrues while students are in school. Students have the option to make payments on the interest or to allow it to' capitalize. Repayment begins six months after students drop - below half-time enrollment status. There are a number of deferment and forbearance options available to students. Refer to *The Student* Guide available in the Financial Aid Office. Students must attend an exit-loan workshop prior to graduation or at which point they otherwise plan to drop below half-time status.

FEDERAL PARENT LOAN FOR UNDERGRADUATE STUDENTS: This loan is for parents of dependent students. Eligibility for the Federal Pell Grant and Federal Subsidized and Unsubsidized Stafford Loan must first be established. Maximum awards cannot exceed a student's cost of attendance less other financial aid received. Loan applications may be obtained from the Financial Aid Office or from a bank, credit union, or savings and loan association. Eligible students must be enrolled in at least six credit hours.

FEDERAL DIRECT LOAN PROGRAM: Nashville State Tech has been accepted by the Department of Education to participate in the Federal Direct Loan Program effective with the 1996-97 award year. If Nashville State Tech participates in this program, it would replace the current student loan application process which includes a lender and guaranty agency. The above loan programs would be managed directly between the federal government and Nashville State Tech. Students who have previously borrowed through the current lender/guaranty agency process and who later borrow through the Federal Direct Loan Program would have the opportunity to consolidate their prior loans in to the Federal Direct Loan Program. Given the future uncertainty of the Federal Direct Loan Program at the point information was submitted for the catalog, it is uncertain whether Nashville State Tech will participate in the Federal Direct Loan Program during the 1998 - 99 award year. Students should inquire at the Financial Aid Office in regard to student loan processing.

Understanding the Nashville State Tech Financial Aid Notification

Students will receive a Financial Aid Notification after their financial aid file is complete. The awarding process generally does not begin until approximately mid-June prior to each award year. Since FSEOG and FWS funds are limited, awards will be made based on files completed at the time the awarding process begins. FSEOG and FWS awards are further based on the date the federal processor received the FAFSA (with priority given to those received prior to May 1) and based on the student "expected family contribution" as determined by the Student Aid Report (with priority given to students with the lowest "expected family contribution").

The Financial Aid Notification will include an assessment of "need" for financial aid. The following example illustrates such an assessment for a dependent student living with parent(s) or relative(s) during the 1997-98 academic year. It should be noted that the cost of registration fees during the 1997-98 academic year (total for two semesters) for a full-time, in-state student was $1,144 including the student activity fee and technology access fee. The average allowance for books and supplies for the same period was $550.

* Cost of Attendance $5,151

(less) Expected Family Contribution 200

Need for Financial Aid $4,951

* The cost of attendance includes an allowance for registration fees, books and supplies, transportation, room and board, and other personal and miscellaneous expenses.

Based on the example, the student might have received the following type of financial assistance:

Federal Pell Grant $2,550

Federal Supplemental Education Grant 400

Tennessee Student Assistance Award . . 528

Total Award $3,478

(It should be noted that in this example, the student received an amount of financial assistance which exceeded the amount needed for the direct educational cost of registration fees and books and supplies. The balance could be used for other education related expenses. Based on the student's unmet need of $1,473 ($4,951 "need" less $3,478 total award), the student could receive additional assistance via student loans, scholarships, Federal Work-Study (based on awarding procedures noted above), etc. A letter of explanation will be sent with the Financial Aid Notification which contains further details regarding awards.

Payment of Registration Fees and Books/Supplies

Students are allowed to defer payment of registration fees at the point of registration if their financial aid files are complete and if their Federal Pell Grant and/or FSEOG awards are sufficient to cover these costs. If students are only eligible to receive a student loan and if they have attended a pre-loan workshop, they may be granted a "special deferment" of payment of registration fees pending receipt of student loan proceeds. Students must contact the Financial Aid Office to obtain a "special deferment." Otherwise, unless they have another third-party source of financial assistance such as scholarships, Job Training Partnership Act Program, Vocational Rehabilitation, Single Parents/Displaced

Homemakers Program, etc., they should be prepared to pay their registration fees at the point they register.

Students should be prepared to purchase books and supplies.

Disbursement of Federal/State Funds

If students' Federal Pell Grant or FSEOG awards exceed the amount owed for registration fees, they will receive a residual check approximately four weeks into the semester at our Business Office. Enrollment status at the point payment is authorized by the Financial Aid Office will determine the amount of the award. Example: If a student is enrolled in twelve credit hours on the first day of class but subsequently drops to nine credit hours prior to authorization for payment, the Financial Aid Office will authorize payment based on nine credit hours. If a student totally withdraws from classes prior to picking up the residual check, it will be canceled and refunded back to the appropriate Title IV account(s).

Tennessee Student Assistance Awards are normally not disbursed until around mid-term. Student loan proceeds will be disbursed on or after the first day of class each semester. As an exception, federal law specifies that first-year, first-time borrowers cannot receive their first disbursement until after 30 days into the payment period. All loan proceeds are disbursed in at least two payments. Students must be enrolled in at least six credit hours at the time they receive their Tennessee Student Assistance Award or student loan proceeds. Students who are employed in the Federal Work-Study Program are paid every two weeks. It should be noted that if a student unofficially withdraws from class (quits attending) and it is later discovered that Title IV funds were paid to the student for credit hours the student was not attending at the point Title IV funds were authorized to the student's account, an overpayment may exist. In such cases, the student will be billed for the overpayment.

Overpayments

Overpayments occur for several reasons. In some cases, students receive financial aid assistance in an amount that exceeds their "need" for financial aid. In other cases, students are inadvertently overpaid Federal Pell Grant funds. No matter what the reason, overpayments must be resolved. In most cases, Nashville State Tech is able to resolve overpayments by reducing awards for subsequent semesters during the same academic year. The Financial Aid Office will notify the student of an amount that must be repaid to a specific program. If the overpayment cannot be resolved by reducing subsequent awards during the same year, students will be required to make immediate repayment or may enter into a written agreement to repay the amount owed within six months. If the overpayment is due to student error, and if the student fails to repay the overpayment, the student will be ineligible for future financial aid assistance at all post-secondary schools. If the error is a result of fraud, it will be reported to the Department of Education. If the overpayment is a result of institutional error and if the student has not made repayment by the close of the award year, Nashville State Tech will be responsible for making the repayment. In such cases, Nashville State Tech will then bill the student and will place a "hold" on future registration.

It should be noted that if a student unofficially withdraws from class (quits attending) and it is later discovered that Title IV funds were paid to the student for credit hours the student was not attending at the point Title IV funds were authorized to the student's account, an overpayment may exist. In such cases, the student will be billed for the overpayment.

Refunds/Repayments

Title IV recipients who partially withdraw from classes on or after the first day of class may be eligible for a tuition refund based on the Nashville State Tech refund policy. Students are allowed to receive such refunds except in cases when they totally withdraw. If a financial aid recipient totally withdraws and if there is an institutional refund due, it will be refunded to federal or state programs according to specified policy and procedure. A copy of the refund/repayment policy may be obtained at the Financial Aid Office. First-time students who are receiving financial aid who totally withdraw on or before 60 percent of the semester are given a pro-rata refund. In such cases, the refund is distributed to federal or state programs according to specified policy and procedure.

Using the cost of maintenance fees for a full-time student enrolled during the Spring Semester of 1998 as an example, the following represents a scenario of a first-time student who drops during the third week of class: The regular institutional refund would be 25 percent of $568 which would equal $142. However, a pro-rata refund would be 80 percent of $572 which would equal $457.60. Since the pro-rata refund would yield the highest refund, it must be used when determining the amount which should be refunded back to Title IV. The particular distribution back to Title IV programs is specified by law.

scholarships

The information regarding scholarships is presented in a brief manner and is subject to change. Students are encouraged to contact the Financial Aid Office for complete guidelines and applications. The number of awards in each category is contingent upon funding.

ACADEMIC SERVICE SCHOLARSHIP: This scholarship is awarded to Tennessee residents who are classified as full-time students. First-year students must graduate in the upper one-fourth of their senior class with at least a 2.9 high school grade point average. The priority date to make application is May 1, preceding each award year. Further priority will be made in the following sequence: (a) renewal applications and incoming high school graduates, and (b) currently enrolled or transfer students not presently receiving this scholarship at Nashville State Tech. After May 1, all eligible applicants will be considered based on the date of application. The amount of the scholarship will be equal to required registration fees (maintenance fee, student activity fee and technology access fee). Recipients are required to work 75 hours per semester on campus.

BENNIE R. JONES MEMORIAL SCHOLARSHIP: This is a need-based scholarship in the amount of $500 to be awarded to a deserving student from Warren County, Tennessee.

FACULTY AND STAFF SCHOLARSHIP: Awards in the amount of $400 will be awarded to degree-seeking students who have completed at least one semester at Nashville State Tech with a minimum of six credit hours earned in college-level

courses. Applicants must have a minimum cumulative GPA of 2.5. Education and career goals will also be taken into consideration.

MIDDLE TENNESSEE INDUSTRIAL DISTRIBUTOR'S ASSOCIATION, INC. SCHOLARSHIP: Four $1,000 scholarships are awarded each year to selected applicants who have completed at least one year as full-time students at Nashville State Tech with a minimum cumulative grade point average of 3.0 each semester and continue to be enrolled as full-time students in Automation-Robotics Technology, Electrical Engineering Technology, Industrial Engineering Technology, or Mechanical Engineering Technology. Financial need and education/career goals are also considered in the selection process.

MINORITY **SCHOLARSHIP:** This scholarship is awarded to African-American students. The priority application date is May 1 preceding each award year. Students are required to complete the Free Application for Federal Student Aid. Since funds are limited, preference is given to students who do not qualify for the Federal Pell Grant. Awards will cover required registration fees (maintenance fee, student activity fee and technology access fee) based on the student's enrollment status at the rate of in-state assessment.

OTHER SCHOLARSHIPS: As additional scholarships become available, they are posted in the student newsletter *Take* One. Students may also inquire at the Financial Aid Office. Students are also encouraged to check with local organizations in reference to potential scholarships as well as with their employers.

Student Disability Services

Student Disability Services, administered through the Academic Skills Department, provides assistance to students with documented physical, emotional, or learning disabilities. The SDS Director assists eligible students with academic planning and registration and serves as a liaison between students and faculty. The SDS staff assists in tutoring, testing, and securing appropriate technology as needed by students. For further information contact Diane Wood (353-3720) in L-106.

JOB TRAINING PARTNERSHIP ACT (JTPA): The Job Training Partnership Act is designed to provide economically disadvantaged individuals the training they need to hold good jobs in the private sector. Business, government, labor groups and schools work together to provide vocational skills to those who are out of work or who earn low incomes. Nashville State Tech participates with eligible students in this program.

Students who would like more information about the JTPA program should contact Gail Marzella at 353-3257 or drop by room D-26 in the Student Services Building for the name of their local certifying Agency. The grant applies to the associate degree programs and technical certificates.

CAREER DIRECTIONS PROGRAM (SINGLE PARENTS/DISPLACED HOMEMAKERS): The Carl Perkins Vocational Act provides federal funds to assist the single parent and displaced homemaker with some of the costs related to attending school. Students who are eligible to participate in this program are reimbursed for a portion of their travel and/or child care. This grant applies to associate degree programs and technical certificates.

A single parent is a person who has never been married. A displaced homemaker is divorced or widowed with the custody of one or more minor children and is the head of the household. A displaced homemaker with or without children may also be a person who has not worked in the labor force for a substantial number of years while providing unpaid services for family members in the home; who has been dependent on public assistance or on the income of another family member, but is no longer supported by that income; or who is unemployed or underemployed and is experiencing difficulties in obtaining or upgrading employment.

Further, in determining eligibility, annual family income and additional financial aid will be considered. Priority is given to those students with significant financial need, educational disadvantage, disability and/or those pursuing non-traditional careers. Students wishing to apply for this program should contact the Career Directions office, D-32 in the Student Services Building or call (615) 353-3229..

FAMILIES FIRST is Tennessee's welfare reform plan which provides temporary cash assistance and contract services to welfare recipients, In some instances, funding for day care and transportation costs is provided to Families First participants in higher education programs. To maintain eligibility for these benefits, participants must: sign a personal responsibility plan with their Case Management Specialist at the Tennessee Department of Human Services; secure funding for their tuition and books through federal financial aid or other means; and make books through federal financial aid or other means; and make satisfactory progress toward the completion of a program of study. For additional information, contact Nancy Nolan at 353-3378.

VETERANS' BENEFITS: Veterans and eligible dependents of veterans who wish to apply for educational benefits from the Veterans Administration (VA) should contact the Records Office at Nashville State Tech to complete the necessary forms to receive VA benefits.

Housing

Nashville State Tech does not have residence halls. Therefore, it is recommended that the student begin efforts to obtain housing at an early date. Any student needing assistance in securing housing may receive information from the Student Development Office.

Library

The Nashville State Tech Library enhances and facilitates learning. The Library is fully automated, with an on-line catalog and CD-ROM reference materials. It has an extensive collection of technical books and periodicals as well as recreational reading materials. The collection contains newspapers, video tapes, audio tapes, films, slide-tape sets, microcomputer software, and microfiche. Equipment is available for using these materials in the classroom or in the Library.

Faculty, staff, and students share in selection of library materials; student suggestions are especially welcome. Technical materials not available in the Library can be borrowed from other libraries.

Housed in the Library, the Testing Center coordinates student tutoring sessions, offers make-up testing, assesses Nashville State Tech students for course placement, and serves as an ACT test site.

Nashville State Tech's Library is open to anyone in the community. Hours are: Monday through Thursday from 7:45 a.m. to 8:00 p.m., Friday from 7:45 a.m. to 4:30 p.m., and Saturday from 9:00 a.m. to 2:00 p.m. during the academic year. Trained personnel provide willing assistance to Library users in a comfortable and pleasant setting. The Library has facilities for both group and individual study.

The Learning Center, located in the Library, offers drop-in academic assistance to all Nashville State Tech students. Services include access to computers for AAPP preparation, tutorials in mathematics, science, reading, and writing, word-processing, and research on the internet, as well as person-to-person assistance from instructors and upper-level students in the areas of writing and mathematics. All services are free.

Orientation

Prior to each academic term, new students attend one of several orientation programs. These programs orient students to campus life and to the many services provided by Nashville State Tech. Students have an opportunity to meet and talk with advisors, discuss registration procedures, meet each other, learn about campus clubs and organizations, and participate in campus tours. Information regarding New Student Orientation is available from the Student Development Office. All incoming degree-seeking students are strongly encouraged to attend.

Security

In the event any student should require the services of security personnel, officers are on duty 24 hours a day to ensure the safety and security of both students and campus facilities. The Security Office is located in A-70A, adjacent to the campus bookstore.

Information about on-campus crime rates is available on request from the Security Office.

Student Activities

The college encourages extracurricular activities which develop individual initiative, group leadership and cooperation. Student activities are faculty sanctioned and supervised. The organization and administration of student activities is a function of the Student Development Office. Each semester a fee is assessed to provide funding for student activities and events. Activities include cultural, social, recreational and educational events. A Student Activities Board recommends and selects all extracurricular activities for the college.

Student Development Office

Trained advisors are active participants in the academic, career, and life-planning services of the college. A developmental academic advising approach includes exploring life goals, identifying career and educational objectives, choosing appropriate academic programs, and selecting and scheduling of proper courses, and assisting students in making sound educational and career decisions.

All degree-seeking students are advised in the Student Development Office during their first year. In the first year experience, the student and the advisor work closely in designing a timely plan to meet the educational goals of the student.

Advisors are also available to assist students on an individual basis with problems and challenges which may arise while they are enrolled at the college.

Student-Right-to-Know Policy. Information about graduation rates of Nashville State Tech students is available from the Dean of Student Services, whose office is in the Student Services Center. The college complies with the Student-Right-to-Know legislation.

Student Government Association

The purpose of the Student Government Association is to promote and expand interest in student activities and to serve as an advisory group to both the administration and student body. All members of the Student Government Association are elected or appointed during the first four weeks of the fall semester and serve a one-year term. The faculty advisor is appointed by the president of Nashville State Tech. Information related to the Student Government Association can be found in the Nashville State Tech Student Handbook.

Student Identification Card

All students must have a Nashville State Tech Student ID card in their possession while on campus. This card enables students to check out library materials, use campus facilities, and participate in college activities.

ID cards are free of charge for all new students and are issued during the first week of classes upon presentation of a paid maintenance fee receipt in the Nashville State Tech Library. However, a $3 replacement fee is charged for lost ID cards. ID cards must be validated at the beginning of each academic term.

Student Organizations

Honor, social, and professional clubs are available to Nashville State Tech students. Each fall and spring term, the college has a Rush Week when students are encouraged and given an opportunity to join clubs and organizations. Information related to the various organizations can be obtained from the Student Development Office.

Expenses & Business Regulations

Nashville State Tech is a state-supported college and, therefore, maintains modest matriculation and incidental fees. Expenses are charged and payable by the semester, since each semester is a separate unit of operation. Registration is not complete until all required fees have been paid (which means all checks have cleared the bank), and students who have not met their financial obligations will not be admitted to classes. All payments are to be made by cash, check, Visa or MasterCard to the Business Office. If fees are paid by the student's employer, the employer must mail an authorization letter on company letterhead to the Business Office each semester indicating which fees they will pay and dollar limit (if applicable).

Maintenance and Tuition Fees

Current in-state and out-of-state fee amounts:

Maintenance Fee/In-State Students (subject to change) - $48 per credit hour, maximum of $543 per semester

Tuition/Out-of-State Students (subject to change) - $142 per credit hour ($48 fee plus $142 tuition), maximum of $2,171 per semester ($543 fee plus $1,628 tuition) in the academic year.

Age 65 and over or totally disabled - Residents of Tennessee (for credit enrollment):

Part time . . . .$24.00 per credit hour

Maximum.. . . . . $48.00 per semester

Summer semester fees are charged at the credit hour rates and have no maximum.

Enrollment without payment of the full maintenance fee will be subject to the availability of space in the class being requested.

CEU . . . . . refer to Special Interest Courses Brochure

*Credit by Examination . . . . . $15.00 per credit hour

**See page 23 for more information.*

For more information, call 353-3310.

The above fees are subject to changes by policy of the Tennessee Board of Regents. *Fee schedules are published as* changes occur.

Other Fees

Application Fee, non-refundable.. . . . . $5.00

Deferred Payment Service Fee $10.00

Deferred Payment Late Fees $25.00

Graduation Fee, per graduation ceremony, non-refundable.. . . . . $25.00

Late Registration Fee, non-refundable $10.00

Library materials overdue, per day $0.25

Library materials lost or damaged. . . . . replacement cost plus $10.00

Locker Fee, non-refundable. $2.00

Motor Vehicle Registration Fee, campus parking, non-refundable annual fee per vehicle.. . . . . $5.00

Returned Check Fee $20.00

Technology Access Fees:
$2.00 per hour up to 11 hours
$25.00 at 12 hours

Traffic Violation Fees:

Violation, disabled parking $100.00

All other violations.. . . . . $10.00 per violation

For additional information, call 353-3310.

The above fees are subject to change by policy of the Tennessee Board of Regents. Fee schedules are published as changes occur.

Registration, maintenance and tuition fees for the summer term will be the same as for the other two semesters. Fees for auditing a course will be the same as the fees paid if taking the course for credit: Enrollment as an audit will be subject to the availability of space in the class being requested. Students are classified as residents or non-residents for the purpose of assessing maintenance and tuition charges. The definition of residency as determined by the Tennessee Board of Regents will apply. Information about residence classification may be obtained from the Admissions or Records offices.

Senior Citizens and Students With Disabilities

For audit courses, no fee is required for persons who are totally disabled or who are 60 years of age or older. Enrollment will be subject to the availability of space in the class requested.

Persons 65 years of age or older who live in Tennessee or totally disabled persons may enroll for credit as special students for a fee equal to 50 percent of the semester hour rate, not to exceed a maximum of $45.00 per semester. Enrollment will be subject to the availability of space in the class requested.

An applicant who wishes to be admitted in one of these categories must submit the following:

1. A completed application for admission.
2. A five-dollar ($5.00) non-refundable application fee.
3. Proof of age or physician's certificate of total disability.

NOTE: Fees for Continuing Education Units (CEU's) are not waived or reduced.

State Employee Fee Waivers

Title 8, Chapter 50, Part 1 in Public Chapter 1047 of the 1990 Publics Acts enables full-time employees of the State of Tennessee to be eligible for enrollment in one course per term at any state supported college or university without the payment of tuition charges, maintenance fees, debt service fees, student activity fees or registration fees.

The following are rules that govern the use of this fee waiver type:

1. Fees are not waived for non-credit or correspondence courses, application fees, or parking permits.
2. Enrollment is subject to space availability in the class selected. Registration is permitted only during the late registration process.
3. At the time of enrollment, the employee must have a completed state employee fee waiver form signed by his or her employer certifying that the applicant is a full-time employee with at least six months of continuous service.

Deferred Payment Program

All students owing a balance greater than $250 who are in good financial standing and with no outstanding balances from previous terms are eligible to participate in the deferred payment program. This program allows the student to defer payment of up to 50% of the maintenance fee, out-of-state tuition, technology access fee, and activity fee into two monthly payments during the term. Fees can be deferred during fall and spring semester only. A deferral fee of $10.00 is assessed to defer costs of the program. Deferred payments that become delinquent are assessed a $25.00 penalty for each late payment. For more information call 353-3300.

Refunds

Two changes in a student's status which may require a refund are: (1) changes in a full-time student's schedule which result in reclassification to part-time student status; and (2) a change in a part-time student's schedule which results in a class load of fewer hours. Other situations which may require a refund are dropping a course or courses, withdrawing from school, cancellation of a class by the college, or death of the student.

The following procedures will be followed in regard to refund of maintenance fees:

If Withdrawal Is.....Refund Will Be:

After pre-registration but **before** the published first day of class 100%*

For courses cancelled by the college 100%*

On the first official day of classes through the 14th calendar day from the published first day of classes. 75%

On the 15th calendar day from the published first day of classes through 25% of the semester calendar days (see school calendar) 25%

After 25% period. 0%

All refund periods will be rounded up or down to the nearest whole day if *necessary.*

The refund schedules are as follows:

Fall Semester 98

100% . . . . . prior to Aug. 22
75% . . . . . Aug 22 - Sept 4
25% . . . . . Sept 5 - Sept 19
0% . . . . . Sept 20

Spring Semester 99

100%. . . . . prior to Jan. 8
75% . . . . . Jan. 9-21
25% . . . . . Jan 22 - Feb 6
0% . . . . . Feb 7

Regular (8 week) Summer Semester *99*

100%. . . . . prior to June 4
75% . . . . . June 4-17
25% . . . . . June 18
0% . . . . . June 19

1st (4 week) Summer Semester *99*

100% . . . . . prior to June 4
75% . . . . . June 4-June 10
0% . . . . . June 11

2nd *(4* **week) Semester** *99*

100% . . . . . prior to July 2
75% . . . . . July 2 - 8
0% . . . . . July 9

Fall Semester *99*

100% . . . . . prior to Aug. 19
75% . . . . . Aug 19 - Sept 1
25% . . . . . Sept 2 - Sept 17
0% . . . . . Sept 18

- A 100% refund will be provided on behalf of a student whose death occurs during the semester.
- A 100% refund will be provided to students who are compelled by the college to withdraw.
- A 100% refund will be provided, upon submission of required forms, to students absent from the college in excess of thirty (30) days while on active military duty.

All refunds will be in the form of a check within three or four weeks after the Records Office has processed a Schedule Change Form. If a student initially pays by bankcard and wishes to have a credit processed to his/her bankcard account, it should be so noted on the Schedule Change Form. A refund date will be established for each semester. Summer term refunds will be based on the above procedures with concentrated terms being prorated as a percentage of a regular term. No refunds will be made for Continuing Education Units (CEUs) unless the class is cancelled.

Returned Checks

There is a $20.00 charge for any check accepted by the college that is returned. When a stop payment is issued it shall result in the administrative dismissal of the student. Returned checks that represent 50% down payment on deferred payment contracts will result in administrative dismissal if not redeemed within 10 days. A late fee of $10.00 will also be assessed for any returned check for registration fees, unless the student registered late initially. Failure to redeem the check after formal notice shall result in the matter being referred to a law enforcement agency for collection and the initiation of college disciplinary action. No student may re-enroll, graduate, receive grades, or receive a transcript until all accounts are settled. The term "account" includes any indebtedness to the college. Cash payment will be required of any student who has written multiple returned checks. The above policy on returned checks is in accordance with recommended and approved policies of the Tennessee Board of Regents.

Vehicle Registration and Parking

All privately owned and/or operated vehicles used on campus by students and staff must be registered in the Security Office (Room A-70A) and must bear an official registration decal for which there is an annual charge of $5.00. The vehicle registration decal may be displayed on a vehicle by the owner or driver is such a manner that it will be clearly visible from the rear of the vehicle. Vehicles so registered must be parked as directed. Students should park in the designated lot and park each vehicle so that it is headed into the parking place with the decal exposed to the traffic lanes. No vehicles are to be parked in the road or on the shoulders of the road. Any vehicle improperly parked may be towed away at the owner's expense. The speed limit on campus is 15 m.p.h. Pedestrians are entitled to the right of way but should exercise caution and courtesy so as not to impede the orderly flow of traffic. Special parking areas are provided for students with disabilities. Disabled parking is governed by the laws of the State of Tennessee. Parking for students enrolled in special courses will be regulated as specified in the course announcement.

Appeals Process

1. Traffic fines:
   a. Traffic fines may be appealed to the Traffic Committee.
   b. Appeal forms may be obtained from Security in Room A-70A.
   c. For detailed information, refer to the Traffic & Parking Regulations brochure.
2. Other fees, charges, refunds:
   a. Appeals must be in written form and addressed to the Vice President of Finance and Administrative Services.
   b. Forms are available in the Vice President's office, room W-35.
   c. The Vice President of Finance and Administrative Services will prepare-a written response to the appeal. If the response is negative, the reason will be so stated.

Nashville State Tech Bookstore

The Nashville State Tech Bookstore is located in A-47 and is operated under the auspices of the college for the convenience of the students. The Bookstore carries all required textbooks and an assortment of student supplies, health and beauty aids, clothing, general reading materials, and emblematic items.

Textbooks are selected and approved by the teaching staff. Since the cost of books and supplies varies from one program of study to another and from semester to semester, only the average costs can be included in this catalog. The average cost of books and supplies is approximately $300-$450 per year, depending upon the program of study. The majority of book and supply costs will be incurred during the fall semester. In courses requiring special equipment and supplies, additional costs must be added.

The Bookstore accepts cash, personal checks, or company checks (accompanied by a letter of introduction on company letterhead) made payable to CBA (College Bookstores of America), American Express, VISA, MasterCard and Discover. There is a $20.00 charge for any check accepted by the Bookstore that is returned, in addition to the face value of the check. Students with returned checks will not be permitted to make additional purchases until the checks are redeemed.

If a class is cancelled, the full new purchase price of a book is refundable through the first two weeks of classes provided: (1) no markings have been made in the book; and (2) the cancel slip and sales receipt are presented when the refund is requested. (See "Return Policy" below.)

The Bookstore's normal hours of operation are:

Monday - Thursday: ..... 7:30 AM - 6:30 PM
Friday: ..... 7:30 AM - Noon

When students are not present, the hours are:

Monday - Friday: ..... 7:30 AM - 4:30 PM

Changes in Bookstore hours will be posted on its door.

Bookstore Return Policy

The Bookstore's policy on returns includes the following:

1. Only clean, unmarked and unread books in new condition may be returned for the full price. The Bookstore Manager is the final judge on the condition of a book.
2. Books may be returned for any reason during the first 10 days of class upon presentation of the Bookstore cash register receipt. After the first 10 days of classes, all books returned to the Bookstore will be purchased at the Missouri Book Service's catalog price. The Bookstore Manager will be the final judge on any special cases. Refunds are made in cash for returned items originally purchased in cash or by check after ten (10) days. Items purchased by credit card are credited to the credit card account. Items NOT accompanied by a Bookstore cash register receipt are not eligible for cash refunds.
3. Books that have markings in them, or which show signs of wear or damage, are classified as USED books and will be purchased according to the "Textbook Buy-Back" policy below.
4. Defective textbooks and supplies may be returned for REPLACEMENT upon presentation of the defective item and the cash register receipt.

Textbook Buy-Back Policy

During final exam week of each semester, the Bookstore conducts a textbook buy-back. The Bookstore will pay 50 percent of the retail price of a book if it has been adopted for the following semester and the Bookstore is not over-stocked on the title. If the book is NOT scheduled for use the following semester, the purchase price will be limited to the wholesale value of the book as listed in the "Used Book Wholesaler's Buying Guide" from the Nebraska Book Company (NBC). Books are bought back throughout the year, but at a price considerably lower than the semester's end price cited above, as set by the NBC "Used Book Wholesaler's Buying Guide."

Academic Programs

All academic programs of study, both two-year degree programs and one-year certificate programs, are listed alphabetically in this section. Each listing includes a brief description of the program and a suggested schedule of courses.

The **Workforce and Community Education Services** offers approximately 150 Special Interest courses to develop employees' skills in particular areas. A sample of these courses is listed on page 95.

General Education, ESL, and **Honors** courses to support technical programs and serve transfer students are described on page 101.

The **Academic Skills Department** offers courses to strengthen academic skills and competencies, as described on page 101. Students cannot enroll in certain college-level courses until they have completed required Academic Skills courses or met the criteria of qualification.

Tech **Prep** is part of a national effort to bridge the move from high school to a two-year college. Nashville State Tech and high schools in Cheatham, Davidson, Dickson, Houston, Humphreys, Montgomery and Stewart counties have agreements that help students begin preparing for rewarding technical careers while still in high school. Credit by Articulation Agreement at Nashville State Tech is a part of this program. High school students should see their principal or counselor concerning enrollment in Tech Prep. Eligible programs in this catalog are marked with TECHPREP PROGRAM ELIGIBILITY .

"Every time I take a flight I am always mindful of the people who make a successful journey possible-the known pilots and the unknown ground crew."

- Martin Luther King, Jr.

ARCHITECTURAL ENGINEERING TECHNOLOGY

TECHPREP PROGRAM ELIGIBILITY

Associate of Applied Science

The technical content of this program supplies a broad background in the many different areas of applied architecture and construction. The program places a strong emphasis on drafting by both traditional and computer-aided methods. Students also take courses in specifications, estimating, construction methods, structures, surveying, and plumbing, mechanical, and, electrical systems. This wide selection of courses acquaints the student with an entire construction project, from design through completed construction.

Typical positions available to graduates include: drafters - prepare the architectural design drawings by hand; **computer-aided drafters** - develop design drawings using computers; **estimators** - prepare quantity and cost estimates for contractors and material suppliers; **detailers** - prepare shop drawings; **assistant superintendents** - assist in checking shop drawings, ordering materials and laying out the structure; and **inspectors** - visit the site to determine if the work is carried out according to plans and specifications.

With additional job experience, the graduates assume more responsibility and can become superintendents and project managers.

COURSE REQUIREMENTS

		Class	Lab	Credits
English				
ENG 1111	Composition I	3	0	3
ENG 2112	Report Writing	3	0	3
SPE 1111	Speech	3	0	3
or				
SPE 1112	Fundamentals of Speech Communication	3	0	3
Humanities Elective				
	Humanities Elective	3	0	3
Mathematics				
MAT 1140	Technical Mathematics	5	0	5
MAT 1150	Basic Calculus	3	0	3
Physics				
PHY 1110	College Physics I	3	0	3
PHY 1111	Physics Laboratory I	0	2	1
PHY 1120	College Physics II	3	0	3
PHY 1121	Physics Laboratory II	0	2	1
Social **Sciences Elective**				
	Social Sciences Elective	3	0	3
Civil Engineering Technology				
CIT 1112	Board Drafting Basics	0	6	2
CIT 1220	Materials and Methods of Construction	3	0	3
CIT 2110	Structural Mechanics	3	0	3
CIT 2130	Surveying I	2	3	3
CIT 2400	Structural Design	3	0	3
Architectural Engineering Technology				
ACT 1161	Residential Drafting and Construction	2	6	4
ACT 1341	Commercial Drafting and Codes	1	6	3
ACT 1391	History of Architecture	3	0	3
ACT 1432	Computer-Aided Drafting I	1	4	3
ACT 1530	Computer-Aided Drafting II	0	6	3
ACT 2160	Building Utilities	3	0	3
ACT 2241	Advanced Architectural Drafting	1	5	3
ACT 2440	Specifications and Estimating	2	2	3
ACT 2460	Advanced Architectural CAD	0	9	3
General Education Elective				
	General Elective	3	0	3
	Total Required - Associate's Degree			**76**

RECOMMENDED FULLTIME SCHEDULE

FIRST YEAR

Fall **Semester**		Cr.
ENG 1111	Composition I	3
MAT 1140	Technical Mathematics	5
ACT 1161	Residential Drafting and Construction	4
ACT 1432	Computer-Aided Drafting I	3
CIT 1112	Board Drafting Basics	2

Spring Semester		
MAT 1150	Basic Calculus..	3
ACT 1341	Commercial Drafting and Codes	3
ACT 1391	History of Architecture..	3
ACT 1530	Computer-Aided Drafting II..	3
CIT 1220	Materials and Methods of Construction..	3
	Social Sciences Elective..	3
	General Elective	1

SECOND YEAR

Fall Semester		Cr.
ENG 2112	Report Writing..	3
PHY 1110	College Physics I..	3
PHY 1111	Physics Laboratory I..	1
ACT 2160	Building Utilities.	3
ACT 2241	Advanced Architectural Drafting	3
CIT 2110	Structural Mechanics	3
CIT 2130	Surveying I	3

Spring Semester		
SPE 1111	Speech..	3
or		
SPE 1112	Fundamentals of Speech Communication	3
PHY 1120	College Physics II..	3
PHY 1121	Physics Laboratory II..	1
ACT 2440	Specifications and Estimating	3
ACT 2460	Advanced Architectural CAD..	3
CIT 2400	Structural Design	3
	Humanities Elective	3

RECOMMENDED PART-TIME SCHEDULE

FIRST YEAR

Fall Semester		Cr.
ENG 1111	Composition I	3
CIT 1112	Board Drafting Basics	2

Spring Semester		
ACT 1161	Residential Drafting and Construction	4
MAT 1140	Technical Mathematics	5

Summer Semester		
ACT 1432	Computer-Aided Drafting I	3
	Social Sciences Elective	3

SECOND YEAR

Fall Semester		Cr.
MAT 1150	BasicCalculus	3
ACT 1341	Commercial Drafting and Codes.	3

Spring Semester		
ACT 1530	Computer-Aided Drafting II	3
ENG 2112	Report Writing	3

Summer Semester		
ACT 1391	History of Architecture	3
	Humanities Elective	3

THIRD YEAR

Fall Semester			Cr.
CIT	1220	Material and Methods of Construction	3
CIT	2130	Surveying I	3

Spring Semester			
ACT	2241	Advanced Architectural Drafting	3
CIT	2110	Structural Mechanics	3

Summer Semester			
PHY	1110	CollegePhysicsI	3
PHY	1111	Physics Laboratory I	1
SPE	1111	Speech	3
	or		
SPE	1112	Fundamentals of Speech Communication	3

FOURTH YEAR

Fall Semester			cr.
ACT	2460	Advanced Architectural CAD	3
CIT	2400	Structural Design	3

Spring Semester			
PHY	1120	College Physics II	3
PHY	1121	Physics Laboratory II	1
ACT	2160	Building Utilities	3

Summer Semester			
ACT	2440	Specifications and Estimating	3
		General Elective	3

Cooperative Education work experience in Architectural Engineering Technology can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 5 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

AUTOMOTIVE SERVICE TECHNOLOGY

TECHPREP PROGRAM ELIGIBILITY

Associate of Applied Science

The Automotive Service Technology program prepares students to work in area automotive dealerships or repair shops.

There are three different groups of directed electives for the program, depending on the sponsoring dealership or repair shop:

1. Automotive Service Educational Program (ASEP) in cooperation with General Motors;
2. Automotive Student Service Educational Training Program (ASSET) in cooperation with Ford Motor Company; and
3. Automotive Training Educational Program (ATEP) in cooperation with Toyota Motors of America and selected other local dealerships.

This program alternates periods of formal training with periods of on-the-job experience at participating dealerships. These periods in the dealership are designed to provide practical experience as reinforcement of concepts taught during the school terms. Students must maintain sponsorship with participating dealerships during the entire training period. Nashville State Tech assists students in obtaining sponsorship.

This program is conducted in response to local training needs and, therefore, may not necessarily begin each year. For further information, please contact Bill Maxwell (353-3457) or Gene Crook (353-3460).

COURSE REQUIREMENTS

		Class	Lab	Credits
English				
ENG 1111	Composition I	3	0	3
SPE 1111	Speech	3	0	3
Humanities Elective				
	Humanities Elective	3	0	3
Mathematics				
MAT 1140	Technical Mathematics	5	0	5
Physics				
PHY 1010	Applied Physics I	3	0	3
PHY 1011	Applied Physics Laboratory I	0	2	1
PHY 1020	Applied Physics II	3	0	3
PHY 1021	Applied Physics Laboratory II	0	2	1
Social Sciences Elective				
	Social Sciences Elective	3	0	3
Core Courses				
Automotive Service Technology				
AMT 1110	Automotive Service	1	3	2
AMT 1122	Standard Transmissions/Drive Lines/Differentials	2	3	3
AMT 1124	Automotive Brakes	2	2	3
AMT 1126	Suspension and Steering	2	2	3
AMT 1310	Automotive Engines	3	4	5
AMT 1320	GM Automotive Engines	2	3	3
AMT 2212	Automatic Transmissions	4	2	5
AMT 2210	Automatic Transmissions II	2	3	3
AMT 2310	Fuel and Emissions	2	3	3
AMT 2320	Automotive Update	1	0	1
AMT 2330	ClimateControl	3	2	4
Directed Electives				
ASEP				
EET 1190	GM Automotive Electricity I	3	2	4
EET 1290	GM Automotive Electricity II	2	3	3
EET 2190	GM Advanced Electronics	2	2	3
EET 2290	GM Automotive Computer Systems I	2	3	3
EET 2295	GM Automotive Computer Systems II	2	3	3
ASSET				
AMT 1220	Ford Electrical Systems	3	2	4
AMT 2110	Ford Electronic Systems/Computers	3	2	4
AMT 2250	Diesel Engine Operations	1	2	2
AMT 2340	Ford Engine Performance	4	4	6
AMT 2360	Ford Automotive Project	2	0	2
ATEP				
AMT 2225	Automotive Engines II	1	2	2
AMT 2345	Engine Performance and Testing	0	2	1
AMT 2350	Developmental Project	2	0	2
EET 1192	Automotive Electricity	3	2	4
EET 2192	Automotive Electronics	3	2	4
EET 2292	Automotive Computer Systems	2	2	3
General Education Elective				
	Total Required - Associate's Degree			**68**

ASEP

FIRST YEAR

Fall Semester		Cr.
ENG 1111	Composition I	3
MAT 1140	Technical Mathematics	5
AMT 1110	Automotive Service	2
EET 1190	GM Automotive Electricity I	4
	Co-op	1
Spring Semester		
SPE 1111	Speech	3
AMT 1124	Automotive Brakes	3
AMT 1126	Suspension and Steering	3
	Humanities Elective	3
	Co-op	1
Summer Semester		
AMT 2330	Climate Control	4
EET 1290	GM Automotive Electricity II	3
	Social Sciences Elective	3
	Co-op	1

SECOND YEAR

Fall Semester		Cr.
AMT 1122	Standard Transmissions/Drive Lines/Differentials	3
PHY 1010	Applied Physics I	3
PHY 1011	Applied Physics Laboratory I	1
AMT 2120	Automatic Transmissions I	3
	Co-op	1
Spring Semester		
PHY 1020	Applied Physics II	3
PHY 1021	Applied Physics Laboratory II	1
AMT 1320	GM Automotive Engines I	3
AMT 2210	Automatic Transmissions II	3
	Co-op	1
Summer Semester		
EET 2290	GM Automotive Computer Systems I	3
AMT 2310	Fuel and Emissions	3
AMT 2320	Automotive Update	1

ASSET

FIRST YEAR

Fall Semester			Cr.
ENG	1111	Composition I	3
MAT	1140	Technical Mathematics	5
AMT	1110	Automotive Service	2
AMT	1220	Ford Electrical Systems	4

Spring Semester			
PHY	1010	Applied Physics I	3
PHY	1011	Applied Physics Laboratory I	1
AMT	1310	Automotive Engines	5
AMT	2110	Ford Electronic Systems/Computers	4

Summer Semester			
AMT	1124	Automotive Brakes	3
AMT	2330	Climate Control	4
PHY	1020	Applied Physics II	3
PHY	1021	Applied Physics Laboratory II	1

SECOND YEAR

Fall Semester			Cr.
SPE	1111	Speech	3
AMT	1126	Suspension and Steering	3
AMT	1122	Standard Transmissions/Drive Lines/Differentials	3

Spring Semester			
AMT	2212	Automatic Transmission	5
		Social Sciences Elective	3

Summer Semester			
AMT	2340	Engine Performance	6
AMT	2250	Diesel Engine Operations	2
		Humanities Elective	3

ATEP

FIRST YEAR

Fall Semester			Cr.
ENG	1111	Composition I	3
MAT	1140	Technical Mathematics	5
AMT	1110	Automotive Service	2
EET	1192	Automotive Electricity	4

Spring Semester			
SPE	1111	Speech	3
AMT	1124	Automotive Brakes	3
AMT	1126	Suspension and Steering	3
		Humanities Elective	3

Summer Semester			
AMT	1122	Standard Transmissions/Drive Lines/Differentials	3
AMT	2330	Climate Control	4
		Social Sciences Elective	3

SECOND YEAR

Fall Semester			Cr.
PHY	1010	Applied Physics I	3
PHY	1011	Applied Physics Laboratory I	1
AMT	2120	Automatic Transmissions I	3
EET	2192	Automotive Electronics	4

Spring Semester			
PHY	1020	Applied Physics II	3
PHY	1021	Applied Physics Laboratory II	1
AMT	1310	Automotive Engines I	5
EET	2292	Automotive Computer Systems	3

Summer Semester			
AMT	2210	Automatic Transmissions II	3
AMT	2225	Automotive Engines II	2
AMT	2320	Automotive Update	1
AMT	2345	Engine Performance and Testing	1
AMT	2350	Developmental Project	1

How to Succeed in *College*

Attend all your classes regularly.

Many students assume that regular classroom attendance is not important in college. WRONG! One of the reasons most listed by faculty for students being unsuccessful in college is not attending classes and not participating in classroom discussion. The nature of the academic programs at Nashville State Tech requires that you attend class. Read your student handbook for the official attendance policy.

BUSINESS MANAGEMENT

Associate of Applied Science

The goal of the Business Management Associate's degree program is to teach business technicians at the two-year college level to enter the business field possessing the managerial and technical skills necessary to perform in entry level management positions in large and small companies. It is the intent of the Business Management program that graduates:

1. Understand how to develop and maintain an organization's management program that effectively and efficiently maximizes organizational resources.
2. Possess basic business management skills in the areas of accounting, computers, economics, marketing, banking, management, team building, and business law.
3. Be able to apply basic business mathematics skills.
4. Communicate effectively in written form and orally.
5. Meet, if not exceed, exit exam scores made by business management graduates in two-year colleges in Tennessee.
6. Find employment in their major field of study with a minimum yearly placement rate of 75 percent.

Concepts taught in General Education courses will be reinforced in the Business Management curriculum and applied to class exercises and projects.

This program contains three concentrations: Financial Services Management, Small Business Administration, and Customer Service.

BUSINESS MANAGEMENT

Customer Service

Customer Service refers to every action by a business entity that augments the customer's ability to realize the potential value of a product or service. In today's competitive environment, companies must distinguish themselves through extraordinary customer service. Applicants for careers in business need to be prepared to deal with the public effectively and efficiently in order to enhance the agency for which they work, whether it be public or private.

The degree in Customer Service is designed to provide entry-level skills in the customer service area. The program will develop competence in problem solving, communication skills, conflict resolution, customer relations, management, and general business practices.

COURSE REQUIREMENTS

		Class	Lab	Credit
English				
ENG 1111	Composition I	3	0	3
SPE 1111	Speech	3	0	3
Humanities				
SPA 1111	Spanish I	4	0	4
Mathematics				
MAT 1110	Business Mathematics	3	0	3
Natural Science/Mathematics Elective				
	Natural Science or Math Elective	3	0	3
Social Science				
SOC 2113	Social Psychology	3	0	3
Technical Core				
AIS 1180	Introduction to Microcomputing.	4	0	4
BUS 1113	Introduction to Business	3	0	3
BUS 2111	Human Relations in Business	3	0	3
BUS 2310	Business Ethics	3	0	3
BUS 2400	Principles of Management	3	0	3
BUS 2600	Business Law: Contracts	3	0	3
MKT 2220	Marketing	3	0	3
MKT 1227	Sales Techniques,	3	0	3
Technical Speciality				
BUS 1000	Introduction to Customer Service..	3	**0**	3
PHI 1000	Critical Thinking and Problem Solving	3	0	3
PSY 1115	Psychology of Adjustment	3	0	3
SPE 1112	Introduction to Human Communication..	3	0	3
Technical Elective				
BNK, BUS, MKT, ECO Course or Co-op..		9	**0**	9
	Total Required - Associate's Degree..			**65**

RECOMMENDED FULL-TIME SCHEDULE

FIRST YEAR

Fall Semester		**Cr.**
PHI 1000	Critical Thinking and Problem Solving	3
ENG 1111	Composition I	3
MAT 1110	Business Mathematics	3
BUS 1000	Introduction to Customer Service	3
PSY 1115	Psychology of Adjustment	3
Spring Semester		
SPE 1111	Speech	3
	Math Elective or Natural Science Elective	3
BUS 2111	Human Relations in Business	3
BUS 1113	Introduction to Business	3
MKT 1227	Sales Techniques	3
	Co-op Elective or Technical Elective	3

SECOND YEAR

Fall Semester		**Cr.**
SPE 1112	Introduction to Human Communication.	3
AIS 1180	Microcomputer Software for Business	4
BUS 2600	Business Law	3
BUS 2310	Business Ethics	3
	Co-op Elective or Technical Elective..	3
Spring Semester		
SOC 2113	Social Psychology	3
SPA 1111	Spanish I	4
BUS 2400	Principles of Management	3
MKT 2220	Marketing	3
	Co-op Elective or Technical Elective	3

RECOMMENDED PART-TIME SCHEDULE

FIRST YEAR

Fall Semester		**Cr.**
ENG 1111	Composition I	3
BUS 1000	Introduction to Customer Service	3
Spring Semester		
PHI 1000	Critical Thinking and Problem Solving	3
BUS 1113	Introduction to Business	3
Summer Semester		
MAT 1110	Business Mathematics	3

SECOND YEAR

Fall Semester		**Cr.**
PSY 1115	Psychology of Adjustment	3
MKT 1227	Sales Techniques	3
Spring Semester		
BUS 2400	Principles of Management	3
	Natural Science Elective	
	or	
	Math Elective.	3
Summer Semester		
SPE 1111	Speech	3

THIRD YEAR

Fall Semester		**Cr.**
SPE 1112	Introduction to Human Communication	3
BUS 2111	Human Relations in Business.	3
Spring Semester		
SOC 2113	Social Psychology	3
	Co-op Elective	
	or	
	Technical Elective.	3
Summer Semester		
AIS 1180	Introduction to Microcomputing.	4

FOURTH YEAR

Fall Semester		**Cr.**
SPA 111	Spanish I	4
	Co-op Elective	
	or	
	Technical Elective.	3
Spring Semester		
BUS 2310	Business Ethics	3
BUS 2600	Business Law: Contracts..	3
MKT 2220	Marketing..	3
Summer Semester		
	Co-op Elective	
	or	
	Technical Elective.	3

Cooperative Education work experience in Business Management (Customer Service) can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 9 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information,

BUSINESS MANAGEMENT

Financial Services Management: Banking

Finance is a dynamic field in which dramatic economic and legal changes are challenging the traditions of all financial institutions. The Financial Services Management: Banking program trains graduates to function in this changing environment.

The curriculum provides the student with firm foundations in accounting principles, the U.S. monetary system, and the credit granting process. English and social science courses provide a valuable broadening experience which prepares graduates to effectively communicate with peers and customers. Typical jobs available for graduates include **clerks, tellers, operations supervisors, bank bookkeepers, administrative assistants,** and **credit investigators.** Financial Services Management also offers degree programs in cooperation with the banking industry (AIB) and the insurance industry (CPCU). These evening programs are offered primarily at off-campus locations. AIB and CPCU catalogs are available upon request.

COURSE REQUIREMENTS

English		**Class**	**Lab**	**Credits**
ENG 1111	Composition I	3	0	3
SPE 1111	Speech	3	0	3
Humanities Elective				
	Humanities Elective	3	0	3
Mathematics				
MAT 1110	Business Mathematics	3	0	3
Natural Science/Mathematics Elective				
	Natural Science **or** Math Elective	3	0	3
Social Science				
	Social Sciences Elective	3	0	3
Technical **Core**				
ACC 1104	Principles of Accounting I	4	0	4
ACC 1105	Principles of Accounting II	4	0	4
AIS 1138	Microcomputer Software for Business	4	0	4
AIS 1180	Introduction to Microcomputing	4	0	4
BUS 2111	Human Relations in Business	3	0	3
BUS 2600	Business Law: Contracts	3	0	3
ECO 1111	Principles of Macroeconomics	3	0	3
MKT 2220	Marketing	3	0	3
Technical Specialty				
BNK 1110	Principles of Banking	3	0	3
BNK 1210	Consumer Lending	3	0	3
BNK 1215	Commercial Bank Management	3	0	3
BNK 2110	Money and Banking	3	0	3
BNK 2115	Negotiable Instruments	3	0	3
BNK 2210	The Trust Business	3	0	3
BNK 2230	Investment Basics	3	0	3
Technical Elective				
	BUS, MKT, ECO Course	9	0	9
	Total Required - Associate's Degree			70

RECOMMENDED FULL-TIME SCHEDULE

FIRST YEAR

Fall Semester		**Cr.**
ENG 1111	Composition I	3
MAT 1110	Business Mathematics	3
ACC 1104	Principles of Accounting I	4
BNK 1110	Principles of Banking	3
AIS 1180	Introduction to Microcomputing	4

Spring Semester

ECO	1111	Principles of Macroeconomics	3
ACC	1105	Principles of Accounting II	4
AIS	1138	Microcomputer Software for Business	4
BNK	1210	Consumer Lending	3
BNK	1215	Commercial Bank Management	3

SECOND YEAR

Fall Semester **Cr.**

BUS	2111	Human Relations in Business	3
BUS	2600	Business Law: Contracts	3
BNK	2110	Money and Banking	3
BNK	2230	Investment Basics	3
		Social Sciences Elective	3
		Natural Sciences Elective **or** Math Elective	3

Spring Semester

SPE	1111	Speech	3
MKT	2220	Marketing	3
BNK	2115	Negotiable Instruments	3
BNK	**2210**	The Trust Business	3
		Humanities Elective	3
		Technical Elective	3

RECOMMENDED PART-TIME SCHEDULE

FIRST YEAR

Fall Semester **Cr.**

ENG	1111	Composition I	3
BNK	1110	Principles of Banking	3

Spring Semester

BNK	I210	Consumer Lending	3
ECO	1111	Principles of Macroeconomics	3

Summer Semester

MAT	1110	Business Mathematics	3

SECOND YEAR

Fall Semester **Cr.**

ACC	1104	Principles of Accounting I	4
		Social Sciences Elective	3

Spring Semester

ACC	1105	Principles of Accounting II	4
BNK	1215	Commercial Bank Management	3

Summer Semester

SPE	1111	Speech	3
		Humanities Elective	3

THIRD YEAR

Fall Semester **Cr.**

BNK	2110	Money and Banking	3
		Natural Sciences Elective **or** Math Elective	3

Spring Semester

BNK	2210	Trust Business	3
BUS	2600	Business Law: Contracts	**3**

Summer Semester

AIS	1180	Introduction to Microcomputing	4
BUS	2111	Human Relations in Business	3

FOURTH YEAR

Fall Semester **Cr.**

AIS	1138	Microcomputer Software for Business	4
BNK	2230	Investment Basics	3

Spring Semester

BNK	2115	Negotiable Instruments	3
MKT	2220	Marketing	3

Summer Semester

Technical Elective 3

Cooperative Education work experience in Business Management (Financial Services Management: Banking) can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 9 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

BUSINESS MANAGEMENT

Small Business Administration

The Small Business Administration emphasis was designed for students who seek employment in either large or small organizations. Skills which are appropriate for small organizations can be used by employees in large organizations who wish to upgrade skills to use within the company for which they work. The program will be helpful to those people who wish to own and operate a business.

The Small Business Administration program provides knowledge and skills sufficient to allow a person to be employed in a wide variety of service, merchandising, and manufacturing organizations. The graduate will have an understanding of business law, accounting, microcomputer applications, payroll information, personnel policies, consumer credit policies, money and banking, insurance, and sales needed in diverse information environments. Marketing and management information and theory provide the ability to understand and use human relations skills.

Graduates will be prepared to seek employment in retail, wholesale and manufacturing offices which use microcomputers for producing financial statements and inventory control, and service industry organizations. Typical job titles include, but are not limited to, **store/office manager, customer service representative, management trainee, director of sales and marketing, project manager, distribution manager, assistant credit manager, purchasing agent,** and **assistant personnel manager.**

COURSE REQUIREMENTS

English			**Class**	**Lab**	**Credits**
ENG	1111	Composition I	3	0	3
SPE	1111	Speech	3	0	3
Humanities Elective					
		Humanities Elective	3	0	3
Mathematics					
MAT	1110	Business Mathematics	3	0	3
Natural Science/Mathematics Elective					
		Natural Science **or** Math Elective	3	0	3
Social Science					
		Social Sciences Elective	3	0	3
Technical Core					
ECO	1111	Principles of Macroeconomics **or**			
ECO	1121	Principles of Microeconomics	3	0	3
ACC	1104	Principles of Accounting I	4	0	4
ACC	1105	Principles of Accounting II	4	0	4
AIS	1138	Microcomputer Software for Business	4	0	4
AIS	1180	Introduction to Microcomputing	4	0	4

BUS	2111	Human Relations in Business..	3	0	3
BUS	2600	Business Law: Contracts..	3	0	3
MKT	2220	Marketing	3	0	3

Technical Specialty Requirements

Banking

BNK	1210	Consumer Lending	3	0	3
BNK	2110	Money and Banking..	3	0	3

Business Management

BUS	1113	Introduction to Business	3	0	3
BUS	2250	Human Resource Management..	3	0	3
BUS	2310	Business Ethics	3	0	3
BUS	2400	Principles of Management	3	O	3
MKT	1227	Sales Techniques	3	**0**	3

Business or Banking Technical Elective (select one course)

BNK		(any Banking course in addition to required courses)			
BUS	1500	Entrepreneurship	3	0	3
BUS	2311	Leadership..	3	0	3
BUS	2400	Personal Money Management	3	0	3
ECO	1111	Principles of Macroeconomics..	3	0	3
ECO	1121	Principles of Microeconomics	3	0	3

Total Required -Associate's Degree 7 0

RECOMMENDED FUIL-TIME SCHEDULE
FIRST YEAR

Fall Semester			**Cr.**
ENG	1111	Composition I..	3
MAT	1110	Business Mathematics	3
ACC	1104	Principles of Accounting I	4
BUS	1113	Introduction to Business	3
MKT	1227	Sales Techniques	3

Spring Semester			
SPE	1111	Speech..	3
ACC	1105	Principles of Accounting II	4
BNK	1210	Consumer Lending	3
ECO	1111	Principles of Macroeconomics	
		or	
ECO	1121	Principles of Microeconomics	3
		Natural Sciences Elective	
		or	
		Math Elective	3
		Social Sciences Elective	3

SECOND YEAR

Fall Semester			**Cr.**
BUS	2111	Human Relations in Business..	3
BNK	2110	Money and Banking..	3
BUS	2250	Human Resource Management..	3
BUS	2310	Business Ethics	3
BUS	2600	Business Law: Contracts..	3
AIS	1180	Introduction to Microcomputing	4

Spring Semester			
AIS	1138	Microcomputer Software for Business	4
BUS	2400	Principles of Management	3
MKT	2220	Marketing	3
		Humanities Elective	3
		Technical Elective..	3

RECOMMENDED PART-TIME SCHEDULE
FIRST YEAR

Fall Semester			**Cr.**
BUS	2111	Human Relations in Business	3
BUS	1113	Introduction to Business	3

Spring Semester			
BNK	1210	Consumer Lending	3
ECO	1111	Principles of Macroeconomics	
		or	
ECO	1121	Principles of Microeconomics	3

Summer Semester			
MAT	1110	Business Mathematics	3

SECOND YFAR

Fall Semester			**Cr.**
ACC	1104	Principles of Accounting I	4
MKT	1227	Sales Techniques	3

Spring Semester			
ENG	1111	Composition I	3
ACC	1105	Principles of Accounting II	4

Summer Semester			
SPE	1111	Speech	3
		Humanities Elective	3

THIRD YEAR

Fall Semester			**Cr.**
BNK	2110	Money and Banking,	3
		Natural Sciences Elective	
		or	
		Math Elective	3

Spring Semester			
BUS	2310	Business Ethics	3
BUS	2600	Business Law: Contracts	3

Summer Semester			
AIS	1180	Introduction to Microcomputing	4
		Social Sciences Elective	3

FOURTH YEAR

Fall Semester			**Cr.**
AIS	1138	Microcomputer Software for Business	4
BUS	2250	Human Resource Management	3

Spring Semester			
BUS	2400	Principles of Management	3
MKT	2220	Marketing	3

Summer Semester			
		Technical Elective	3

Cooperative Education work experience in Business Management Small Business Administration Concentration) can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 9 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

NASHVILLE State Tech

The Nashville Community's Two-Year College

CIVIL AND CONSTRUCTION ENGINEERING TECHNOLOGY

Associate of Applied Science

The courses in the program prepare the graduate for a variety of jobs in the office and on the site. Students receive practical instruction and hands-on experience with electronic surveying equipment, computers, and computer-aided drafting equipment, as well as traditional procedures. The student becomes knowledgeable of the design and building process.

Typical positions available to graduates include: **drafters** - who prepare maps and civil, structural, and environmental design drawings; **computer-aided drafters** - who develop maps and design drawings using computers; estimators - who prepare quantity and cost estimates for contractors and material suppliers; **laboratory technicians** - who test soil, rock, concrete, and other construction materials; surveyors - who perform boundary, topographic, and construction surveys; **inspectors** - who visit the site to test materials and determine if the work is carried out according to plans and specifications; **assistant superintendents** - who assist in checking shop drawings, ordering materials and laying out the structure; and **detailers** - who prepare shop drawings.

With additional experience graduates can assume more responsibility and become party chiefs, chief drafters, project managers, superintendents, and registered land surveyors.

COURSE REQUIREMENTS

		Class	Lab	Credits
English				
ENG 1111	Composition I	3	0	3
ENG 2112	Report Writing	3	0	3
SPE 1111	Speech	3	0	3
	or			
SPE 1112	Fundamentals of Speech Communication	3	0	3
Humanities Elective				
	Humanities Elective	3	0	3
Mathematics				
MAT 1140	Technical Mathematics	5	0	5
MAT 1150	Basic Calculus	3	0	3
Physics				
PHY 1110	College Physics I	3	0	3
PHY 1111	Physics Laboratory I	0	2	1
PHY 1120	College Physics II	3	0	3
PHY 1121	Physics Laboratory II	0	2	1
Social Sciences Elective				
	Social Sciences Elective	3	0	3
Architectural Engineering Technology				
ACT 1432	Computer-Aided Drafting I	1	4	3
ACT 1530	Computer-Aided Drafting II	0	6	3
ACT 2440	Specifications and Estimating	2	2	3
Industrial Engineering Technology				
IET 2120	Engineering Economy	3	0	3
Civil Engineering Technology				
CIT 1112	Board Drafting Basics	0	6	2
CIT 1150	Environmental Technology I	3	0	3
CIT 1220	Materials and Methods of Construction	3	0	3
CIT 1230	Testing of Materials	1	3	2
CIT 2110	Structural Mechanics	3	0	3
CIT 2130	Surveying I	2	3	3
CIT 2250	Environmental Technology II	2	2	3
CIT 2300	Site Design with CAD	1	6	3
CIT 2310	Surveying II	2	3	3
CIT 2400	Structural Design	3	0	3
General Education Elective				
	General Elective	3	0	3
	Total Required - Associate's Degree			74

RECOMMENDED FULLTIME SCHEDULE

FIRST YEAR

Fall Semester		**Cr.**
ENG 1111	Composition I	3
MAT 1140	Technical Mathematics	5
CIT 1112	Board Drafting Basics	2
ACT 1432	Computer-Aided Drafting I	3
	Social Sciences Elective	3
	General Elective	3

Spring Semester		
ENG 2112	Report Writing	3
MAT 1150	Basic Calculus	3
CIT 1150	Environmental Technology I	3
CIT 1220	Materials and Methods of Construction	
CIT 1230	Testing of Materials	2
ACT 1530	Computer-Aided Drafting II	3

SECOND YEAR

Fall Semester		**Cr.**
SPE 1111	Speech	3
	or	
SPE 1112	Fundamentals of Speech Communication	3
PHY 1110	College Physics I	3
PHY 1111	Physics Laboratory I	1
CIT 2110	Structural Mechanics	3
CIT 2130	Surveying I	3
CIT 2250	Environmental Technology II	3
IET 2120	Engineering Economy	3

Spring Semester		
PHY 1120	College Physics II	3
PHY 1121	Physics Laboratory II	1
CIT 2300	Site Design with CAD	3
CIT 2310	Surveying II	3
CIT 2400	Structural Design	3
ACT 2440	Specifications and Estimating	3
	Humanities Elective	3

RECOMMENDED PART-TIME SCHEDULE

FIRST YEAR

Fall Semester		**Cr.**
ENG 1111	Composition I	3
CIT 1112	Board Drafting Basics	2

Spring Semester		
MAT 1140	Technical Mathematics	5
CIT 1230	Testing of Materials	2

Summer Semester		
ENG 2112	Report Writing	3
	Social Sciences Elective	3

SECOND YEAR

Fall Semester		**cr.**
MAT 1150	Basic Calculus	3
ACT 1432	Computer-Aided Drafting I	3

Spring Semester

PHY	1110	College Physics I	3
PHY	1111	Physics Laboratory I	1
CIT	1150	Environmental Technology I	3

Summer Semester

ACT	1530	Computer-Aided Drafting II	3
		Humanities Elective	3

THIRD YEAR

Fall Semester **Cr.**

CIT	1220	Materials and Methods of Construction	3
CIT	2130	Surveying I	3

Spring Semester

CIT	2110	Structural Mechanics	3
CIT	2310	Surveying II	3

Summer Semester

SPE	1111	Speech	3
		or	
SPE	1112	Fundamentals of Speech Communication	3
IET	2120	Engineering Economy	3

FOURTH YEAR

Fall Semester **Cr.**

CIT	2250	Environmental Technology II	3
CIT	2400	Structural Design	3

Spring Semester

PHY	1120	College Physics II	3
PHY	1121	Physics Laboratory II	1
CIT	2300	Site Design with CAD	3

Summer Semester

ACT	2440	Specifications and Estimating	3
		General Elective	3

Cooperative Education work experience in Civil and Construction Engineering Technology can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 5 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

How to Succeed in College

Get to know your instructors and advisors immediately

Your academic instructors and advisor can provide you accurate information about Nashville State Tech's academic programs, policies, procedures and support services. They can assist you in making educational choices if you are planning to transfer to another college or university. It is essential that you periodically discuss your academic progress with your instructor. He/she may recommend sources of academic assistance if you need them.

All faculty members are available to students for consultation and maintain regular office hours for that purpose. A schedule of faculty members' office hours is posted on their office door. For each course that you are enrolled, the instructors will provide a course outline or syllabus that will have the instructor's office and telephone numbers

Obtain all books and supplies needed for your classes.

The bookstore carries all required textbooks and an assortment of students supplies, general reading materials and emblematic items. Textbooks are selected and approved by the teaching staff. Since the cost of books and supplies varies for semester to semester, only the average cost can be included in this Handbook. The average cost of books and supplies is approximately $300-$450 per year, depending upon the program of study.

The Bookstore's normal hours of operation are Monday through Thursday from 7:30 a.m. until 6:30 p.m. and Friday from 7:30 a.m. until 12 noon. When students are not present the hours are Monday through Friday from 7:30 a.m. until noon. Any changes in Bookstore hours will be posted on the entrance door.

COMMUNICATIONS TECHNOLOGY

Associate of Applied Science

The evolving trend in distributed electronic information processing (voice, data, video) over different computer platforms, integrating traditional systems with other types of hardware devices, has created a need for employees with training that bridges the boundaries between the traditionally separate fields of computer software specialists and computer hardware specialists. The primary goal of the Communications Technology Associate's degree program is to train individuals to function as entry-level technicians in an environment where data/telecommunications equipment exists (or plans exist to install such equipment) and is utilized as an integral part of the organization's information processing systems and procedures.

Graduates of this program will be employed in areas in which a broad knowledge of computer operating systems protocol is required, as well as techniques for establishing physical connections between various computer platforms. Graduates will possess knowledge applicable to small firms utilizing stand-alone local area networks and to large firms utilizing distributed workgroups that are linked directly over a shared medium and/or indirectly through a host computer. Students will receive training in interconnecting computers of different platforms. They will be exposed to the various media used to make the connection at the target computer and to-the operating system protocol that the target computer utilizes in order to recognize and communicate with other computers.

In addition to the technical skills that graduates of this program will possess, they will also possess verbal and written communication skills and mathematics skills. Humanities and social science courses are included in the program in order to ensure graduates have a broad range of discipline areas and interpersonal skills.

Typical positions available to graduates of the program include: communications service technician - installs and maintains various types of communications equipment with service occasionally provided at the customer site; communication **network technician** - installs and does initial and follow-up operational checks of various networking installations with work typically provided at customer sites; and **repair (maintenance) technician** - provides customer service repair response.

It is the intent of the Computer Technologies Department that graduates of the Communications Technology program be able to:

- Function competently in entry-level network technician positions
- Proficiently use various operating environments to include DOS, Windows, Novell, and UNIX
- Prepare various network servers to include Novell, Windows NT, UNIX
- Prepare client workstation software to communicate with network servers
- Install and configure network interface cards
- Select and install appropriate cabling systems
- Install and configure networking equipment to include routers, bridges, gateways, and repeaters
- Troubleshoot and analyze network hardware and software problems
- Install, implement, and utilize network management tool and procedures
- Communicate successfully in a variety of settings using oral and written skills
- Use concepts taught in general education courses and reinforced in the Communications Technology curriculum

COURSE REQUIREMENTS

		class	Lab	credits
English				
ENG 1111	Composition I..	3	0	3
SPE 1111	Speech..	3	0	3
Humanities Elective				
	Humanities Elective	3	O	3
Mathematics				
MAT 1140	Technical Mathematics	5	0	5
MAT 2110	Statistics..	3	0	3
Social Sciences Elective				
	Social Sciences Elective..	3	0	3
Computer Information Systems				
CIS 2216	C Language for Engineering Technologies	2	2	3
CIS 2250	Micro Operating Systems and Networking	3	0	3
Electronic Engineering Technology				
EET 1130	Introduction to Electronics..	4	2	5
Computer Technology				
CPT 1400	Digital Circuits	2	2	3
CPT 2325	Operating Systems I	3	0	3
CPT 2425	UNIX..	3	0	3
Communications Technology				
CMT 1010	Survey of Communications Technology	3	0	3
CMT 1110	Communications Equipment and Transmission Media.	2	2	3
CMT 2010	Protocols and Topologies	3	0	3
CMT 2020	Digital Communication and Network Extensions	3	2	4
CMT 2030	Windows NT Installation and Configuration	3	0	3
CMT 2100	Network Management and Analysis..	4	0	4
CMT 2150	Principles of TCP/IP	4	0	4
CMT 2130	Applied Networking..	1	2	2
Technical Electives				
	Technical Electives	3	0	3
General Education Elective				
	General Elective	3	0	3
	Total Required - Associate's Degree			**72**

RECOMMENDED FULLTIME SCHEDULE

FIRST YEAR

Fall Semester			**Cr.**
ENG	1111	Composition I	3
MAT	1140	Technical Mathematics	5
EET	1130	Introduction to Electronics	5
CMT	1010	Survey of Communications Technology	3
CPT	2325	Operating Systems I	3

Spring Semester			
MAT	2110	Statistics	3
CIS	2216	C Language for Engineering Technologies	3
CPT	1400	Digital Circuits	3
CPT	2425	UNIX	3
CMT	1110	Communications Equipment and Transmission Media	3
CIS	2250	Micro Operating Systems and Networking	3

SECOND YEAR

Fall Semester			**Cr.**
SPE	1111	Speech	3
CMT	2010	Protocols and Topologies	3
CMT	2020	Digital Communications and Network Extensions	4
		Humanities Elective	3
CMT	2030	Windows NT Installation and Configurations	3

Spring Semester			
CMT	2100	Network Management and Analysis	4
CMT	2150	Principles of TCP/IP	4
CMT	2130	Applied Networking	2
		Technical Elective	3
		Social Sciences Elective	3
		General Elective	3

RECOMMENDED PART-TIME SCHEDULE

FIRST YEAR

Fall Semester			**Cr.**
MAT	1140	Technical Mathematics	5
CMT	1010	Survey of Communications Technology	3

Spring Semester			
EET	1130	Introduction to Electronics	5
CPT	2325	Operating Systems I	3

Summer Semester			
ENG	1111	Composition I	3
CIS	2216	C Language for Engineering Technologies	3
CPT	1400	Digital Circuits	3

SECOND YEAR

Fall Semester			**cr.**
MAT	2110	Statistics	3
CPT	2425	UNIX	3

Spring Semester			
SPE	1111	Speech	3
CIS	2250	Micro Operating Systems and Networking	3
CMT ,	1110	Communications Equipment and Transmission Media	3

Summer Semester			
		Humanities Elective	3
		Social Sciences Elective	3

THIRD YEAR

Fall Semester			**Cr.**
CMT	2010	Protocols and Topologies	3
CMT	2020	Digital Communications and Network Extensions	4

Spring Semester			
CMT	2100	Network Management and Analysis	4
CMT	2030	Windows NT Installation and Configuration	3

Summer Semester			
		General Elective	3

FOURTH YEAR

Fall Semester			**Cr.**
CMT	2130	Applied Networking	2
		Technical Elective	3

Spring Semester			
CMT	2150	Principles of TCP/IP	4

Cooperative Education work experience in Communications Technology can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 7 credit hours with the prior approval of the department head. All Co-op work must have department head approval, The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

"The aim of education should be to teach us rather how to think, than what to think- rather to improve our minds, so as to enable us to think for ourselves, than to load the memory with thoughts of other men."

- Bill Beattie

COMPUTER ACCOUNTING TECHNOLOGY

Associate of Applied Science

The Computer Accounting Technology program provides students with a broad-based core of accounting skills as well as a significant working knowledge of all areas of microcomputing. The microcomputer has -been integrated into almost every course taken. As technology changes, courses are updated.

It is the intent of the Computer Accounting program that graduates be able to:

- Function competently in entry-level accounting and information systems positions.
- Think creatively in solving accounting and information systems, as well as general business problems, generating well-considered logic.
- Work effectively as an individual and in a team environment.
- Adjust rapidly to a specific microcomputer hardware/software environment.
- Develop database applications using current state-of-the-art microcomputer software.
- Develop complete spreadsheet systems including the design and implementation of user interfaces.
- Apply problem-solving and task-management techniques to the design and implementation of software solutions in a microcomputer environment.
- Use mathematics concepts in the solving of accounting and microcomputer problems.
- Communicate successfully in a variety of settings using oral and writing skills.
- Use concepts taught in general education courses through reinforcement in the Computer Accounting Technology curriculum and application to class exercises and projects.

Typical jobs available for graduates include: **paraprofessional** - records and checks transactions relating to payrolls, accounts payable, accounts receivable, cash payments, cash receipts, and other business operations; **accounting technician and** systems **analyst** - assist in the design, implementation, and maintenance of information systems; staff **accountant** - prepares tax returns, bookkeeping, auditing, and microcomputer accounting in public accounting firms; **microcomputer specialist** - works in any area of the microcomputing field, utilizing an in-depth knowledge of the use of spreadsheets, file managers, data base and other software to solve business problems.

NOTE: If you plan to transfer to a four-year program upon leaving Nashville State Tech, consult the department head for a specialized program of study. Failure to do so could result in a loss of credits in the transfer process.

COURSE REQUIREMENTS

			Class	Lab	Credits
English					
ENG	1111	Composition I	3	0	3
SPE	1111	Speech	3	0	3
Humanities Elective					
		Humanities Elective	3	0	3
Mathematics					
MAT	1120	College Algebra	3	0	3
MAT	2110	Statistics	3	0	3
Social Sciences Elective					
		Social Sciences Elective	3	0	3
Business Management					
BUS	2310	Business Ethics	3	0	3
Computer Information Systems					
CIS	1030	Program Logic and Design	**4**	**0**	**4**
Computer Accounting and Accounting Information Systems					
ACC	1104	Principles of Accounting I	4	0	4
ACC	1105	Principles of Accounting II	4	0	4
ACC	1200	Payroll Accounting	4	0	4
ACC	2154	Intermediate Accounting I	4	0	4
ACC	2164	Intermediate Accounting II	4	0	4
ACC	2340	Cost and Managerial Accounting	4	0	4
ACC	2350	Taxation	3	0	3
ACC	2380	Microcomputer Accounting Applications	2	2	3
ACC	2740	Auditing	4	0	4
AIS	1138	Microcomputer Software for Business	4	0	4
AIS	1180	Introduction to Microcomputing	4	0	4
AIS	**2600**	Spreadsheet Problems	2	2	0
AIS	**2840**	Accounting Information Systems	4	**0**	4
		Total Required - Associate's Degree			**74**

RECOMMENDED FULL-TIME SCHEDULE
FIRST YEAR

Fall Semester			**Cr.**
ENG	1111	Composition I	3
MAT	1120	College Algebra	3
ACC	1104	Principles of Accounting I	4
AIS	1180	Introduction to Microcomputing	4
		Humanities Elective	3
		Social Sciences Elective	3

Spring Semester			
SPE	1111	Speech	3
MAT	2110	Statistics	3
CIS	1030	Program Logic and Design	4
ACC	1105	Principles of Accounting II	4
AIS	1138	Microcomputer Software for Business	4

SECOND YEAR

Fall Semester			**cr.**
ACC	2154	Intermediate Accounting I	4
ACC	2340	Cost and Managerial Accounting	4
ACC	2380	Microcomputer Accounting Applications	3
ACC	2740	Auditing	4
AIS	2600	Spreadsheet Problems	3

Spring Semester			
ACC	2164	Intermediate Accounting II	4
ACC	2350	Taxation	3
BUS	2310	Business Ethics	3
AIS	2840	Accounting Information Systems	4
ACC	1200	Payroll Accounting	4

IMPORTANT: Courses should be taken in the sequence indicated in order to ensure graduation on schedule.

RECOMMENDED PART-TIME SCHEDULE

FIRST YEAR

Fall Semester			**Cr.**
ENG	1111	Composition I	3
ACC	1104	Principles of Accounting I	4
AIS	1180	Introduction to Microcomputing	4

spring Semester			
MAT	1120	College Algebra	3
ACC	1105	Principles of Accounting II	4
AIS	1138	Microcomputer Software for Business	.

Summer Semester			
ACC	2340	Cost and Managerial Accounting	4

SECOND YEAR

Fall Semester			**cr.**
AIS	2600	Spreadsheet Problems	3
ACC	2154	Intermediate Accounting I	4

Spring Semester			
MAT	2110	Statistics	3
ACC	2164	Intermediate Accounting II	4

Summer Semester			
ACC	2740	Auditing	4

THIRD YEAR

Fall Semester			**Cr.**
SPE	1111	Speech	3
AIS	2840	Accounting Information Systems	4

spring Semester			
ACC	2380	Microcomputer Accounting Applications	3
		Social Sciences Elective	3

Summer Semester			
		Humanities Elective	3

FOURTH YEAR

Fall Semester			**Cr.**
CIS	1030	Program Logic and Design	4
ACC	2350	Taxation	3

Spring Semester			
BUS	2310	Business Ethics	3
ACC	1200	Payroll Accounting	4

Cooperative Education work experience in Computer Accounting Technology can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 9 credit hours with the prior approval of the department head. Ail Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

How to Succeed in College

Success comes down to one person.

The college experience requires each student be a responsible and well-informed individual. This means that students must attend classes regularly, understand institutional policies and procedures, complete all homework, assignments, and examinations according to the assigned instructor's specifications, and most of all learn to manage time wisely. The old excuse, "Nobody told me . . ." will not work in college. You alone, will ultimately be responsible for your success or failure.

Make a comprehensive educational and career plan.

There is an old saying that goes something like this, "You won't know that you have arrived unless you know where you are going. Many college students really do not know what they want to pursue as a career. That is why it is important that you take advantage of professional advisors and counselors that are available to assist you in making career and educational decisions. Consider the following in career planning:

1. Select a college major or career path that will make YOU happy or satisfied.
2. Determine if your goal or objective is realistic.
3. Investigate the job placement rates and the occupational outlook of your selected major. (This information is available in our Career Employment Center.)
4. Attempt to obtain "experience" in your chosen major while you are in college. Visit the Career Employment Center and learn about cooperative education work experience. Work experience will have an edge on other graduates you will be competing with in the job market when you complete your college degree.
5. Work especially hard on developing social and communication skills. Your Speech and Social Sciences classes can help you in developing these skills.

COMPUTER INFORMATION SYSTEMS

Associate of Applied Science

Computer Information Systems trains entry-level computer programmers and systems analysts. The solution to practical business problems is emphasized in the training. All courses are practical, not theoretical. Each graduate has written, tested, and debugged programs in all of the major programming languages. Each graduate has also developed a practical business system, studied communications systems and programming, and has knowledge of different operating systems and hardware.

It is the intent of the Computer Information and Accounting Department that graduates of the Computer Information Systems program be able to:

- Function competently in entry-level programmer/analyst positions.
- Think creatively in solving problems, generating well-considered logic.
- Work effectively as an individual and in a team environment.
- Adjust rapidly to a specific systems hardware/software environment.
- Develop database applications using current interfaces with procedural and object-oriented languages.
- Apply problem-solving and task management techniques to solve organizational computer applications.
- Use mathematics concepts in research, design, programming, and debugging business-related applications.
- Communicate successfully in a variety of settings using oral and written skills.
- Use concepts taught in general education courses through reinforcement in the Computer Information Systems curriculum and application to class exercises and projects.

All students utilize both mainframe and microcomputers during the two-year program. However, a concentration in either microcomputers or mainframes is chosen after the first year. Students may complete both options if desired.

A communications link to the campus mainframe is available for students who have access to a personal computer at home or work.

COURSE REQUIREMENTS

			Class	Lab	Credits
English					
ENG	1111	Composition I	3	0	3
SPE	1111	Speech	3	0	3
Humanities Elective					
PHI	1111	Introduction to Ethics	3	0	3
Mathematics					
MAT	1160	Finite Mathematics	3	0	3
MAT	2110	Statistics	3	0	3
Social Sciences Elective					
		Social Sciences Elective	3	0	3
Computer Accounting Technology					
ACC	1104	Principles of Accounting I	4	0	4
ACC	1105	Principles of Accounting II	4	0	4
Computer Information Systems					
CIS	1010	Introduction to Electronic Data Processing	3	0	3
CIS	1020	Computing Environments	3	0	3
CIS	1030	Program Logic and Design	4	0	4
CIS	1120	Assembler Language Programming	4	0	4
CIS	2010	ANS COBOL Programming	4	0	4
CIS	2110	Systems Design and Development..	3	0	3
CIS	2120	Operating Systems..	3	0	3
CIS	2130	RPG Programming..	3	0	3
CIS	2140	ANS COBOL Applications..	5	0	5
CIS	2150	Introduction to CICS Programming..	4	0	4
CIS	2160	Data Base Programming	4	0	4
		CIS Elective	3	0	3
CPT	2425	UNIX..	3	0	3
		Total Required - Associate's Degree			**72**

MAINFRAME CONCENTRATION

RECOMMENDED FULL-TIME SCHEDULE
FIRST YEAR

Fall Semester			**Cr.**
ENG	1111	Composition I	3
MAT	1160	Finite Mathematics	3
ACC	1104	Principles of Accounting I	4
CIS	1010	Introduction to Electronic Data Processing	3
CIS	1020	Computing Environments	3
CIS	1030	Program Logic and Design	4

Spring Semester			
PHI	1111	Introduction to Ethics..	3
ACC	1105	Principles of Accounting II..	4
CIS	1120	Assembler Language Programming	4
		CIS Elective	3
		Social Sciences Elective..	3

SECOND YEAR

Fall Semester			**Cr.**
MAT	2110	Statistics..	3
SPE	1111	Speech..	3
CIS	2010	ANS COBOL Programming..	4
CIS	2120	Operating Systems..	3
CIS	2130	RPG Programming	3

Spring Semester			
CIS	2110	Systems Design and Development..	3
CIS	2140	ANS COBOL Applications..	5
CIS	2150	Introduction to CICS Programming..	4
CIS	2160	Data Base Programming	4
CPT	2425	UNIX..	3

RECOMMENDED PART-TIME SCHEDULE
FIRST YEAR

Fall Semester			**Cr.**
CIS	1010	Introduction to Electronic Data Processing	3
CIS	1020	Computing Environments	3
Spring Semester			
ACC	1104	Principles of Accounting I	4
CIS	1030	Program Logic and Design	4
Summer Semester			
ENG	1111	Composition I	3
MAT	1160	Finite Mathematics	3

SECOND YRAR

Fall Semester			**Cr.**
ACC	1105	Principles Accounting II	4
CIS	1120	Assembler Language Programming	4
Spring Semester			
		CIS Elective	3
		Social Sciences Elective	3
Summer Semester			
PHI	1111	Introduction to Ethics	3
MAT	2110	Statistics	3

THIRD YEAR

Fall Semester			**Cr.**
CIS	2120	Operating Systems	3
CIS	2010	ANS COBOL Programming	4
Spring Semester			
CIS	2140	ANS COBOL Applications	5
SPE	1111	Speech	3
Summer Semester			
CPT	2425	UNIX	3

FOURTH YEAR

Fall Semester			**Cr.**
CIS	2150	Intro to CICS Programming	4
CIS	2160	Data Base Programming	4
Spring Semester			
CIS	2110	Systems Design and Development	3
CIS	2130	RPG Programming	3

NOTE: Students may take CPT 2325 as a substitute for CIS 1020.

Cooperative Education work experience in Computer Information Systems Technology (Mainframe Concentration) can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 9 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

MICROCOMPUTER CONCENTRATION

COURSE REQUIREMENTS

English			**Class**	**Lab**	**Credits**
ENG	1111	Composition I	3	0	3
SPE	1111	Speech	3	0	3
Humanities					
PHI	1111	Introduction to Ethics	3	0	3
Mathematics					
MAT	1160	Finite Mathematics	3	0	3
MAT	2110	Statistics	3	0	3
Social **Sciences Elective**					
		Social Sciences Elective	3	0	3
Computer Accounting Technology					
ACC	1104	Principles of Accounting I	4	0	4
ACC	1105	Principles of Accounting II	4	0	4
Computer Information Systems					
CIS	1010	Introduction to Electronic Data Processing	3	0	3
CIS	1020	Computing Environments	3	0	3
CIS	1030	Program Logic and Design	4	0	4
CIS	1130	PASCAL	3	0	3
CIS	2010	ANS COBOL Programming	4	0	4
CIS	2217	Visual BASIC	4	0	4
CIS	2220	C Language Programming	4	0	4
CIS	2221	C++ Programming	3	0	3
CIS	2230	Microcomputer Database Programming	0		3
CIS	2240	Micro Systems Design Project	3	0	3
CIS	2250	Micro Operating Systems and Networking	3	0	3
CIS	2270	Advanced Micro Concepts	3	0	3
CPT	2425	UNIX	3	0	3
CIS	2218	Advanced Topics in Visual Basic	4	0	4
		or			
CIS	2280	Delphi-Rapid Application Development	4	0	4
		Total Required - Associate's Degree			**73**

RECOMMENDED FULL-TIME SCHEDULE
FIRST YEAR

Fall Semester			**Cr.**
ENG	1111	Composition I	3
MAT	1160	Finite Mathematics	3
ACC	1104	Principles of Accounting I	4
CIS	1010	Introduction to Electronic Data Processing	3
CIS	1020	Computing Environments	3
CIS	1030	Program Logic and Design	4
Spring Semester			
PHI	1111	Introduction to Ethics	3
ACC	1105	Principles Accounting II	4
CIS	2010	ANS COBOL Programming	4
CIS	1130	PASCAL	3
		Social Sciences Elective	3

SECOND YEAR

Fall Semester			**Cr.**
MAT	2110	Statistics	3
CIS	2220	C Language Programming	4
CIS	2230	Microcomputer Database Programming	3
CIS	2270	Advanced Micro Concepts	3
CIS	***2217***	Visual Basic	4
Spring Semester			
SPE	1111	Speech	3
CIS	2221	C++ Programming	3
CIS	2240	Micro Systems Design Project	3
CIS	2250	Micro Operating Systems and Networking	3
CPT	2425	UNIX	3

CIS	2218	Advanced Topics in Visual Basic	4
		or	
CIS	2280	Delpi-Rapid Applications Development	4

RECOMMENDED PART-TIME SCHEDULE

FIRST YEAR

Fall Semester **Cr.**

CIS	1010	Introduction to Electronic Data Processing	3
CIS	1020	Computing Environments	3

Spring Semester

ACC	1104	Principles of Accounting I	4
CIS	1030	Program Logic and Design	4

Summer Semester

ENG	1111	Composition I	3
MAT	1160	Finite Mathematics	3

SECOND YEAR

Fall Semester **Cr.**

ACC	1105	Principles of Accounting II	4
CIS	2010	ANS COBOL Programming	4

Spring Semester

CIS	1130	PASCAL	3
		Social Sciences Elective	3

Summer Semester

PHI	1111	Introduction to Ethics...	3
MAT	2110	Statistics	3

THIRD-YEAR

Fall Semester **Cr.**

CIS	2230	Microcomputer Database Programming	3
CIS	2270	Advanced Micro Concepts	3

Spring Semester

CIS	2220	C Language Programming	4
CIS	2250	Micro Operating Systems and Networking	3

Summer Semester

SPE	1111	Speech	3
CPT	2425	UNIX	3

FOURTH YFAR

Fall Semester **Cr.**

CIS	2221	C++ Programming	3
CIS	2217	Visual BASIC	4

Spring Semester

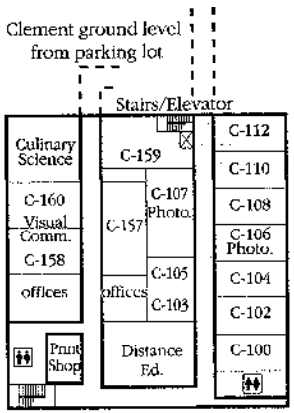
CIS	2218	Advanced Topics in Visual Basic.	4
		or	
CIS	2280	Delphi-Rapid Application Development.	4
CIS	2240	Micro Systems Design Project	3

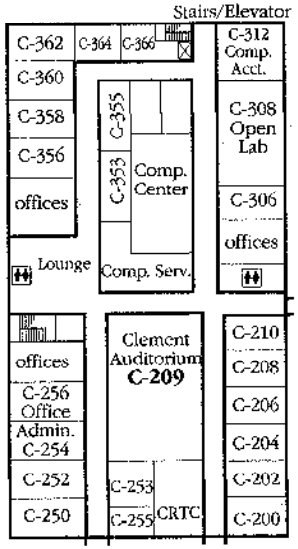
Cooperative Education work experience in Computer Information Systems (Mainframe Concentration) can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 9 credit hours with the prior approval of the department head. Ail Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

NASHVILLE State Tech

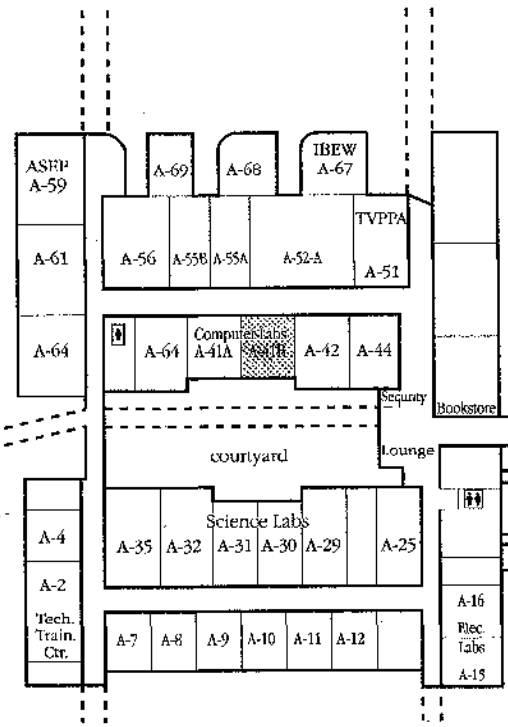
The Nashville Community's Two-Year College

Campus Map

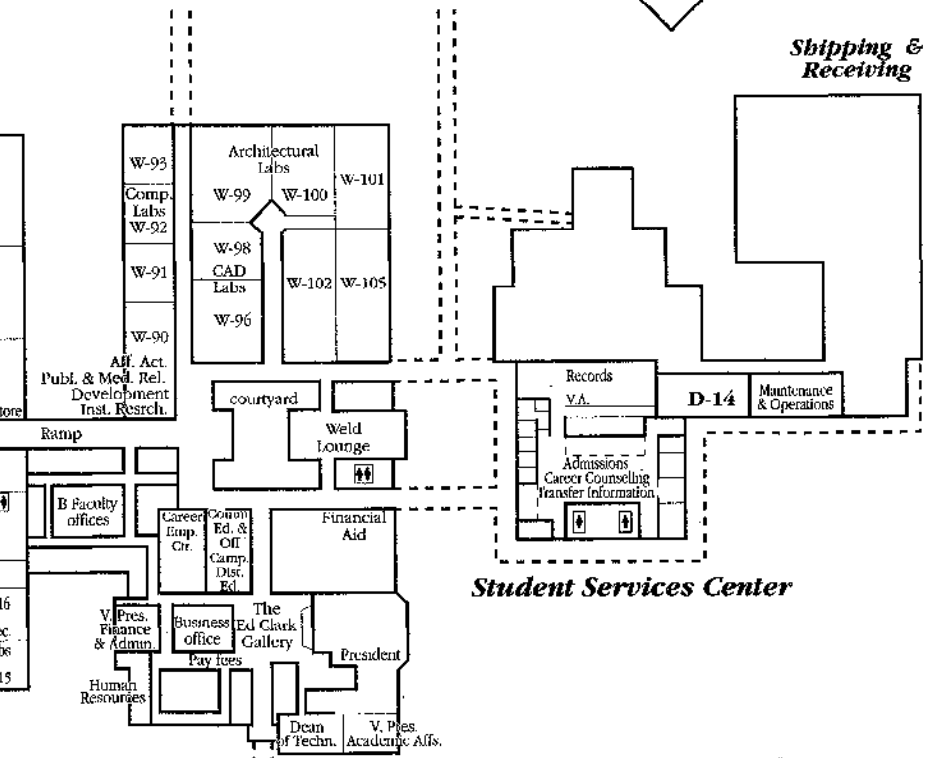




Clement Building

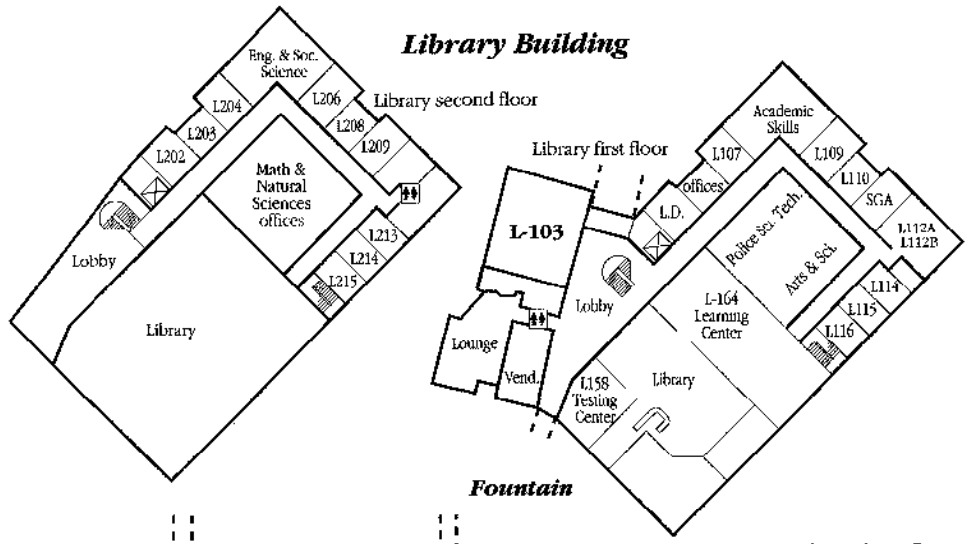


A Building



Weld Building

Student Services Center



White Bridge Road ↓

Restrooms

COMPUTER TECHNOLOGY

Associate of Applied Science

Electronic computers are rapidly becoming the heart of business, manufacturing, and service organizations. The goal of this program is to train men and women as computer technicians. Students become proficient in the operating principles, installation and maintenance of a variety of digital computers, concentrating on the microcomputer and various operating systems and networks.

The program emphasizes digital techniques, computer software and hardware, peripheral devices, telecommunications, operating systems, and systematic troubleshooting. Laboratory work enhances course material and gives the student vital hands-on job skills. The program includes the necessary mathematics, physics, electronics and communications skills needed as a basis for specialization.

Typical positions available to graduates of this program are: **service technician** - configures hardware and software and installs, upgrades and maintains computers and their related peripheral equipment; **technical sales support employee** -helps design custom computer systems based on specific customer requirements; and engineering aide -works with engineers in the design and development of computer controlled equipment and devices.

COURSE REQUIREMENTS

		Class	Lab	Credits
English				
ENG 1111	Composition I	3	0	3
SPE 1111	Speech	3	0	3
Humanities Elective				
	Humanities Elective	3	0	3
Mathematics				
MAT 1140	Technical Mathematics	5	0	5
MAT 1150	Basic Calculus	3	0	3
Physics				
PHY 1110	College Physics I	3	0	3
PHY 1111	Physics Laboratory I	0	2	1
PHY 1120	College Physics II	3	0	3
PHY 1121	Physics Laboratory II	0	2	1
Social Sciences Elective				
	Social Sciences Elective	3	0	3
Computer Information Systems				
CIS 2250	Micro Operating Systems and Networking	3	0	3
Computer Technology				
CPT 1400	Digital Circuits	2	2	3
CPT 2310	Microprocessor Principles	4	3	5
CPT 2320	Telecommunications	2	2	3
CPT 2325	Operating Systems I	3	0	3
CPT 2410	Computer Peripherals	2	2	3
CPT 2425	UNIX	3	0	3
CPT 2430	System Troubleshooting	2	4	4
Electronic Engineering Technology				
EET 1110	Electric Circuits	4	2	5
EET 1210	Electronic Circuits	4	2	5
Technical Electives* (3 credits required)				
ART 2510	Instrumentation and Automation Control Devices	3	2	4
CPT 2440	Digital Design/Construction Project	0	2	1
EET 2110	Industrial Electronics	4	2	5
MET 1013	Technical Drawing	1	2	2
CMT 1010	Survey of Communications Technology	3	0	3
CMT 2120	Network Management	2	2	3
Programming Elective				
CIS 2215	BASIC Programming for Engineering Technologies	2	2	3
or				
CIS 2216	C Language Programming for Engineering Technologies	2	2	3
	Total Required - Associate's Degree			71

*Other courses may be substituted for technical electives with the department head and division head approval.

RECOMMENDED FULL-TIME SCHEDULE
FIRST-YEAR

Fall Semester		Cr.
ENG 1111	Composition I	3
MAT 1140	Technical Mathematics	5
CPT 2325	Operating Systems I	3
EET 1110	Electric Circuits	5
	Humanities Elective	3

Spring Semester		
MAT 1150	Basic Calculus	3
PHY 1110	College Physics I	3
PHY 1111	Physics Laboratory I	1
EET 1210	Electronic Circuits	5
CPT 1400	Digital Circuits	3
	Programming Elective	3

SECOND YEAR

Fall Semester		Cr.
SPE 1111	Speech	3
PHY 1120	College Physics II	3
PHY 1121	Physics Laboratory II	1
CIS 2250	Micro Operating Systems and Networking	3
CPT 2310	Microprocessor Principles	5
	Technical Elective	3

Spring Semester		
CPT 2320	Telecommunications	3
CPT 2410	Computer Peripherals	3
CPT 2425	UNIX	3
CPT 2430	System Troubleshooting	4
	Social Sciences Elective	3

RECOMMENDED PART-TIME SCHEDULE
FIRST YEAR

Fall Semester		Cr.
MAT 1140	Technical Mathematics	5
CPT 2325	Operating Systems I	3

Spring Semester		
	Programming Elective	3
EET 1110	Electric Circuits	5

Summer Semester		
ENG 1111	Composition I	3
	Social Sciences Elective	3

SECOND YEAR

Fall Semester		Cr.
EET 1210	Electronic Circuits	5
	Humanities Elective	3

Spring Semester

SPE 1111 Speech 3
CPT 1400 Digital Circuits 3

Summer Semester

MAT 1150 Basic Calculus 3

THIRD YEAR

Fall Semester			**Cr.**
CPT	2310	Microprocessor Principles	5
CIS	2250	Micro Operating Systems and Networking	3

Spring Semester

CPT 2320 Telecommunications 3
CPT 2425 UNIX 3

Summer Semester

PHY 1110 College Physics I 3
PHY 1111 Physics Laboratory I 1

FOURTH YFAR

Fall Semester			**Cr.**
CPT	2410	Computer Peripherals	3
CPT	2430	System Troubleshooting	4

Spring Semester

PHY	1120	College Physics II	3
PHY	1121	Physics Laboratory II	1
		Technical Elective	3

NOTE: Students may take CIS 1020 as a substitute for CPT 2325.

Cooperative Education work experience in Computer Information Systems (Microcomputer Concentration) can be an Important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 6 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

CULINARY SCIENCE

Associate of Applied Science

The hospitality industry is a dynamic growth industry which has a large demand for trained, qualified personnel. As a greater percentage of the population looks to the hospitality industry to meet their needs for entertainment, travel, and lodging, the need for food service professionals will increase. Opportunities within the industry are virtually unlimited, offering individuals' numerous career options which provide excellent income potential. The breadth of food service opportunities include hotel and restaurant operations, fast food management, catering, baking and pastry, education, and individual entrepreneurship.

Chefs and other food service professionals require strong cooking techniques as well as the ability to communicate and manage resources, including personnel, equipment, food inventories, and budgets. Upon graduating with an A.A.S. degree in Culinary Science, the student will have acquired the basic culinary education necessary to meet the needs of the industry for trained, qualified personnel.

It is the intent of the Culinary Science program that graduates are able to demonstrate:

- Basic competency in food production skills and an awareness and a working knowledge of culinary terms and commercial kitchen functions.
- Knowledge of nutrition principles, menu planning, cost and inventory control, and approved safety and sanitation principles.
- The ability to think creatively and work effectively in team environments and to develop strong work habits and ethics.
- Management techniques and an awareness of the functions of all areas of the food service industry.

These skills are reinforced through two cooperative work assignments in the industry which allow the student to practice classroom techniques.

COURSE REQUIREMENTS

English			Class	Lab	Credit
ENG	1111	Composition I	3	0	3
SPE	1111	Speech	3	0	3
Humanities Elective					
		Humanities Elective	3	0	3
Mathematics					
MAT	1120	College Algebra	3	0	3
Natural Science/Mathematics Elective					
BIO	1010	Biology	3	0	3
BIO	1011	Biology Lab	0	1	0
Social Sciences Elective					
		Social Sciences Elective	3	0	3
Accounting and Accounting Information Systems					
ACC	1104	Principles of Accounting I	4	0	4
AIS	1138	Microcomputer Software for Business	4	0	4
Business Management					
BUS	2111	Human Relations in Business	3	0	3
BUS	2400	Principles of Management	3	0	3
		Business Elective	3	0	3
Technical Specialty					
CUL	1010	Hospitality Management	3	0	3
CUL	1015	Sanitation and Safety	2	0	2
CUL	1040	Food Production I - Skills	1	4	3
CUL	2050	Food Production II	1	4	3
CUL	2055	Food Production III	1	4	3
CUL	1050	Nutrition and Menu Planning	3	0	3
CUL	2010	Purchasing and Cost Control	3	0	3
CUL	2020	Baking Principles	1	4	3
CUL	2030	Catering and Table Service	1	4	3
CUL	2210	Internship I	0	0	1.5
CUL	2220	Internship II	0	0	1.5
		Total Required - Associate's Degree			**65**

RECOMMENDED FULL-TIME SCHEDULE

FIRST YEAR

Fall Semester			**Cr.**
ENG	1111	Composition I	3
MAT	1210	College Algebra	3
CUL	1010	Hospitality Management	3
CUL	1015	Sanitation and Safety	2
BIO	1010	Biology	3
BIO	1011	Biology Lab	1
Spring Semester			
		Business Elective	3
BUS	2400	Principles of Management	3
ACC	1104	Principles of Accounting I	4
CUL	1040	Food Production I - Skills	3
CUL	1050	Nutrition and Menu Planning	3

SECOND YEAR

Fall Semester			**Cr.**
AIS	1138	Microcomputer Software for Business	4
BUS	2111	Human Relations in Business	3
CUL	2010	Purchasing and Cost Control	3
CUL	2020	Baking Principles	3
CUL	2050	Food Production II	3
CUL	2210	Internship I	1.5
Spring Semester			
SPE	1111	Speech	3
CUL	2030	Catering and Table Service	3
CUL	2055	Food Production III	3
CUL	2220	Internship II	1.5
		Humanities Elective	3
		Social Sciences Elective	3

Nashville State Tech Wins Tennessee Quality Commitment Award

The Tennessee Quality Commitment Award has been presented to Nashville State Tech of Nashville. Governor Don Sundquist presented the recognition award. The ceremony was attended by more that 1000 representatives of participating Tennessee companies, organizations and support groups statewide.

Tennessee Governor Don Sundquist said, "The quest for quality distinguishes our state as a place where innovators flourish, consistently high standards are set, and a highly trained competent work force is on-line for the future."

Winners of this level two Quality Commitment Award have advanced from quality knowledge and skills to a pint of serious commitment, with participants being recognized for specific accomplishments. These organizations have documented a solid approach to system-level quality management and are implementing plans and procedures.

Marie B. Williams, director of the Tennessee Quality Award program, said, "We have highly motivated, committed people working to improve quality and productivity in businesses and industries throughout Tennessee. Quality is an ongoing journey and we are proud of the efforts Nashville State Tech and many other organizations in our state have made."

The Tennessee Quality Award program is patterned after the Malcolm Baldrige National Quality Award, recognized as the standard of excellence for quality and productivity.

Unlike the Baldridge Award, whose winners are only in the manufacturing and service industries, the Tennessee Quality Award program is open to all business and industry as well as governmental agencies and public and private educational institutions.

ELECTRICAL ENGINEERING TECHNOLOGY

Associate of Applied Science

This program emphasizes both theory and practical applications in applied electrical engineering technology. Graduates have a diversified understanding of modern methods and insight in comprehending new and future developments.

Applied mathematics, physics, and communication courses support comprehensive electrical technology studies. Laboratory experiments coordinate with classroom theory to provide practical hands-on learning. Students analyze industrial, commercial and utility electrical power systems and study electrical and modern control systems with application to processing and manufacturing industries.

Graduates' careers are typically as electrical engineering technicians working with engineering teams; planning, specifying, purchasing, installing, testing, operating and maintaining electrical systems, equipment and controls in such important activities as: industrial plant engineering; manufacturing methods and quality assurance; automatic control of complex industrial processes; electrical facilities in building construction; operation and maintenance of electrical and associated equipment; electrical design and specifications and drawing development in professional consulting engineering activities; and electrical power company systems and equipment.

COURSE REQUIREMENTS

		Class	Lab	Credits
English				
ENG 1111	Composition I	3	0	3
SPE 1111	Speech	3	0	3
Humanities Elective				
	Humanities Elective	3	0	3
Mathematics				
MAT 1140	Technical Mathematics	5	0	5
MAT 1150	Basic Calculus..	3	0	3
Physics				
PHY 1110	College Physics I	3	0	3
PHY 1111	Physics Laboratory I	0	2	1
PHY 1120	College Physics II	3	0	3
PHY 1121	Physics Laboratory II..	0	2	1
Social Sciences Elective				
	Social Sciences Elective	3	0	3
Computer Information Systems				
CIS 2215	BASIC Programming for Engineering Technologies..	2	0	3
Computer Technology				
CPT 1400	Digital Circuits	2	2	3
Electronic Engineering Technology				
EET 1100	Technical Orientation..	2	2	3
EET 1110	Electric Circuits..	4	2	5
EET 1210	Electronic Circuits..	4	2	5
EET 1220	Transformers/Rotating Machines	2	2	3
EET 2020	Industrial Control Systems	3	2	4
EET 2600	Automatic Control Systems	3	2	4
EET 2640	Power Distribution	3	2	4
EET 2660	Electrical Design Project	0	2	1
Mechanical Engineering Technology				
MET 1013	Technical Drawing..	1	2	2
Technical Electives (5 credits required)				
EET 2110	Industrial Electronics	4	2	5
EET 2530	Power Systems..	3	2	4
CPT 2310	Microprocessor Principles	4	3	5
General Education Elective				
	General Elective..	3	0	3
Total Required . Associate's Degree				73

RECOMMENDED FULL-TIME SCHEDULE

FIRST YEAR

Fall Semester			**Cr.**
ENG	1111	Composition I	3
MAT	1140	Technical Mathematics	5
CIS	2215	BASIC Programming for Engineering Technologies..	3
EET	1100	Technical Orientation	3
EET	1110	Electric Circuits	5

Spring Semester			
MAT	1150	Basic Calculus	3
PHY	1110	College Physics I	3
PHY	1111	Physics Laboratory I..	1
EET	1210	Electronic Circuits..	5
EET	1220	Transformers/Rotating Machines	3
CPT	1400	Digital Circuits	3

SECOND YEAR

Fall Semester			**Cr.**
SPE	1111	Speech..	3
PHY	1120	College Physics II..	3
PHY	1121	Physics Laboratory II..	1
EET	2020	Industrial Control Systems	4
EET	2640	Power Distribution	4
EET	2660	Electrical Design Project	1
MET	1013	Technical Drawing	2

Spring Semester			
EET	2600	Automatic Control Systems..	4
		Technical Electives	5
		Social Sciences Elective..	3
		Humanities Elective..	3
		General Elective	3

RECOMMENDED PART-TIME SCHEDULE

FIRST YEAR

Fall Semester			**Cr.**
MAT	1140	Technical Mathematics	5
EET	1100	Technical Orientation	3

Spring Semester			
CIS	2215	BASIC Programming for Engineering Technologies..	3
EET	1110	Electric Circuits	5

Summer Semester			
ENG	1111	Composition I..	3
PHY	1110	College Physics I..	3
PHY	1111	Physics Laboratory I..	1

SECOND YEAR

Fall Semester			**Cr.**
EET	1210	Electronic Circuits	5
CPT	1400	Digital Circuits	3

Spring Semester			
MAT	1150	Basic Calculus	3
EET	1220	Transformers/Rotating Machines	3

Summer Semester

PHY	1120	College Physics II	3
PHY	1121	Physics Laboratory II	1
		Humanities Elective	3

THIRD YEAR

Fall Semester			**Cr.**
EET	2020	Industrial Control Systems	4
MET	1013	Technical Drawing	2

Spring Semester

EET	2640	Power Distribution	4
		General Elective	3

Summer Semester

SPE	1111	Speech	3
		Social Sciences Elective	3

FOURTH YEAR

Fall Semester			**Cr.**
EET	2660	Electrical Design Project	1
		Technical Elective	5

Spring Semester

EET	2600	Automatic Control Systems	4

Cooperative Education work experience in Electrical Engineering Technology can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 7 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

ELECTRICAL MAINTENANCE

Technical Certificate

Reliable electrical power systems are dependent on proper maintenance to avoid outages and other problems. Qualified maintenance specialists are vital to the safe, reliable operation of the complex electrical systems in large industrial plants, commercial buildings, and institutional facilities.

This comprehensive certificate program offers excellent preparation for a career in the maintenance of large electrical systems. It includes an appropriate amount of necessary theory explaining "why" 'and places strong emphasis on the actual equipment and operation of large and critical electrical power systems. The program covers electrical, as well as associated electronic, hydraulic and pneumatic equipment and applications.

COURSE REQUIREMENTS

Course		Class	Lab	Credits
EMC 1112	Interpreting Technical Information	3	3	4
EMC 1122	Electrical Maintenance Orientation..	3	3	4
EMC 1136	Basic D.C. and A.C. Circuits..	6	6	8
	Or			
EMC 1131	Basic D.C. Circuits..	3	3	4
	and			
EMC 1161	Basic A.C. Circuits	3	3	4
EMC 1216	Electrical Machines and Controls	6	6	8
EMC 1218	Digital Principles	3	3	4
EMC 1222	Basic Hydraulics and Pneumatics..	4	3	5
EMC 1312	Control Applications..	3	3	4
EMC 1322	Programmable Logic Controllers	3	4	5
	Total Required - Certificate			**42**

RECOMMENDED FULL-TIME SEQUENCE

Fall Semester		**Cr.**
EMC 1112	Interpreting Technical Information	4
EMC 1122	Electrical Maintenance Orientation	4
EMC 1136	Basic D.C. and A.C. Circuits	8
Spring Semester		
EMC 1216	Electrical Machines and Controls	8
EMC 1218	Digital Principles	4
EMC 1222	Basic Hydraulics and Pneumatics	5
Summer Semester		
EMC 1312	Control Applications	4
EMC 1322	Programmable Logic Controllers	5

NOTE: No day sequence is currently offered

RECOMMENDED PART-TIME SEQUENCE
First Year

Fall Semester		**Cr.**
EMC 1122	Electrical Maintenance Orientation	4
EMC 1131	Basic D.C. Circuits	4
Spring Semester		
EMC 1222	Basic Hydraulics and Pneumatics	5
EMC 1161	Basic A.C. Circuits	4
Summer Semester		
EMC 1112	Interpreting Technical Information	4

SECOND YEAR

Fall Semester		**cr.**
EMC 1216	Electrical Machines and Controls	8
Spring Semester		
EMC 1218	Digital Principles	4
EMC 1312	Control Applications	4
Summer Semester		
EMC 1322	Programmable Logic Controllers	5

Cooperative Education work experience in Electrical Maintenance can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 6 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

How to Succeed in College

The following information was obtained from the faculty of Nashville State Tech. The purpose of these tips is to provide you specific information, which will help you be successful with your college studies.

- Always come to class, but if you do have to miss class, find out all you can about what you missed.
- Listen carefully to directions, assignments, and due dates.
- Write everything down-notes assignments, etc. Don't depend upon your memory.
- If you do not understand a point made in class, ask questions.
- Try to take a light load during your first semester so as to give yourself time to adjust to college life.
- While studying, give yourself a break every thirty to forty-five minutes to clear your mind.
- Join or form a study group with other students in your classes. Working together can increase your learning and your efficiency.
- Analyze the first test in any class very carefully to see what percentage of the questions came from the class notes and what percentage came from the textbook.
- When answering test questions, always answer the way you learned the information in that class, not the way you learned in high school or industry. The teacher wants to see that you know that certain way he/she taught it.
- Become well acquainted with the Library and its resources at the very beginning of the school term.
- Study your campus map and become familiar with office locations and services.
- Select a time and a place for uninterrupted study at the beginning of the school term.
- Do not get behind in your assignments. Try to study every weeknight. Try to get into the habit of studying about the same time every school day.
- Write papers well in advance of due dates.
- Be involved in class discussions and activities.
- Know your instructor's name and office number. Use office hours to get additional help, if needed. Instructors want you to succeed.
- While studying any course, try to think about the logic of any new procedure not just memorizing.
- Always read your classroom notes on the day taken. This serves as a review and allows clarification while the lecture is still fresh in your mind. It reinforces what you have heard, written, and now read.
- Sit near the front row and act interested. This can lead to the development of a real interest. Don't sit in the back and visit with your friends.
- Students should buy an academic year planner/calendar to write assignments, due dates of projects, tests, etc., in order to plan time accordingly.
- Outline chapters when studying for tests - incorporate lecture notes into the outline.
- Schedule a one-hour break in your schedule - do not do all your classes back-to-back.
- Take time to learn about the range of student services available to students.
- Relate your studies. Try to see how your classes reinforce and help make sense of each other. Try especially to relate new material to your life and what you already know.
- Read your CATALOG AND STUDENT HANDBOOK. Be especially aware of the school calendar that is in the front of both documents.
- Never think for a moment that you will not be successful in college. Set graduation as your long-range goal and let nothing interfere with that goal.
- Remember that college is a once in a lifetime experience. You will never regret the hard work that is required to obtain your diploma. It will open doors which otherwise could not be opened.

ELECTRONIC ENGINEERING TECHNOLOGY

Associate of Applied Science

The Electronic Engineering Technology program provides graduates for various types of occupations involving electronics. The program is broad, rigorous, and comprehensive enough to ensure appropriate competencies in mathematics, physics, communication skills, and electronics. It also provides enough technical electives to allow students to tailor, to some degree, the training toward their future or present employment. Typical areas of emphasis are communications, electronic repair, manufacturing, and field service repair. The student receives extensive hands-on experience in all the electronic courses using equipment now available on the job in Nashville.

Typical jobs for graduates of this program are: **customer service technician** - installs and maintains various types of electronic equipment with service occasionally provided at the customer site; **electronic engineering aide** - assists engineers in the design, development, and testing of electronic equipment; **industrial maintenance technician** - works as an electronic repair technician in large industrial sites; and **communications technician** - installs and maintains various types of communications, broadcasting, or cable television equipment.

COURSE REQUIREMENTS

		Class	Lab	Credits
English				
ENG 1111	Composition I	3	0	3
SPE 1111	Speech	3	0	3
Humanities Elective				
	Humanities Elective	3	0	3
Mathematics				
MAT 1140	Technical Mathematics	5	0	5
MAT 1150	Basic Calculus	3	0	3
Physics				
PHY 1110	College Physics I	3	0	3
PHY 1111	Physics Laboratory I	0	2	1
PHY 1120	College Physics II	3	0	3
PHY 1121	Physics Laboratory II	0	2	1
Social Sciences Elective				
	Social Sciences Elective	3	0	3
Computer Information Systems				
CIS 2216	C Language for Engineering Technologies	2	2	3
Computer Technology				
CPT 1400	Digital Circuits	2	2	3
CPT 2310	Microprocessor Principles	4	3	5
Electronic Engineering Technology				
EET 1100	Technical Orientation	2	2	3
EET 1110	Electric Circuits	4	2	5
EET 1210	Electronic Circuits.	4	2	5
EET 2110	Industrial Electronics	4	2	5
EET 2120	Electronic Design Project	0	2	1
EET 2210	Circuit Analysis	1	2	2
EET 2220	Communication Circuits	3	2	4
Technical Electives (5 credits required)				
EET 2230	Network Analysis	0	4	2
EET 2240	Instrumentation	2	2	3
EET 2280	Video Systems	2	2	3
MET 1013	Technical Drawing	1	2	2
MET 1122	Computer-Aided Drafting	1	4	3
MET 2010	Hydraulics and Pneumatics	2	2	3
CPT 2410	Computer Peripherals	3	3	4
EET 2215	Introduction to Fiber Optics	2	2	3
General Education Elective				
	General Elective	3	0	3
	Total Required - Associate's Degree			**72**

RECOMMENDED FULL-TIME SCHEDULE
FIRST YEAR

Fall Semester			**Cr.**
ENG	1111	Composition I.	3
MAT	1140	Technical Mathematics	5
CIS	2216	C Language for Engineering Technologies.	3
EET	1100	Technical Orientation.	3
EET	1110	Electric Circuits	5
Spring Semester			
MAT	1150	Basic Calculus.	3
PHY	1110	College Physics I	3
PHY	1111	Physics Laboratory I.	1
EET	1210	Electronic Circuits.	5
CPT	1400	Digital Circuits	3
		Humanities Elective	3

SECOND YEAR

Fall Semester			**Cr.**
SPE	1111	Speech.	3
PHY	1120	College Physics II.	3
PHY	1121	Physics Laboratory II:.	1
CPT	2310	Microprocessor Principles.	5
EET	2110	Industrial Electronics.	5
EET	2120	Electronic Design Project.	1
Spring Semester			
EET	2210	Circuit Analysis	2
EET	2220	Communication Circuits.	4
		Technical Electives	5
		Social Sciences Elective	3
		General Elective	3

RECOMMENDED PART-TIME SCHEDULE
FIRST YFAR

Fall Semester			**Cr.**
MAT	1140	Technical Mathematics	5
EET	1100	Technical Orientation.	3
Spring Semester			
CIS	2216	C Language for Engineering Technologies.	3
EET	1110	Electric Circuits	5
Summer Semester			
ENG	1111	Composition I.	3
PHY	1110	College Physics I	3
PHY	1111	Physics Laboratory I.	1

SECOND YEAR

Fall Semester			**Cr.**
EET	1210	Electronic Circuits.	5
CPT	1400	Digital Circuits	3
Spring Semester			
MAT	1150	Basic Calculus.	3
CPT	2310	Microprocessor Principles.	5

Summer Semester

PHY	1120	College Physics II..	3
PHY	1121	Physics Laboratory II..	1
		Humanities Elective..	3

THIRD YEAR

Fall Semester			**Cr.**
EET	2110	Industrial Electronics	5
EET	2120	Electronic Design Project	1

Spring Semester

EET	2220	Communication Circuits	4
		General Elective	3

Summer Semester

SPE	1111	Speech	3
		Social Sciences Elective	3

FOURTH YFAR

Fall Semester			**Cr.**
EET	2210	Circuit Analysis	2
		Technical Elective	2

Spring Semester

		Technical Elective	3

Cooperative Education work experience in Electronic Engineering Technology can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 7 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

"Education's purpose is to replace an empty mind with an open one."

- Malcolm S. Forbes

GENERAL TECHNOLOGY

Associate of Applied Science

The General Technology curriculum allows students flexibility in the technical specialization of their choice. Students occasionally desire to take courses in a technical specialty to enhance their employment potential based upon their personal goals or upon the request of their employers. Because of the requirements of the specific technical programs, this flexibility is not always available. Through the General Technology curriculum, students may tailor their educational programs to meet the needs of their present or potential employers, or to be sure that their program of studies will meet their needs.

Students who choose this curriculum may prepare themselves for employment in many diverse areas: electro-mechanical equipment repair and service; business forms and accounting system sales; and technical equipment sales in the areas of electrical, electronics, systems and components, and computer-related products.

GTP l000 GENERAL TECHNOLOGY **1-28 Credits**

Upon documented evidence of successful completion of a postsecondary vocational program and 15 hours of college-level work at Nashville Tech, credit may be granted for this course toward the Associate of Applied Science degree in General Technology. In order to receive credit, the student must demonstrate that vocational competencies are equivalent to learning outcomes expected from college-level courses. Students may demonstrate competency by scoring at or above the national postsecondary mean on the Student Occupational Competency Achievement Test (SOCAT) in the occupational area for which the students are requesting credit. Appropriate assessment procedures to document college-level proficiency are required for all articulated programs.

BUSINESS CONCENTRATION
COURSE REQUIREMENTS

		Class	Lab	Credits
English				
ENG 1111	Composition I	3	0	3
SPE 1111	Speech	3	0	3
Humanities Elective				
	Humanities Elective	3	0	3
Mathematics				
MAT 1110	Business Mathematics	3	0	3
	Math Elective	3	0	3
Natural Science Elective				
	Natural Science Elective	3	0	3
Social Sciences Elective				
	Social Sciences Elective	3	0	3
Computer Accounting Technology				
ACC 1104	Principles of Accounting I	4	0	4
AIS 1138	Microcomputer Software for Business	4	0	4
Business Management				
BUS 1113	Introduction to Business	3	0	3
BUS 2600	Business Law: Contract and Commercial Transactions	3	0	3
ECO 1111	Principles of Macroeconomics	3	0	3
MKT 1227	Sales Techniques	3	0	3
MKT 2220	Marketing	3	0	3
Business Concentration				**12**

The Business Concentration must reflect 12 hours in a specific area of business. This must be approved by the General Technology Coordinator prior to filing the Intent to Graduate.

Computer Accounting Technology and Computer Information Systems				
CIS 1010	Introduction to Electronic Data Processing	3	0	3
CIS 1020	Computing Environments	3	0	3
	or			
AIS 1180	Introduction to Microcomputing	3	0	3
Other Elective				
PHI 1111	Introduction to Ethics	3	0	3
	or			
BUS 2310	Business Ethics	3	0	3
General Education Elective				
	General Elective	3	0	3
	Total Required - Associate's Degree			**69**

TECHNICAL CONCENTRATION
COURSE RRQUIREMENTS

		Class	Lab	Credits
English				
ENG 1111	Composition I	3	0	3
SPE 1111	Speech	3	0	3
Humanities Elective				
	Humanities Elective	3	0	3
Mathematics				
MAT 1140	Technical Mathematics	5	0	5
	or			
MAT 1120	College Algebra	3	0	3
	and			
MAT 1130	Trigonometry	3	0	3
MAT 1150	Basic Calculus	3	0	3
	or			
MAT 2110	Statistics	3	0	3
Natural Science Elective				
	Natural Science Elective or Physics	3	2	4
Physics				
PHY 1110	College Physics I	3	0	3
PHY 1111	Physics Laboratory I	0	2	1
Social Sciences Elective				
	Social Sciences Elective	3	0	3
Computer Accounting Technology				
AIS 1138	Microcomputer Software for Business	4	0	4
Computer Information Systems				
CIS 2215	BASIC Programming for Engineering Technologies	1	2	2
Business Management				
ECO 1111	Principles of Macroeconomics	3	0	3
General Elective				3
Guided Electives				9
Technical Electives				20
	Minimum Total Required - Associate's Degree			**69**

The student's plan of study and all options must be approved in advance by the appropriate department head and division head.

Cooperative work experience in General Technology (Business or Technical Concentration) can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 9 credit hours with the prior approval of the department head. All Co-op work must have department head approval. Students participating in Cooperative Education are encouraged to work a minimum of two terms. The Career Employment Center will provide the correct course numbers. See page 96 for more information.

Many course credits transfer to four-year colleges and universities.

You can start your college education at Nashville State Tech and move on to another school. You can save time and money by transferring your NSTI course credits. Nashville State Tech has transfer agreements with several area four-year colleges and universities. Call 353-3267 for more information and to find out which credits are accepted. Currently, the following schools have transfer agreements with Nashville State Tech.

Austin Peay State University

Belmont University

David Lipscomb University

East Tennessee State University

Middle Tennessee State University

Tennessee State University

Tennessee Technological University

The University Of Memphis

The University Of Tennessee At Knoxville

The University Of Tennessee At Martin

Western Kentucky University

NASHVILLE State Tech

The Nashville Community's Two-Year College

Did you know?

Over 11,000 students were enrolled at Nashville State Tech last year.

Nearly 2,500 of our students are enrolled solely to earn college credits that transfer to four-year colleges and universities.

Our students can earn two-year degrees, career advancement or technical certificates in over 40 top fields and latest technologies.

In addition to our main campus on White Bridge Road, we have many off-campus locations throughout the community and surrounding counties, including a center in Cookeville.

Nashville State Tech is furnished with labs that use the latest equipment and technologies.

Nashville State Tech has a Career Employment Center that helps graduating students locate career opportunities.

Business and industry training is available through our Technical Training Center which is a Work Keys Service Center.

Our Computer Resource & Training Center offers one- and two-day cost-effective computer courses in various PC applications.

Three-hour Small Business Workshops are offered discussing such topics as Starting a New Business and Financing Your Business.

Nashville State Tech features a complete Library that houses over 46,000 volumes accessible through WebCat, the on-line catalog.

Up-to-date information about Nashville State Tech can be found on our website at ***http://www.nsti.tec.tn.us***

Nashville State Tech received the Tennessee Quality Award for its commitment to quality in education.

Nashville State Tech is a Tennessee Board of Regents college in the State University and Community College System.

MANUFACTURING ENGINEERING TECHNOLOGY

Associate of Applied Science

Manufacturing facilities are currently experiencing major changes. Most companies are becoming increasingly automated, and in many the integration of various aspects of the company into a central computer-controlled process is a reality. The need for people who are capable of working in this environment is becoming more and more critical. The Manufacturing Engineering Technology program is a course of study designed by Nashville State Technical Institute and plant managers/manufacturing supervisors from Middle Tennessee companies to satisfy this need for trained employees.

This program of study is structured to provide job entry level knowledge in three separate manufacturing skill areas and is coupled with courses to tie these knowledge bases together. The three areas are:

1) Mechanical Devices/Theory

2) Industrial Manufacturing Performable Evaluation Techniques

3) Electrical/Electronic Maintenance

A graduate of this program, then, would be capable of employment in such varied manufacturing areas as quality control, line worker/supervisor, drafting, and plant maintenance. The graduate would be capable of bridging the gap between the craftsperson and plant engineering, and would possess the knowledge necessary to work directly with engineering as an engineering aide. The breadth of knowledge provided by this course of study would offer skill levels necessary to be hired in any of the areas listed above and the flexibility of movement within the plant. Upon completion of study, the graduate of this program will be able to:

- Use basic manufacturing hand tools and have an understanding of measurement techniques.
- Perform drafting and CAD operations
- Perform statistical process control/quality control operations
- Perform operations of work measurement
- Work with industrial electricians in various electrical areas including automation
- Demonstrate an overall knowledge of manufacturing techniques
- Use materials with an understanding of their chemical composition and properties
- Set up and program computer numerical controlled machine tools
- Demonstrate competency of Nashville State Tech general critical outcomes

COURSE REQUIREMENTS

		Class...	Lab	Credits
English				
ENG 1111	Composition I..	3..	0..	3
SPE 1111	Speech..	3..	0..	3
Humanities Elective				
	Humanities Elective..	3	0	3
Mathematics				
MAT 1140	Technical Mathematics	5	0	5
MAT 2110	Statistics..	3..	0	3
Natural Science				
PHY 1110	College Physics I	3..	0..	3
PHY 1111	Physics Laboratory I..	0..	2..	1
PHY 1120	College Physics II..	3..	**0**	3
PHY 1121	Physics Laboratory..	**0**	2..	1
Social Science Elective				
	Social Science Elective	3	0	3
Electronic Engineering Technology				
EET 1130	Introduction to Electronics..	4	2	5
Computer Information Systems				
	Programming Elective	2	2	3
Manufacturing Engineering Technology				
MFG 1013	Technical Drawing.	1	2	2
MFG 1120	Machine Tool and CNC Operations	3	2..	4
MFG 1220	Production, Inventory and Cost Control..	2	2	3
MFG 1500	Work Measurement/Methods..	2	2	3
MFG 1900	Strength of Materials/Statics..	3	2	4
MFG 2010	Hydraulics and Pneumatics..	2	2	3
MFG 2110	Plant Layout and Material Handling..	2	2	3
MFG 2130	Industrial Safety/Ergonomics	3	0	3
MFG 2210	Quality Control	2..	2..	3
MFG 2710	Introduction to Automated Systems/Robots..	3	3	4
	Total Required - Associate's Degree			**68**

Cooperative Education work experience in Manufacturing Engineering Technology can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 6 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

RECOMMENDED FULL-TIME SCHEDULE
FIRST YEAR

Fall Semester		**Cr.**
ENG 1111	Composition I	3
MAT 1140	Technical Mathematics	5
EET 1130	Introduction to Electronics	5
CIS	Programming Elective	3
MFG 1013	Technical Drawing	2

Spring Semester		
MAT 2110	Statistics..	3
PHY 1110	College Physics I	3
PHY 1111	Physics Laboratory I	1
MFG 1120	Machine Tool and CNC Operations..	4
MFG 2010	Hydraulics and Pneumatics	3
	Social Science Elective	3
	Humanities Elective	3

SECOND YEAR

Fall Semester			**Cr.**
SPE	1111	Speech	3
MFG	1220	Production, Inventory and Cost Control	3
MFG	1500	Work Measurement/Methods	3
MFG	1900	Strength of Materials/Statics	4
MFG	2710	Introduction to Automated Systems and Robots	4
Spring Semester			
PHY	1120	College Physics II	3
PHY	1121	Physics Laboratory II	1
MFG	2110	Plant Layout and Material Handling	3
MFG	2130	Industrial Safety/Ergonomics	3
MFG	2210	Quality Control	3

RECOMMENDED PART-TIME SCHEDULE

FIRST YEAR

Fall Semester			**Cr.**
MAT	1140	Technical Mathematics	5
MFG	1013	Technical Drawing	2
Spring Semester			
ENG	1111	Composition I	3
EET	1130	Introduction to Electronics	5
Summer Semester			
CIS		Programming Elective	3

SECOND YEAR

Fall Semester			**Cr.**
PHY	1110	Physics I	3
PHY	1111	Physics Laboratory I	1
		Social Sciences Elective	3
MFG	1120	Machine Tool and CNC Operations	4
Spring Semester			
MAT	2110	Statistics	3
MFG	2010	Hydraulics and Pneumatics	3
Summer Semester			
		Humanities Elective	3

THIRD YEAR

Fall Semester			
SPE	1111	Speech	3
MFG	1900	Strength of Materials/Statics	4
Spring Semester			
MFG	1220	Production, Inventory and Cost Control	3
MFG	2710	Introduction to Automated Systems and Robots	4
Summer Semester			
MFG	1500	Work Measurements/Methods	3

FOURTH YEAR

Fall Semester			
MFG	2210	Quality Control	3
MFG	2130	Industrial Safety/Ergonomics	3
Spring Semester			
PHY	1120	Physics II	3
PHY	1121	Physics Laboratory II	1
MFG	2110	Plant Layout and Material Handling	3

"Always do right; this will gratify some people and astonish the rest."

-Mark Twain

OCCUPATIONAL THERAPY ASSISTANT TECHNOLOGY

Associate of Applied Science

The Occupational Therapy Assistant Technology program trains students to provide services to individuals whose abilities to cope with tasks of living are threatened or impaired by developmental delays, the aging process, poverty and cultural differences, physical injury or illness, or psychological and social disability. The OTA program is accredited by the Accreditation Council of Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA) at 4720 Montgomery Lane (P.O. Box 31220) Bethesda, MD 20824-1220, telephone number 301-652-2682.

Upon completion of the academic curriculum and receiving a satisfactory rating on the OTA Professional Behavior Scale, students will become candidates for fieldwork. Students will participate in supervised clinical training for a minimum of 16 weeks. (This training may be in a location outside of the Middle Tennessee area, which will require relocating for 8 to 16 weeks.) After meeting all program requirements, graduates can take the certification examination administered by the National Board of Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). Licensure by the Tennessee State Board of Occupational Examiners is required in order to practice. Under the supervision of a registered occupational therapist, certified assistants will implement restorative, preventive, and maintenance programs in manual and creative arts, activities of daily living, recreation, and exercise.

Due to limited enrollment, students should request admission early. Contact the OTA Department concerning application, admission procedures and interview deadlines. This information and required forms are included in the OTA Admission Packet available in the Admissions, Student Services, and Occupational Therapy departments. In addition to college entrance requirements, the Occupational Therapy Assistant Technology program requires the following:

1. OTA applications must be on file in the OTA Department. All transfer requests and ACT/AAPP and assessment scores must be on file prior to being considered for admission into the program.
2. Students in the OTA program must have professional liability insurance. It is purchased as a group the first week of class. Proof of health insurance and health forms must be on file after being accepted into the program and before enrolling in OTA courses.
3. Interested students must participate in interview activities with a panel of Education Council members. Students must have completed remedial/developmental courses before interviewing. (If students are enrolled in the last developmental course, they may interview if a letter from the instructor is presented indicating a passing grade.) It is highly recommended that students who test into remedial/developmental courses take Orientation to Occupational Therapy, OTT 1100.
4. Proof of clinical observation visits must be on file in the OTA office. Deadline dates and forms are listed in the OTA Admission Packet.
5. Acceptance is based on grade average and interviews. Additional points are given on acceptance criteria to Tennessee residents. A letter with specific admitting criteria will be sent to all qualified students whose OTA application is on file in the OTA Department.

Students will be responsible for travel costs, parking fees, special projects, orientation workshop, uniforms, professional and health insurance, and relocation expenses during fieldwork.

COURSE REQUIREMENTS

		Class	lab	Credits
English				
ENG 1111	Composition I	3	0	3
SPE 1111	Speech	3	0	3
	or			
SPE 1112	Fundamentals of Speech Communications	3	0	3
Humanities Elective				
	Humanities Elective	3	0	3
Mathematics Elective				
	Math Elective	3	0	3
Social Sciences				
SOC 1111	Sociology	3	0	3
PSY 1111	Psychology	3	0	3
Biology				
BIO 1000	Medical Terminology	3	0	3
BIO 1130	Anatomy & Physiology I	3	2	4
Occupational Therapy				
OTT 1110	OT Theory and Practice I	2	3	3
OTT 1120	Therapeutic Activities I	1	3	3
OTT 1170	Interpersonal and Group Skills	3	0	3
OTT 1230	Human Development	4	0	4
OTT 1240	Therapeutic Activities II	1	9	4
OTT 1260	Kinesiology	2	3	4
OTT 2120	Psychosocial Dysfunction	3	0	3
OTT 2130	Treatment of Psychosocial Dysfunction	3	3	4
OTT 2140	Physical Dysfunction	2	0	2
OTT 2150	Treatment of Physical Dysfunction	4	3	5
OTT 2110	OT Theory and Practice II	2	3	3

		Contact Hours	Credits
OTT 2220	Level II Fieldwork-Psychosocial Dysfunction	320	8
OTT 2230	Level II Fieldwork-Physical Dysfunction	320	8
	Total Required - Associate's Degree		78

RECOMMENDED FULL-TIME SCHEDULE

Prerequisites for First Year, **Fall Semester Courses:** All Remedial and Developmental Courses

FIRST YEAR

Fall Semester		Cr.
ENG 1111	Composition I	3
BIO 1130	Anatomy & Physiology I	4
OTT 1110	OT Theory and Practice I*	3
OTT 1120	Therapeutic Activities I	3
OTT 1170	Interpersonal and Group Skills	3
	Math Elective	3

Spring Semester

OTT	1230	Human Development	4
OTT	1240	Therapeutic Activities II*	4
OTT	1260	Kinesiology	3
BIO	1000	Medical Terminology	3
SPE	1111	Speech	3
		or	
SPE	1112	Fundamentals of Speech Communication	3
		Humanities Elective	3

Summer Semester

SOC	1111	Sociology	3
PSY	1111	Introduction to Psychology.	3

SECOND YEAR

Fall Semester **Cr.**

OTT	2120	Psychosocial Dysfunction	3
OTT	2130	Treatment of Psychosocial Dysfunction.	4
OTT	2140	Physical Dysfunction.	2
OTT	2150	Treatment of Physical Dysfunction	5
OTT	2110	OT Theory and Practice II*	3

Spring Semester

OTT	2220	Level II Fieldwork-Psychosocial Dysfunction**	8
OTT	2230	Level II Fieldwork-Physical Dysfunction**	8

*This includes a clinical component.

**Level II Fieldwork will be completed within 18 months of academic preparation.

OFFICE ADMINISTRATION

Associate of Applied Science

Today's office administrator is considered an assistant to the executive and has the ability to assume responsibility, make decisions, and work independently. Job duties include planning, organizing, and directing office activities.

This program is designed to provide skills for those who are interested in a career as an office administrator in the legal, medical, or administrative (nonspecialized) office environment. It also provides much of the educational background necessary for those who want to gain recognition for their skills and knowledge by passing the Certified Professional Secretary exam or the Professional Legal Secretary exam.

It is the intent of the Office Administration program that graduates be able to:

Keyboard at employable standards.

Operate personal computing equipment and use current word processing, spreadsheet, and presentation software efficiently.

Organize time to perform work assignments and maintain a smooth flow of work when completing office tasks.

Apply the principles of records management to both manual and electronic database systems.

Perform general office financial transactions and record-keeping activities.

Apply basic language arts skills in the composition and transcription of documents.

Understand the principles of human resource management, office layout and design, equipment selection and procurement, and office management theory.

Communicate both orally and in writing.

Concepts taught in general education courses will be reinforced in the Office Administration curriculum and applied to class exercises and projects.

OFFICE ADMINISTRATION Administrative

After an individual has completed 15 credit hours in the Office Administration program, certain credits are available based on verification of successful completion of the Certified Professional Secretary examination. The following credits will be awarded:

SOC	Social Sciences Elective	3 Credits
OAD 1400	Electronic Office Procedures	4 Credits
OAD 2400	Office Accounting	4 Credits
OAD 2800	Office Management	3 Credits

COURSE REQUIREMENTS

		class	Lab	credits
English				
ENG 1111	Composition I	3	0	3
SPE 1111	Speech	3	0	3
Humanities Elective				
	Humanities Elective	3	0	3
Mathematics				
MAT 1110	Business Mathematics	3	0	3
Natural Sciences/Mathematics Elective				
	Natural Sciences or Math Elective	3	0	3
Social Sciences Elective				
	Social Sciences Elective	3	0	3
Accounting Information Systems				
AIS 1180	Introduction to Microcomputing	4	0	4
Business Management				
BUS 2310	Business Ethics	3	0	3
Office Administration				
OAD 1010	Records and Database Management	4	0	4
OAD 1115	Office Reference Manual Review	4	0	4
OAD 1120	Keyboarding/Speedbuilding.	4	0	4
OAD 1220	Beginning Word Processing.	4	0	4
OAD 1230	Advanced Word Processing.	4	0	4
OAD 1240	Introduction to Desktop Publishing	4	0	4
OAD 1260	Spreadsheet Software for the Administrative Assistant	3	0	3
OAD 1400	Electronic Office Procedures.	4	0	4
OAD 1500	Presentation Software.	3	0	3
OAD 2400	Office Accounting.	4	**0**	4
OAD 2700	Administrative Machine Transcription.	4	0	4
OAD 2800	Office Management	3	0	3
	Total Required - Associate's Degree.			**70**

RECOMMENDED FULL-TIME SCHEDULE

FIRST YEAR

Fall Semester		**Cr.**
ENG 1111	Composition I.	3
MAT 1110	Business Mathematics	3
AIS 1180	Introduction to Microcomputing	4
OAD 1120	Keyboarding/Speedbuilding	4
	Social Sciences Elective.	3

Spring Semester		
OAD 1010	Records and Database Management	4
OAD 1115	Office Reference Manual Review	4
OAD 1220	Beginning Word Processing	4
	Humanities Elective	3
	Math Elective or Natural Science Elective	3

SECOND YEAR

Fall Semester		**Cr.**
OAD 1230	Advanced Word Processing	4
OAD 1400	Electronic Office Procedures	4
OAD 1500	Presentation Software.	3
OAD 2400	Office Accounting.	4
OAD 2700	Administrative Machine Transcription	4

Spring Semester		
SPE 1111	Speech	3
BUS 2310	Business Ethics	3
OAD 1240	Introduction to Desktop Publishing	4
OAD 1260	Spreadsheet Software for the Administrative Assistant	3
OAD 2800	Office Management	3

RECOMMENDED PART-TIME EVENING SCHEDULE
FIRST YEAR

Fall Semester			**Cr.**
ENG	1111	Composition I	3
OAD	1120	Keyboarding/Speedbuiding	4
Spring Semester			
MAT	1110	Business Mathematics	3
OAD	1115	Office Reference Manual Review	4
Summer Semester			
AIS	1180	Introduction to Microcomputing	4

SECOND YEAR

Fall Semester			**Cr.**
OAD	1010	Records and Database Management	4
OAD	1220	Beginning Word Processing	4
Spring Semester			
OAD	1230	Advanced Word Processing	4
OAD	1500	Presentation Software	3
Summer Semester			
		Social Sciences Elective	3

THIRD YEAR

Fall Semester			**Cr.**
OAD	1400	Electronic Office Procedures	4
OAD	2700	Administrative Machine Transcription	4
Spring Semester			
OAD	1260	Spreadsheet Software for the Administrative Assistant	3
OAD	1240	Introduction to Desktop Publishing	4
Summer Semester			
SPE	1111	Speech	3

FOURTH YEAR

Fall Semester			**Cr.**
OAD	2400	Office Accounting	4
		Natural Sciences Elective or Math Elective	3
Spring Semester			
OAD	2800	Office Management	3
BUS	2310	Business Ethics	3
Summer Semester			
		Humanities Elective	3

Cooperative Education work experience in Office Administration (Administrative Concentration) can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 9 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

OFFICE ADMINISTRATION
Legal Concentration

After an individual has completed 16 credit hours in the Office Administration program, certain credits are available based on verification of successful completion of the Professional Legal Secretary examination. The following credits will be awarded:

OAD	1115	Office Reference Manual Review — 4 credits
OAD	1120	Keyboarding/Speedbuiding — 4 credits
OAD	2400	Office Accounting — 4 credits
OAD	2540	Law Office Practices — 4 credits

COURSE REQUIREMENTS

			Class	**Lab**	**Credits**
English					
ENG	1111	Composition I	3	0	3
SPE	1111	Speech	3	0	3
Humanities Elective					
		Humanities Elective	3	0	3
Mathematics					
MAT	1110	Business Mathematics	3	0	3
Natural Sciences/Mathematics Elective					
		Natural Sciences or Math Elective	3	0	3
Social Sciences Elective					
		Social Sciences Elective	3	0	3
Accounting Information Systems					
AIS	1180	Introduction to Microcomputing	4	0	4
Business Management					
BUS	2310	Business Ethics	3	0	3
Office Administration					
OAD	1010	Records and Database Management	4	0	4
OAD	1115	Office Reference Manual Review	4	0	4
OAD	1120	Keyboardiig/Speedbuilding	4	0	4
OAD	1220	Beginning Word Processing	4	0	4
OAD	1230	Advanced Word Processing	4	0	4
OAD	1260	Spreadsheet Software for the Administrative Assistant	3	0	3
OAD	1400	Electronic Office Procedures	4	0	4
OAD	1500	Presentation Software	3	0	3
OAD	2400	Office Accounting	4	0	4
OAD	2500	Legal Machine Transcription	4	0	4
OAD	2540	Law Office Practices	4	0	4
OAD	2800	Office Management	3	0	3
		Total Required - Associate's Degree			**70**

RECOMMENDED FULL-TIME SCHEDULE
FIRST YEAR

Fall Semester			**Cr.**
ENG	1111	Composition I	3
MAT	1110	Business Mathematics	3
AIS	1180	Introduction to Microcomputing	4
OAD	1120	Keyboarding/Speedbuiding	4
		Social Sciences Elective	3
Spring Semester			
OAD	1010	Records and Database Management	4
OAD	1115	Office Reference Manual Review	4
OAD	1220	Beginning Word Processing	4
		Humanities Elective	3
		Natural Sciences Elective or Math Elective	3

SECOND YEAR

Fall Semester			Cr.
OAD	1230	Advanced Word Processing..	4
OAD	1400	Electronic Office Procedures	4
OAD	1500	Presentation Software..	3
OAD	2400	Office Accounting..	4
OAD	2500	Legal Machine Transcription..	4

Spring Semester			
SPE	1111	Speech	3
BUS	2310	Business Ethics	3
OAD	1260	Spreadsheet Software for the Administrative Assistant	3
OAD	2540	Law Office Practices..	4
OAD	2800	Office Management..	3

RECOMMENDED PART-TIME SCHEDULE
FIRST-YEAR

Fall Semester			Cr.
ENG	1111	Composition I	3
OAD	1120	Keyboarding/Speedbuilding	4

Spring Semester			
MAT	1110	Business Mathematics	3
OAD	1115	Office Reference Manual Review..	4

Summer Semester			
AIS	1180	Introduction to Microcomputing	4

SECOND YEAR

Fall Semester			cr.
OAD	1010	Records and Database Management..	4
OAD	1220	Beginning Word Processing	4

Spring Semester			
OAD	1230	Advanced Word Processing..	4
OAD	1500	Presentation Software..	3

Summer Semester			
		Social Sciences Elective..	3

THIRD-YEAR

Fall Semester			Cr.
OAD	1400	Electronic Office Procedures	4
OAD	2500	Legal Machine Transcription..	4

Spring Semester			
OAD	1260	Spreadsheet Software for the Administrative Assistant	3
OAD	2540	Law Office Practices..	4

Summer Semester			
SPE	1111	Speech	3

FOURTH YEAR

Fall Semester			Cr.
OAD	2400	Office Accounting..	4
		Natural Sciences Elective	
		or	
		Math Elective	3

Spring Semester			
OAD	2800	Office Management..	3
BUS	2310	Business Ethics	3

Summer Semester			
		Humanities Elective..	3

Cooperative Education work experience in Office Administration (Legal Concentration) can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 9 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

OFFICE ADMINISTRATION
Medical Concentration

COURSE REQUIREMENTS

Biology			Class Lab Credits
BIO	1000	Medical Terminology..	3.....0.....3
BIO	1130	Anatomy and Physiology	3 .....2 4
English			
ENG	1111	Composition I	3.....0.....3
SPE	1111	Speech	3.....0 3
Humanities Elective			
		Humanities Elective..	3 .....0 3
Mathematics			
MAT	1110	Business Mathematics....	3.....0.....3
Social Sciences Elective			
		Social Sciences Elective	3 .....0.....3
Accounting Information Systems			
AIS	1180	Introduction to Microcomputing	4 .....0 4
Office Administration			
OAD	1115	Office Reference Manual Review	4 .....0 4
OAD	1120	Keyboarding/Speedbuilding	4 .....0 4
OAD	1220	Beginning Word Processing..	4 .....0 4
OAD	1230	Advanced Word Processing	4 .....0 4
OAD	2600	Medical Machine Transcription I	4 .....0 4
OAD	2610	Medical Machine Transcription II..	4 .....0 4
OAD	2620	Medical Office Procedures..	4 .....0 4
OAD	2630	ICD-CM Coding	4.....0.....4
OAD	2635	CPT Coding..	3 .....0 3
OAD	2650	Medical Insurance	3 .....0 3
OAD	2660	Pharmacology..	2 .....0.....2
OAD	2800	Office Management	3 .....0 3
		Total Required - Associates Degree	69

RECOMMENDED FULL-TIME SCHEDULE
FIRST-YEAR

Fall Semester			cr.
ENG	1111	Composition I	3
BIO	1000	Medical Terminology..	3
MAT	1110	Business Mathematics	3
AIS	1180	Introduction to Microcomputing	4
OAD	1120	Keyboarding/Speedbuilding	4

Spring Semester			
BIO	1130	Anatomy and Physiology..	4
SPE	1111	Speech..	3
OAD	1115	Office Reference Manual Review	4
OAD	1220	Beginning Word Processing..	4
		Social Sciences Elective..	3

SECOND YEAR

Fall Semester			Cr.
OAD	1230	Advanced Word Processing	4
OAD	2600	Medical Machine Transcription I..	4
OAS	2630	ICD-CM Coding	4
OAD	2660	Pharmacology..	2
		Humanities Elective..	3

Spring Semester

OAD	2610	Medical Machine Transcription II	4
OAD	2620	Medical Office Procedures	4
OAD	2635	**CPT Coding**	**3**
OAD	2650	Medical Insurance	3
OAD	2800	Office Management	3

RECOMMENDED PART-TIME SCHEDULE
FIRST YEAR

Fall Semester **Cr.**

ENG	1111	Composition I	3
OAD	1125	Keyboarding/Speedbuilding	4

Spring Semester

MAT	1110	Business Mathematics	3
OAD	1115	Office Reference Manual Review	4

Summer Semester

AIS	1180	Introduction to Microcomputing	4

SECOND YEAR

Fall Semester **Cr.**

BIO	1000	Medical Terminology	3
OAD	1220	Beginning Word Processing	4

Spring Semester

BIO	1130	Anatomy and Physiology	4
OAD	1230	Advanced Word Processing	4

Summer Semester

Social Sciences Elective 3

THIRD YEAR

Fall Semester **cr.**

OAD	2600	Medical Machine Transcription I	4
OAD	2630	ICD-CM Coding	4

Spring

OAD	2610	Medical Machine Transcription II	4
OAD	2635	CPT Coding	3

Summer

SPE	1111	Speech	3

FOURTH YEAR

Fall Semester **Cr.**

OAD	2650	Medical Insurance	3
OAD	2660	Pharmacology	2

Spring Semester

OAD	2620	Medical Office Procedures	4
OAD	2800	Office Management	3

Summer Semester

Humanities Elective 3

Cooperative Education work experience in Office Administration (Medical Concentration) can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 9 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

How to Succeed in College

Use the Library and its Services

The Nashville State Tech Library enhances and facilitates learning. The Library is fully automated, with an on-line catalog and CD-/ROM reference materials. It has an extensive collection of technical books and periodicals as well as recreational reading materials. The collection contains newspapers, videotapes, audio tapes, films, slide-tape sets, microcomputer software, and microfiche. Equipment is available for using these materials in the classroom or in the Library.

Nashville State Tech's Library is open to anyone in the community. The Library is open during the week and on Saturdays. Call 353-3555 for specific hours. Trained personnel provide willing assistance to Library users in a comfortable and pleasant setting. The Library has facilities for both group and individual study.

Use the Learning Center

Nashville State Tech has a clearing house, or central location, for all academic assistance programs. This clearing house is located in the Library in Room L-164. Personnel in the Learning Center will provide students who are experiencing academic difficulties a wide range of services that will focus on improving writing and reading skills, mathematics, problem solving, and study strategies essential for the development of scholarship ant Nashville State Tech. There are also programs of one-on-one tutoring and small group interaction

Seek academic assistance immediately if you are experiencing any difficulties in understanding course content. You should know after the first testing period if you need academic assistance. A grade of "D" or "F" is a warning that you need help. Talk to your instructor immediately and then go to the learning center for help.

PARAEDUCATOR

Technical Certificate

The ParaEducator Technical Certificate is a two-semester, 32 credit hour program which trains individuals to work with teachers and/or educators to move into employment as classroom professionals. Graduates will be trained to assist educators in the workplace and to work with children placed in the least restrictive environment to meet the educational, social, behavioral, and emotional goals of individual education plans. The program develops a broad base of knowledge of child development processes from birth through secondary school which will improve the efficiency and effectiveness of teaching teams.

Graduates will also acquire a better understanding of the school system, teaching procedures, outcome expectations, and parent and student responsibilities in the education process.

COURSE REQUIREMENTS

Fall Semester		**Cr.**
EDU 1111	Introduction to Education	3
EDU 2110	Human Growth and Development	3
EDU 1115	Overview of Exceptionalities	3
EDU 1113	Health and Safety Issues/ IEP Writing Interpretation	3
EDU 2111	Classroom Management	3
EDU 2114	Legal Issues in Special Education	3
Spring Semester		
EDU 1116	Instructional Strategies	3
EDU 1112	Introduction to Communications and Human Relations	3
EDU 1114	Teaming and Collaboratives	3
EDU 2115	Transition and Job Training	3
EDU 2100	Practicum	3

"A teacher affects eternity; he can never tell where his influence stops."

- Henry Adams,
The Education of Hen y Adams

PHOTOGRAPHY

Technical Certificate

The Nashville State Tech Photography program provides the student with the most complete facility and curriculum in the region. Former students can be found in a variety of media positions in state and local government. Many others have found career opportunities as owners or employees of private media businesses. Both full- and part-time students of all ages comprise the growing Photography Department.

The facilities include a 22-enlarger black-and-white darkroom, a film processing lab, a color print lab with 20 individual darkrooms, a studio furnished with large format cameras and various lighting capabilities, a television studio and editing room, and a digital imaging lab.

The instructors bring to the classroom a wealth of experience and expertise in many phases of commercial and free-lance photography, and television production. The curriculum requires the student to acquire a thorough comprehension of the basic technical skills necessary to enter the job market.

Fall Semester		**Class**	**Lab**	**Cr.**
PHO 1110	Basic Photography	3	0	3
PHO 1115	Photographic Visual Principles	3	0	3
PHO 1210	Black-and-White Photography I	2	2	3
COM 1210	Introduction to Electronic Media	3		
Spring Semester				
PHO 1230	Color Lab Techniques I	2	2	3
PHO 1240	Studio and Lighting Techniques	2	2	3
PHO 1430	Portrait & Wedding Techniques	3	0	3
	Technical Elective			3
Summer Semester				
PHO 1270	Portfolio Practicum	2	2	3
PHO 1320	Color Lab Techniques II	2	2	3
	TOTAl. REQ UIREMENTS			**30**

Technical Electives

COM 1230	Introduction to Digital Imaging	2	2	3
PHO 1120	Film and Video Production	2	2	3
PHO 1310	Black-and-White Photography II	2	2	3
PHO 1410	Nature Photography	2	2	3
PHO 1440	Medical Photography Techniques	3	0	3
PHO 1450	Individual Study	1	6	3
PHO 1460	Open Darkroom	2	2	3
PHO 1470	Photojournalism	2	2	3

Cooperative Education work experience in Photography can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 6 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course number. Students participating in Cooperative Education are encouraged to work a minimum of two terms. See page 96 for more information.

"Discovery consists of looking at the same things as everyone else does and thinking something different."

-Albert Szent Gyordyi

POLICE SCIENCE TECHNOLOGY

Associate of Applied Science

Police Science Technology trains individuals for careers in police administration and corrections management. Graduates of the degree program will have the skills and knowledge to seek employment in the field of criminal justice, including law enforcement, private security and corrections. The program is designed to provide the training needed for entry-level personnel and advancement opportunities for those presently employed in the field of corrections and law enforcement. The Police Science Technology program offers concentrations in Police Administration and Corrections Management.

POLICE ADMINISTRATION CONCENTRATION

COURSE REQUIREMENTS

		English	**Class**	**Lab**	**Credits**
ENG	1111	Composition I	3	0	3
ENG	2112	Report Writing	3	0	3
SPE	1111	Speech	3	0	3
		or			
SPE	1112	Fundamentals of Speech Communication	3	0	3
		Humanities			
PHI	1111	Introduction to Ethics	3	0	3
		or			
SPA	1111	Spanish I	3	0	3
		Mathematics			
MAT	1110	Business Mathematics	3	0	3
		Natural Sciences Elective			
		Natural Sciences Elective	3	2	4
		Social Sciences Elective			
		Social Sciences Elective	3	0	3
		Police Administration			
PST	1000	Introduction to Criminal Justice	3	0	3
PST	1010	Criminal Law and Procedure	3	0	3
PST	1020	Police Administration	3	0	3
PST	1030	Criminal Evidence	3	0	3
PST	2000	Drug Identification and Effects	3	0	3
PST	2010	Criminal Investigation	3	0	3
PST	2020	Police Firearms and Defensive Tactics	3	0	3
PST	2030	Seminar in Police Science Technology	3	0	3
		Technical Electives (select 6 courses)			
AIS	1180	Introduction to Microcomputers	3	0	3
PST	1005	Introduction to Criminology	3	0	3
PST	1040	Unarmed Defensive Tactics	3	0	3
PST	1050	Tactical Shotgun	3	0	3
PST	1060	Basic Surveillance Techniques	3	0	3
PST	1070	Officer Survival	3	0	3
PST	1080	Interviewing & Interrogation Techniques	3	0	3
PST	1090	Traffic Accident Investigation	3	0	3
PST	2040	VIP Executive Protection	3	0	3
PST	2050	Police Tactical Training (SWAT)	3	0	3
PST	2060	Evidence Photography	3	0	3
PST	2070	Business & Industry Security	3	0	3
PST	2035	Juvenile Procedures	3	0	3
PST	2045	Introduction to Criminalistics	3	0	3
PST	2055	Gangs, Cults, Deviant Movements	3	0	3
		General Education Elective (1)			
		General Elective	3	0	3
		Total Required Associate's Degree			67

FIRST YEAR

Fall Semester			**Cr.**
ENG	1111	Composition I	3
MAT	1110	Business Mathematics	3
PST	1000	Introduction to Criminal Justice	3
PST	1010	Criminal Law and Procedure	3
PST	1020	Police Administration	3
Spring Semester			
PHI	1111	Introduction to Ethics	3
		or	
SPA	1111	Spanish I	3
PST	1030	Criminal Evidence	3
		Technical Electives	6
		Natural Sciences Elective & Lab	4

SECOND YEAR

Fall Semester			**Cr.**
ENG	2112	Report Writing	3
PST	2000	Drug Identification and Effects	3
PST	2010	Criminal Investigation	3
		Social Sciences Elective	3
		Technical Electives	6
Spring Semester			
SPE	1111	Speech	3
		or	
SPE	1112	Fundamentals of Speech Communication	3
PST	2020	Police Firearms and Defensive Tactics	3
PST	2030	Seminar in Police Science Technology	3
		Technical Electives	6
		General Elective	3

CORRECTIONS MANAGEMENT CONCENTRATION

COURSE REQUIREMENTS

		English	**Class**	**Lab**	**Credits**
ENG	1111	Composition I	3	0	3
ENG	2112	Report Writing	3	0	3
SPE	1111	Speech	3	0	3
		or			
SPE	1112	Fundamentals of Speech Communication	3	0	3
		Humanities			
PHI	1111	Introduction to Ethics	3	0	3
		or			
SPA	1111	Spanish I	3	0	3
		Mathematics			
MAT	1110	Business Mathematics	3	0	3
		Natural Sciences Elective			
		Natural Sciences Elective	3	2	4
		Social Sciences Elective			
		Social Sciences Elective	3	0	3
		Corrections Management			
PST	1005	Introduction to Criminology	3	0	3
PST	1015	Survey of Institutional Corrections	3	0	3
PST	1025	Community-Based Corrections	3	0	3
PST	2005	Constitutional Rights of Prisoners	3	0	3
PST	2015	Correctional Management	3	0	3
PST	2025	Probations, Pardons and Parole	3	0	3
PST	2035	Juvenile Procedures	3	0	3

Police Administration

PST	1000	Introduction to Criminal Justice..	3	0	3
PST	1010	Criminal Law and Procedure..	3	0	3
PST	2000	Drug Identification and Effects	3	0	3
PST	2020	Police Firearms and Defensive Tactics	3	0	3
PST	2030	Seminar in Police Science Technology	3	0	3

Technical Electives (select 2 courses)

PST	1040	Unarmed Defensive Tactics	3	0	3
PST	1050	Tactical Shotgun	3	0	3
PST	1060	Basic Surveillance Techniques	3	0	3
PST	1070	Officer Survival	3	0	3
PST	1080	Interviewing & Interrogation Techniques	3	0	3
PST	2040	VIP Executive Protection	3	0	3
PST	2050	Police Tactical Training (SWAT)	3	0	3
PST	2060	Evidence Photography	3	0	3
PST	2045	Introduction to Criminalistics	3	0	3
PST	2055	Gangs, Cults, Deviant Movements	3	0	3

General Education Elective

		General Elective	3	0	3
		Total Required - Associate's Degree			**67**

FIRST YEAR

Fall Semester			**Cr.**
ENG	1111	Composition I..	3
MAT	1110	Business Mathematics	3
PST	1000	Introduction to Criminal Justice	3
PST	1010	Criminal Law and Procedure..	3
PST	1005	Introduction to Criminology	3

Spring Semester			
PHI	1111	Introduction to Ethics..	3
		or	
SPA	1111	Spanish I..	3
PST	1015	Survey of Corrections Institutions	3
PST	1025	Community-Based Corrections	3
		Technical Elective..	3
		Natural Sciences Elective	4

SECOND YEAR

Fall Semester			**Cr.**
ENG	2112	Report Writing..	3
PST	2000	Drug Identification and Effects..	3
PST	2005	Constitutional Rights of Prisoners	3
PST	2015	Correctional Management..	3
PST	2025	Probations, Pardons and Parole	3
		Social Sciences Elective..	3

Spring Semester			
SPE	1111	Speech	3
		or	
SPE	1112	Fundamentals of Speech Communication	3
PST	2020	Police Firearms and Defensive Tactics	3
PST	2035	Juvenile Procedures.	3
		Technical Electives	3
		General Elective	3

"Education is what you get from reading the fine print. Experience is what you get from not reading it."

— Unknown

SURGICAL TECHNOLOGY

Technical Certificate

The Surgical Technology Certificate is a two-semester program which trains individuals as surgical technologists. These individuals are specially trained members of the health care team who assist in a variety of ways in the operating room. Individuals completing this program will be eligible to sit for the national certifying exam given by the Association for Surgical Technologists. Upon passing the exam, individuals are designated as Certified Surgical Technologists. Application for certification is a graduation requirement. The student is responsible for the exam fee.

Job opportunities include operating rooms, clinics, labor and delivery departments, and sterile central supply departments. A high school diploma or equivalent and acceptable scores on the ACT or AAPP test are required for admission to the program. Medical forms are required for enrollment in the program, and students must have professional liability and health insurance. A "C" average or better in all courses is required to enter the second semester. Admission is based on GPA and interview. Due to limited enrollment, students should request application early. A letter with specific admission requirements will be sent to all qualified applicants.

COURSE REQUIREMENTS

		Class	Lab	Credits
English				
ENG 1111	Composition I	3	0	3
Biology				
BIO 1000	Medical Terminology	3	0	3
BIO 1002	Microbiology for Surgical Technology	2	0	2
BIO 1004	Basic Anatomy & Physiology	3	0	3
Chemistry				
CHE 1000	Basic Chemistry & Pharmacology	2	0	2
Allied Health				
ALH 1001	Introductory Surgical Technology	2	3	3
ALH 1002	Basic Skills Laboratory	3	0	1
ALH 1010	Clinical Experience for Surgical Technology	5	32	15
	Total Required - Certificate			**32**

Fall Semester		**Cr.**
ENG 1111	Composition I	3
ALH 1001	Introductory Surgical Technology	3
ALH 1002	Basic Skills Laboratory	1
BIO 1000	Medical Terminology	3
BIO 1002	Microbiology for Surgical Technology	2
BIO 1004	Basic Anatomy and Physiology	3
CHE 1000	Basic Chemistry and Pharmacology	2

Spring Semester		
ALH 1010	Clinical Experience for Surgical Technology	15

"Aim for success, not perfection. Never give up your right to be wrong, because then you will lose the ability to learn new things and move forward with your life."

- Dr. David M. Burns

WORKFORCE READINESS

Technical Certificate

The Workforce Readiness Technical Certificate is a one-year program that trains and equips graduates to succeed in the workplace. The program develops students' basic job-related skills and workplace performance skills such as teamwork, communication, and problem-solving.

This certificate provides an opportunity for educational advancement and mobility through articulation with the appropriate A.A.S. degree. Students must meet college admission requirements to be admitted to the program

BUSINESS TECHNICAL OPTION

Career Objective: This program will, with one year of college training, equip completers to succeed in entry-level office-related jobs.

FIRST SEMESTER

			Cr.
ACC	1104	Accounting I	4
AIS	1180	Introduction to Microcomputing	4
BUS	1113	Introduction to Business	3
MAT	1107	Applied Workplace Mathematics	3
SPE	1112	Fundamentals of Speech Communication	3

SECOND SEMESTER

AIS	1138	Microcomputer Software for Business	4
BUS	2310	Business Ethics	3
BUS	2600	Business Law: Contracts and Commercial Transactions	3
BUS	2400	Principles of Management	3
OAD	1220	Beginning Word Processing	4

OFFICE ADMINISTRATION OPTION

Career Objective: This program will, with one year of college training, equip completers to succeed in entry-level clerical or office-related jobs.

FIRST SEMESTER

AIS	1180	Introduction to Microcomputing	4
MAT	1107	Applied Workplace Mathematics	3
OAD	1115	Office Reference Manual Review	4
OAD	1120	Keyboarding/Speedbuilding	4
SPE	1112	Fundamentals of Speech Communication	3

SECOND SEMESTER

BUS	2310	Business Ethics	3
OAD	1220	Beginning Word Processing	4
OAD	1260	Spreadsheet Software for Administrative Assistants	3
OAD	1400	Electronic Office Procedures	4
OAD	1500	Presentation Software	3

COMPUTER INFORMATION OPTION

Career Objective: This program will, with one year of college training, equip completers to succeed in entry-level clerical, office-related, or computer jobs.

FIRST SEMESTER

CIS	0115	AS/400 Basic Computer Operations	3
OAD	1120	Keyboarding/Speedbuiding	4
CIS	1020	Computing Environment	3
MAT	1107	Applied Workplace Mathematics	2
SPE	1112	Fundamentals of Speech Communication	3

SECOND SEMESTER

BUS	2310	Business Ethics	3
CIS	1030	Program Logic and Design	4
CIS	0117	AS/400 SQL Relation Database Design	3
CIS	2250	Micro Operating Systems and Networking	3
CIS	0116	AS/400 Control Language	3

How to Succeed in College

Be realistic with your class scheduling

Most students work while they attend college. . Sometimes students misjudge the amount of study time that college courses require. Generally, college courses require much more preparation than high school courses required, and the quality of work is much higher in college. Students should discuss with their advisor the amount of hours that they work per week, and this should be a determining factor in how many courses a student should enroll.

The job market is very competitive today, and potential employers pay close attention to a student's academic performance. Nationally, students are taking longer to complete their degrees and are focusing on making good grades.

VISUAL COMMUNICATIONS

Associate of Applied Science

The visual communications industry represents the largest employment segment in the Nashville-Davidson County economy. The primary goal of the Visual Communications Associate's degree program is to train individuals to enter this evolving industry. Graduates from the Graphic Design Concentration of this program will be employed in jobs that require a combination of traditional graphic arts and design skills, along with electronic publishing and illustration abilities using computers and various software packages. Graduates from the Photography Concentration will use electronic imaging techniques to expand the capabilities of traditional methods. By blending skills from the areas of graphic design, photography, and electronic publishing, graduates of this program will be uniquely qualified to perform in the exciting field of visual communications.

It is the intent that graduates of the Visual Communications program in graphic design or photography be able to:

- demonstrate entry-level proficiency with both the traditional skill sets and the evolving electronic tools of their major
- use mathematics to measure accurately, calculate proportions, and determine resolutions
- understand and apply the principles of typography
- understand and apply the principles of color and value relationships
- be familiar with a variety of visual media
- utilize basic design principles to convey an intended message by visual means
- apply creative problem-solving techniques to design challenges
- understand and communicate in industry-appropriate vocabularies including the processes and final products
- work effectively and efficiently as an individual and in a team environment

Concepts taught in general education courses will be reinforced in the Visual Communications curriculum and applied to class exercises and projects.

GRAPHIC DESIGN CONCENTRATION

COURSE REQUIREMENTS

		Class	Lab	Credits
English				
ENG 1111	Composition I	3	0	3
SPE 1111	Speech	3	0	3
Humanities Elective				
HUM 1111	Appreciation of the Arts	3	0	3
Mathematics				
MAT 1110	Business Mathematics	3	0	3
Natural Sciences/Mathematics Elective				
	Natural Sciences or Math Elective	3	0	3
Social Sciences Elective				
	Social Sciences Elective	3	0	3
Photography				
PHO 1150	Photography I	3	0	3
Visual Communications				
COM 1110	Introduction to Visual Communications	3	0	3
COM 1111	Graphic Processes and Techniques	3	3	4
COM 1130	Graphic Design I	2	2	3
COM 1150	Type Concepts	2	2	3
COM 1170	Technology for Print Production	2	2	3
COM 1210	Introduction to Electronic Media	2	2	3
COM 1220	Graphic Design II	2	2	3
COM 1230	Introduction to Digital Imaging	2	2	3
COM 2110	Electronic Publishing	2	2	3
COM 2170	Visual Communications Portfolio	3	3	4
COM 2210	Electronic Design and Illustration	2	2	3
COM 2220	Electronic Publishing Practicum	2	2	3
Technical Elective (6 credits required)				
COM 2240	Advanced Digital Imaging for Photographers	2	2	3
COM 2250	Advanced Digital Imaging for Designers	2	2	3
COM 2260	Advanced QuarkXPress Production Techniques	2	2	3
COM 2270	Advanced Computer Illustration Techniques	2	2	3
COM 2330	Introduction to Electronic Prepress	3	0	3
COM 0136	Basic Illustration/Media Techniques	3	0	3
COM 0137	HTML/Web Language for Mac	3	0	3
General Education Elective				
	General Elective			3
	Total Required - Associate's Degree			**68**

RECOMMENDED FULL-TIME SCHEDULE
FIRST YEAR

Fall Semester		**Cr.**
ENG 1111	Composition I	3
COM 1111	Graphic Processes and Techniques	4
COM 1150	Type Concepts	3
COM 1210	Introduction to Electronic Media	3
COM 1110	Introduction to Visual Communications	3

Spring Semester		
SPE 1111	Speech	3
HUM 1111	Appreciation of the Arts	3
COM 1130	Graphic Design I	3
COM 1170	Technology for Print Production	3
COM 2110	Electronic Publishing	3
COM 2210	Electronic Design and Illustration	3

SECOND YEAR

Fall Semester		**Cr.**
COM 1230	Introduction to Digital Imaging	3
COM 1220	Graphic Design II	3
MAT 1110	Business Mathematics	3
PHO 1150	Photography I	3
	Technical Elective	3
	Social Sciences Elective	3

Spring Semester		
COM 2170	Visual Communications Portfolio	4
COM 2220	Electronic Publishing Practicum	3
	Technical Elective	3
	Mathematics Elective or Natural Sciences Elective	3
	General Elective	3

RECOMMENDED PART-TIME SCHEDULE
FIRST YEAR

Fall Semester		**Cr.**
COM 1111	Graphic Processes and Techniques	4
COM 1150	Type Concepts	3
Spring Semester		
COM 1110	Introduction to Visual Communications	3
COM 1210	Introduction to Electronic Media	3
Summer Semester		
ENG 1111	Composition I	3
HUM 1111	Appreciation of the Arts	3

SECOND YEAR

Fall Semester		**Cr.**
COM 1170	Technology for Print Production	3
COM 2110	Electronic Publishing	3
Spring Semester		
COM 1130	Graphic Design I	3
COM 2210	Electronic Design and Illustration	3
Summer Semester		
PHO 1150	Photography I	3

THIRD YEAR

Fall Semester		**Cr.**
COM 1230	Introduction to Digital Imaging	3
COM 1220	Graphic Design II	3
Spring Semester		
	Technical Elective	3
	Social Sciences Elective	3
Summer Semester		
	General Elective	3
	Natural Sciences Elective or Math Elective	3

FOURTH YEAR

Fall Semester		**Cr.**
COM 2220	Electronic Publishing Practicum	3
	Technical Elective	3
Spring Semester		
COM 2170	Visual Communications Portfolio	4
SPE 1111	Speech	3
Summer Semester		
MAT 1110	Business Mathematics	3

Cooperative work experience in Visual Communications (Graphic Design Concentration) can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 9 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. See page 96 for more information.

PHOTOGRAPHY CONCENTRATION

COURSE REQUIREMENTS

		Class	**Lab**	**Credits**
English				
ENG 1111	Composition I	3	0	3
SPE 1111	Speech	3	0	3
Humanities				
HUM 1111	Appreciation of the Arts	3	0	3
Mathematics				
MAT 1110	Business Mathematics	3	0	3
Natural Sciences/Mathematics Elective				
	Natural Sciences or Math Elective	3	0	3
Social Sciences Elective				
	Social Sciences Elective	3	0	3
Photography				
PHO 1115	Photographic Visual Principles	3	0	3
PHO 1150	Photography I	3	0	3
PHO 1160	Photo Darkroom I	2	2	3
PHO 1230	Color Lab Techniques I	2	2	3
PHO 1270	Portfolio Practicum	2	2	3
PHO 1320	Color Lab Techniques II	2	2	3
PHO 1430	Portrait and Wedding Techniques	3	0	3
PHO 2260	Photography II	2	2	3
PHO 2270	Photo Darkroom II	2	2	3
Visual Communications				
COM 1110	Introduction to Visual Communications	3	0	3
COM 1111	Graphic Processes and Techniques	3	3	4
COM 1150	Type Concepts	2	2	3
COM 1210	Introduction to Electronic Media	2	2	3
COM 1230	Introduction to Digital Imaging	2	2	3
Technical Elective				
	*Technical Elective	3	0	3
General Education Elective				
	General Elective	3	0	3
	Total Required - Associate's Degree			**67**

*Technical Elective to be chosen from any degree course with a COM, GRA, or PHO prefix.

RECOMMENDED FULL-TLME SCHEDULE
FIRST YEAR

Fall Semester		**Cr.**
ENG 1111	Composition I	3
COM 1110	Introduction to Visual Communications	3
COM 1111	Graphic Processes and Techniques	4
COM 1150	Type Concepts	3
PHO 1150	Photography I	3
Spring Semester		
HUM 1111	Appreciation of the Arts	3
SPE 1111	Speech	3
COM 1210	Introduction to Electronic Media	3
PHO 1115	Photographic Visual Principles	3
PHO 1160	Photo Darkroom I	3
	General Elective	3

SECOND YEAR

Fall Semester		**Cr.**
COM 1230	Introduction to Digital Imaging	3
PHO 1230	Color Lab Techniques I	3
PHO 2260	Photography II	3
PHO 2270	Photo Darkroom II	3
	Technical Elective	3
	Social Sciences Elective	3
	Natural Sciences Elective or Math Elective	3

Spring Semester

MAT	1110	Business Mathematics	3
PHO	1320	Color Lab Techniques II	3
PHO	**1430**	Portrait and Wedding Techniques	3
PHO	1270	Portfolio Practicum	3
		Technical Elective	3

RECOMMENDED PART-TIME EVENING SCHEDULE

FIRST YEAR

Fall Semester **cr.**

COM	1111	Graphic Processes and Techniques	4
COM	1150	Type Concepts	3

Spring Semester

COM	1110	Introduction to Visual Communications	**3**
COM	1210	Introduction to Electronic Media	3

Summer Semester

ENG	1111	Composition I	**3**
PHO	1150	Photography	**3**

SECOND YEAR

Fall Semester **Cr.**

PHO	1160	Photo Darkroom I	**3**
PHO	1115	Photographic Visual Principles	3

Spring Semester

PHO	1230	Color Lab Techniques I	**3**
HUM	1111	Appreciation of the Arts	3

Summer Semester

SPE	1111	Speech	**3**

THIRD YEAR

Fall Semester **Cr.**

PHO	2270	Photo Darkroom II	3
		Social Sciences Elective	3

Spring Semester

PHO	**2260**	Photography II	3
		Technical Elective	3

Summer Semester

Natural Sciences Elective
or
Math Elective **3**

FOURTH YEAR

Fall Semester **cr.**

MAT	1110	Business Mathematics	**3**
COM	1230	Introduction to Digital Imaging	**3**

Spring Semester

PHO	1320	Color Lab Techniques II	3
PHO	**1430**	Portrait and Wedding Techniques	3

Summer Semester

PHO	1270	Portfolio Practicum	**3**

Cooperative work experience in Visual Communications (Photography Concentration) can be an important addition to a student's formal classroom work. Co-op courses, if appropriate, may substitute for technical courses up to 9 credit hours with the prior approval of the department head. All Co-op work must have department head approval. The Career Employment Center will provide the correct course numbers. See page **96** for more information.

"You cannot depend on your eyes when your imagination is out of focus."

-Mark Twain

Workforce and Community Education Services

COMMUNITY EDUCATION CENTER

Each semester Nashville State Tech, through the Community Education Center, offers more than 150 special interest courses. These courses are designed primarily to assist in preparing individuals for new employment opportunities or to help improve the skills of those employed. These college level courses are not part of a Nashville State Tech degree or certificate program and some courses are offered as CEUs. Most of these courses are offered on a regular basis in phase with our semester schedule: Fall, Spring and Summer. Most courses are offered in the evening and meet one night per week. These courses can also be offered at other times and locations or can be customized to meet specific training needs by special request.

Typical course topics include:

- Accounting
- AutoCAD
- Basic Medical Terminology
- Basic Blueprint Reading
- Board Drafting
- Building Codes
- Common Sense Grammar & Style
- Construction Estimating
- Creative Writing
- Desktop Publishing
- Electrical Code
- Financial Planning
- Floral Design
- Gardening
- Introduction to Microcomputing
- Introduction to Wall Street
- Keyboarding
- Landscaping
- Microcomputer Literacy
- Microsoft Access
- Microsoft Excel
- Microsoft Office
- MicroStation CAD
- Networking/Internet
- Own & Operating a Small Business
- Programmable Logic Controllers
- Publishing
- Real Estate
- Stained/Art Glass
- Tooling and Machining
- Travel Agent
- Web Design
- Windows
- WORD
- WordPerfect
- Writing for Magazines

For more information on Special Interest Courses, please call **353-3255.**

Real Estate Courses

The Community Education Center offers real estate courses designed for the local real estate industry in compliance with the educational objectives established by the Tennessee Real Estate Commission. Each course satisfies the educational requirements of the Tennessee Real Estate Broker's License Act of 1973 as amended.

Successful completion of the Tennessee Real Estate Exam is required before a person can sell real estate as an agent. RLE 0101, Real Estate Fundamentals, a sixty-hour course, qualifies a person to sit for the Affiliate Broker's Licensing Exam.

Students need to be aware that there are strict attendance policies for each course in order to be in compliance with the attendance requirements of the TREC.

Courses offered include:

RLE 0101 Real Estate Fundamentals

RLE 0103 Course for New Affiliates/Real Estate

RLE 0122 Real Estate Investments

For more information, please call 353-3255.

Certified Employee Benefit Specialist (CEBS) Program

The CEBS program is a ten-course curriculum covering the entire spectrum of employee benefits. It has been designed to help individuals develop a comprehensive understanding of employee benefit principles and concepts.

Individuals who complete the CEBS program earn the professional designation Certified Employee Benefit Specialist, the most widely recognized and highly respected designation in the employee benefit field.

Individuals participating in the CEBS program represent a variety of backgrounds. Benefit managers, consultants, insurance company representatives, trust officers, administrators, attorneys, accountants, investment specialists and others interested in employee benefits should enroll in CEBS.

Three of the ten classes are offered fall and spring semesters. Testing is now done by computer at strategically located centers.

For more information, please call 353-3255.

Technical Training Center

The Technical Training Center provides on-going development of courses, seminars and workshops for business and industry to assist with special in-house training needs. These training programs are short term in nature and are not on the regular semester format; nor do they generally carry regular college credit. Specialized training programs can be designed to meet your company's specific needs or general public demand. In addition, this training may be offered either on the Nashville State Tech campus or on your company site. ISO/QS-9000, TQM, Continuous Improvement, Interpersonal Skills, Leadership, Programmable Logic Controllers, Industrial Electronics, and Hydraulics and Pneumatics are examples of the variety of training that may be provided.

For more information, please call 353-3456.

Work Keys Service Center

The Work Keys program enables business and education to work together to strengthen workplace skills. Work Keys compares the skills of job applicants and current employees to the skill requirements of the jobs within a company. With the information from Work Keys, a company can focus its training programs to target the skill deficiencies of employees. Call 353-3580 for more information.

Computer Resource and Training Center

The Computer Resource and Training Center offers a comprehensive variety of computer applications seminars. These half-day and full-day seminars are offered on a regular schedule throughout the year. Available classes include database management, desktop publishing, operating systems and environments, spreadsheets, word processing, Internet and Web page design. These classes, which generate continuing education units, can be customized to meet the needs of the customer. They are available on campus or at a customer's location on a contract basis.

For more information and a current schedule, please call 353-3405.

Off-Campus Locations & Distance Education Center

Off-campus Location Services: The Center offers multiple permanent educational sites located throughout Davidson County and the surrounding areas. Each location offers courses for starting or continuing one's academic or professional development goals.

Davidson County Off-campus Locations: Antioch High School, Glencliff High School, Hunters Lane High School, Legislative Plaza (Downtown Center), Maplewood High School, Nashville Electric Service and Whirlpool Training Center.

Outside Davidson County Locations: Dickson County High School (Dickson), Harpeth High School (Kingston Springs), Houston County High School (Erin), Humphreys County Vocational Center (Waverly), and Sycamore High School (Pleasant View).

Distance Education Services: There are three distance education modes at Nashville State Tech. They are video checkout courses, web-based courses and ITV courses. Distance Education programs are learning experiences in which the instructor and students do not share the same physical space. These formats allow learning to be available for individuals who are not able to travel back and forth to campus on a weekly basis or whose work schedules do not fit our regular scheduled offerings. Both degree and special interest courses are available.

For more information, please call 353-3259 or 353-3461.

Career Employment Center

The Career Employment Center is responsible for assisting students, graduates and alumni with their employment needs. Employers use the Center to locate qualified job applicants from the college. The service attempts to match the needs of employers with those of the student, graduate or alumnus. The Center assists with part-time and full-time employment opportunities.

In addition, the Center provides employment guidance and direct employment assistance to students and graduates of the college. It does not operate as an employment agency nor does it guarantee employment to those individuals registered with the Center.

To register and participate in either the Cooperative Education program or the Career Employment program, purchase a Resume Expert diskette from the Nashville State Tech Bookstore. Using any IBM compatible microcomputer, follow the directions on the diskette to develop your resume. When completed, bring the diskette to the Career Employment Center in the Weld Building, room W-77. Your data will be copied to the Center's Resume Expert management software program. This will enable the Center to perform job matching based on your education and qualifications.

Cooperative Education

Cooperative Education is a partnership between the college and the employment community which enables students to work in areas related to their major fields of study. The combination of academic studies in school and work experience on the job affords the Co-op student with added credentials to compete in the job market. Students may work part-time to receive 1.5, credits or full-time to receive 3.0 credits.

Any student interested in the Cooperative Education program is encouraged to apply. To qualify for the program, one of the following criteria must be met:

1. A minimum cumulative grade point average of 2.5 and the successful completion of the first semester within the student's major field of study.
2. Past or present work experience in a field related to the student's major.

To register for Co-op, a Co-op Packet is available in the Career Employment Center or students may use the Resume Expert software. Center personnel will assist the student in securing a work assignment in business, industry or government. Once the job is obtained, the student must complete a Learning Agreement and obtain a course number from the Center in order to receive academic credit for the work experience. Students should expect to pay for these academic credits since they are a part of their academic program of study. Grades for the Co-op work experience are based on the successful completion of a paper about their work and an employer evaluation.

Students are encouraged to work a minimum of three semesters. Such a schedule allows them to develop self-esteem, explore real work environments in their major field, and appreciate the relationship between theory and practice. Students receive monetary compensation for their Co-op work experience.

Career Employment

Because having graduates employed in their chosen career field is important to the college, the Career Employment Center targets its efforts to assist graduates. Therefore, all second-year students who will seek career employment at graduation should register with the Center at the beginning of their last semester. After completing the Resume Expert diskette make an appointment with the Director to discuss the employment process, the job market, and other services and materials available through the Center.

Students can receive information about the latest employment and salary statistics of Nashville State Tech graduates from the Career Employment Center.

Alumni Relations

The Career Employment Center is responsible for coordinating alumni activities and for maintaining communications between alumni and the college. The alumni publication, AlumniNews, provides information related to alumni activities, services and special events for all Nashville State Tech graduates and is distributed regularly to them.

For more information, please call 353-3248.

"Real success is finding your lifework in the work that you love."

- David McCullough

Arts and Sciences

The Arts and Sciences Division provides general education courses which complement the student's technical preparation and also serve as transfer credit. General education courses include studies in the areas of communications, humanities, mathematics, political science, social sciences, and the natural sciences. The courses support and strengthen academic skills needed for success in the business and engineering technologies programs offered by the college and may be used as transfer courses to other colleges and universities. General education course requirements are listed in the suggested schedule for each program of study.

The division also offers degree programs in Occupational Therapy Technology and Police Science Technology and certificate programs in Surgical Technology, Work Force Readiness and ParaEducator.

Academic Skills Department

The Academic Skills Department assists students who need to strengthen their academic skills to ensure success in college-level courses. During the admissions process, degree-seeking and transfer students may be assessed with the AAPP test to determine whether or not remedial/developmental coursework is necessary prior to enrolling in college-level courses. Academic advising, counseling, and regularly scheduled conferences with instructors and counselors help provide the skills students need to move into degree programs. If an academic deficiency is identified after students' enter college-level courses, students are referred to the Academic Skills Department for evaluation. The department also administers the Learning Center, located in the Library and the student disabilities program located in L-106.

English, ESL, Humanities and Social Sciences Department

(Spanish and French courses included)

English courses are offered in composition, business writing, speech communications, and literature. In some courses, students analyze samples of writing for organizational patterns, literary development, and modes of thought. Students gain practical experience in writing and speaking. Assignments frequently allow students to make use of their job experiences or technical backgrounds.

Humanities include courses in philosophy and art appreciation as well as courses in Spanish, French and literature. Humanities courses help students gain an appreciation of their cultural heritage and to appraise their personal values.

Social Sciences courses are offered in history, psychology, political science, and sociology. In these courses, students increase their understanding of human nature within a historical context or in their social environments and personal lives as it affects communication and behavior. All the courses emphasize the need for organization and clear thinking in professional as well as in private life.

Language courses allow students to develop proficiency in understanding, speaking, reading, and writing Spanish or French.

English as **a Second Language** (ESL) sections are offered in college-preparatory (remedial/developmental) courses and are noted on the class schedule. In addition, the college has a full-time ESL specialist on staff to assist students who speak English as a Second Language.

The Honors Program at Nashville State Tech provides opportunities for highly motivated, academically accomplished students to pursue courses in composition, psychology, sociology, ethics, speech, literature, and history. The goals of the honors program are to encourage intellectual growth, to promote new understanding, to enhance scholarship, and to instill a sense of academic and personal excellence.

The Honors Program is open to new and currently enrolled students. First-semester freshmen should have satisfactory scores on the ACT or SAT. Returning or continuing students must have completed twelve hours with a GPA of 3.0 or higher. All applicants must submit an application form, which includes a writing sample, and may be asked to participate in an interview with an honors committee representative.

Transcripts of Honors Program students will indicate successful participation in the program. Students will also receive a certificate and may be eligible for other benefits.

For more information and an application form, contact the English and Social Sciences department at 353-3531.

Students cannot enroll in a degree-level English, Humanities, or Social Sciences course until any required remedial/developmental English or reading course has been completed.

Mathematics and Natural Sciences Department

The Mathematics and Natural Sciences Department offers courses to provide the student with practical and applied skills which support the courses in the student's field of study. Job-related skills in business and industry are also introduced and reinforced in the department's courses.

Students in mathematics courses may be required to have a specific type of hand-held calculator with functions appropriate to the course. Laboratory assignments in mathematics and natural science courses outside of regular class meetings may be required.

Students cannot enroll in a degree-level mathematics course until any required remedial/developmental mathematics courses have been completed.

Course Descriptions

Course Descriptions

All courses which are offered as part of a technical certificate, associate's degree program, or general education core are listed and described briefly in this section of the catalog.

Each course is listed by its department prefix and course number. The courses are listed in alphabetical order by prefix. For example, the prefix for Computer Information Systems courses is CIS. All Computer Information Systems courses are listed, from the lowest number to the highest number, under CIS.

If you do not know the prefix of the program in which you are interested, look at the suggested schedule in the Academic Program description. The course prefix, number, and title of each course required in an academic program are shown. Honors courses are identified in individual course descriptions. Classes identified with ❑ are available by video check-out.

The prefix for courses in each area are:

ACC Accounting

ACT Architectural Engineering Technology

AIS Accounting Information Systems

ALH Surgical Technology

AMT Automotive Service Technology

BIO Biology

BNK Banking

BUS Business

CHE Chemistry

CIT Civil and Construction Engineering Technology

CMT Communications Technology

COM Visual Communications

CPT Computer Technology

C U L Culinary Science

DSE Developmental English

DSM Developmental Mathematics

DSR Developmental Reading

DSS Developmental Study Skills

ECO Economics

EDU Paraeducator

EET Electrical-Electronic Engineering Technology

EMC Electrical Maintenance

ENG English

FRE French

GEO Geology

HIS History

HON Honors

HUM Humanities

MAT Mathematics

MFG Manufacturing Engineering Technology

MKT Marketing

OAD Office Administration

OTT Occupational Therapy Assistant Technology

PHI Ethics and Critical Thinking

PHO Photography

PHY Physics

POL Political Science

PSC Physical Sciences

PST Police Science Technology

PSY Psychology

RSE Basic English

RSM Basic Mathematics

RSR Basic Reading

SOC Sociology

SPA Spanish

SPE Speech and Communications

ACCOUNTING

ACC 1104 - PRINCIPLES OF ACCOUNTING I **4 Credits**
4 Class Hours

Designed for accounting majors to cover the basic principles of accounting theory and practice. Topics covered include accounting for sole proprietorship, service, and merchandising business enterprises. The processes of evaluation, journalizing, and posting are covered in depth. Worksheets, financial statements, deferrals, accruals, voucher systems, receivables, and inventory are also covered.
Perquisite: DSM 0813

ACC 1105 - PRINCIPLES OF ACCOUNTING II **4 Credits**
4 Class Hours

A continuation of ACC 1104, this course is intended for accounting majors with emphasis on plant assets, payroll, partnerships, and corporate forms of business organization. Other topics covered include account controls, earnings, dividends, long-term investments and liabilities, and statement of cash flows.
Prerequisite: ACC 1104

ACC 1200 - PAYROLL ACCOUNTING **4 Credits**
4 Class Hours

This course is designed to cover the payroll procedures and laws that affect payroll operations and employment practices. Students are required to complete all payroll operations for a business including payroll tax returns. Students will also complete a payroll project through the use of payroll software and a microcomputer.
Prerequisites: ACC 1104 and AIS 1138

ACC 2154 - INTERMEDIATE ACCOUNTING I **4 Credits**
4 Class Hours

The course presents an in-depth study of the conceptual framework of accounting theory and the preparation of financial statements. The revenue/receivable/cash cycle is covered. The identification, valuation and estimation of inventory, and cost of goods sold are also covered.
Prerequisites: ACC 1105 with a grade of C or better and AIS 1138

ACC 2164 - INTERMEDIATE ACCOUNTING II **4 Credits**
4 Class Hours

A continuation of ACC **2154,** topics include accounting for debt financing, equity financing, and investing in dept and equity securities. The acquisition, utilization, and retirement of noncurrent operating assets; lease accounting, earnings per share, analysis of financial statements, accounting changes, and error corrections are also covered.
Prerequisite: ACC 2154

ACC 2340 - COST AND MANAGERIAL ACCOUNTING **4 Credits**
4 Class Hours

A course designed to introduce students to management accounting and how it is used in the decision making process for an organization. Topics covered include job order and process cost accounting, variable and absorption costing, contribution margin approach, cost volume-profit analysis, master budget, flexible budgets, standard costing and variances, evaluation of cost centers, and short-term and long-run decision making.
Prerequisites: ACC 1105, AIS 1138

ACC 2350 - TAXATION **3 Credits**
3 Class Hours

An introductory course to acquaint the student with taxation and the statutory concept of income. As an overview, the three primary tax returns - personal, partnership, and corporate - are covered.
Prerequisite: ACC 1105

ACC 2380 - MICROCOMPUTER ACCOUNTING APPLICATIONS **3 Credits**
2 Class Hours,
2 Laboratory Hours

This course is designed to set up an accounting system on the microcomputer using popular commercial accounting software. Students are expected to set up a computerized system, run parallel (manual and computerized) and produce financial statements and all supporting schedules.
Prerequisites: ACC 1105

ACC 2740 - AUDITING **4 Credits**
4 Class Hours

This course emphasizes the traditional role of the attest function - rendering of an opinion on published financial statements. Topics covered include generally accepted auditing standards, the auditors report, professional ethics, and the legal liability of auditors. Also covered is audit evidence, planning the audit, internal control, and audit procedures by specific account.
Prerequisite: ACC 1105

ARCHITECTURAL ENGINEERING TECHNOLOGY

ACT 1161 RESIDENTIAL DRAFTING AND CONSTRUCTION **4 Credits**
2 Class Hours,
6 Laboratory Hours

An introductory course in the basics of light construction systems. Lettering, architectural symbols, dimensioning systems, graphic systems and the use of drafting instruments and materials are studied. The student will prepare construction drawings and a study model for a small residence.
Corequisites: ENG 1111 and DSM 0803 or equivalent skills, CIT 1112

ACT 1341 COMMERCIAL DRAFTING AND CODES **3 Credits**
1 Class Hour,
6 Laboratory Hours

A study of the application of building codes to the construction process through drawings of code-conforming construction plans and details. Construction contracts, building permits, and the zoning process are investigated. The student will construct a study model for a small commercial building.
Prerequisite: ACT 1161
Corequisite: ACT 1432 and DSM 0813

ACT 1391 HISTORY OF ARCHITECTURE **3 Credits**
3 Class Hours

Traces the development of construction techniques through historical periods. Emphasis is placed on identification features and the characteristics of construction during these periods. The course covers ancient architecture and the development of western architecture through the Renaissance and Baroque periods and concludes with the Modern and Post-Modern developments in contemporary architecture.
Corequisite: ENG 1111

ACT 1432 COMPUTER-AIDED DRAFTING I **3 Credits**
1 Class Hour, 4 Laboratory Hours

Designed to familiarize the student with computers and DOS, to teach the basic elements of computer-aided drafting, and to introduce the operation of a computer graphics system as it is used in professional practice. The student gains hands-on experience at the computer graphics station while working on two-dimensional and three-dimensional drafting exercises and elementary site plans.
Corequisites: CIT 1112 and DSM 0803 or equivalent skills

ACT 1530 COMPUTER-AIDED DRAFTING II **3 Credits**
6 Laboratory Hours

An intermediate level CAD class designed to follow ACT 1432 with more in-depth coverage of advanced features, productivity enhancing techniques, and an introduction to three-dimensional drawing. Topics include prototype drawings, polylines and polyline editing, dimensioning and advanced dimensioning features, hatching and advanced hatching features, use of blocks and layers, display options (including zooming and viewports), plotting and plotting set-up, elementary programming and introductory 3-D.
Prerequisite: ACT 1432 and DSM 0813

ACT 2160 BUILDING UTILITIES **3 Credits**
3 Class Hours

Designed to familiarize the student with elements of the Standard Plumbing Code, Mechanical Codes, and National Electrical Code. Topics include plumbing, mechanical and electrical symbols approved for drawings, definitions, minimum facilities, abbreviations, standard locations and sizes, minimum and maximum requirements, selected proper installations, estimate of loads and required services. The student solves practical problems in the layout and design of selected utilities for a single- or multi-family dwelling, a commercial location, and an industrial or a specialized location.
Prerequisite: MAT 1140

ACT 2241 ADVANCED ARCHITECTURAL DRAFTING **3 Credits**
1 Class Hour, 5 Laboratory Hours

Designed to enable the student to produce a complete set of construction drawings for a steel framed building. Sections of the building code applying to steel construction are studied. The student constructs a study model.
Prerequisites: ACT 1341, ACT 1432 and MAT 1140
Corequisite: ACT 1530

ACT 2440 SPECIFICATIONS AND ESTIMATING **3 Credits**
2 Class Hours, 2 Laboratory Hours

Provides instruction in contracts and the use and importance of specifications for communication of construction requirements, with emphasis on the ability to prepare and to interpret selected sections of the specifications. The course also provides instruction in the development of procedures for preparing quality surveys. The topics include correlation of plans and specifications, CSI format, specification writing and conditions, specification interpretation, calculation of quantities of selected materials, labor considerations, pricing, take-off procedures, and development of quantity survey sheets.
Prerequisite: CIT 1220

ACT 2460 ADVANCED ARCHITECTURAL CAD **3 Credits**
9 Laboratory Hours

Designed to produce a complete set of construction drawings for a concrete framed building through team participation. Sections of the building code applying to concrete construction are studied. The student, with approval of the instructor, constructs one of the following: a study model, a perspective, an isometric, or a 3-D drawing of the project.
Prerequisite: ACT 2241

ACCOUNTING INFORMATION SYSTEMS

AIS 1138 - MICROCOMPUTER SOFTWARE FOR BUSINESS **4 Credits**
4 Class Hours

A one-semester course intended to introduce participants to the use of microcomputer software in the business environment. Applications included are word processing, spreadsheet, database, and presentation graphic software. The actual software used will be determined by what the local market is using.

AIS 1180 - INTRODUCTION TO MICROCOMPUTING **4 Credits**
4 Class' Hours

A first course in microcomputing providing an overview of the microcomputing environment including hardware, operating environments, and the use of the Internet, including the World Wide Web.

AIS 2600 - SPREADSHEET PROBLEMS **3 Credits**
2 Class Hours, 2 Laboratory Hours

An upper division course designed to teach students to solve a wide range of accounting and business decision-making problems using a popular spreadsheet package. Topics covered include creating and developing professional looking worksheets, creating charts, working with lists, integrating with other programs and the World Wide Web, using financial functions, creating data tables, using built-in analysis and decision-making tools and enhancing the worksheet for ease of use.
Prerequisites: ACC 1105, AIS 1138

AIS 2700 - WINDOWS SOFTWARE **4 Credits**
4 Class Hours

This course is a follow-on to AIS 1138. Students are taught to integrate word processing, data base, and presentation graphics software into fully integrated applications. The docucentric approach to application development and the use of object linking and embedding are stressed.

Prerequisites: AIS 1180 and AIS 1138

AIS 2840 - ACCOUNTING INFORMATION SYSTEMS **4 Credits**
4 Class Hours

An overview of technology and methods used in the accumulation, reporting, and analysis of accounting data. Students are given hands-on experience using a database management system.

Prerequisites: AIS 1180, AIS 1138

SURGICAL TECHNOLOGY

ALH 1001 INTRODUCTORY SURGICAL TECHNOLOGY **3 Credits**
2 Class Hours, 3 Laboratory Hours

Introduces the student to the basic concepts and skills required in surgical technology. Topics include historic, legal, and ethical aspects of surgery; coping with death, dying, and transplant technology; and the role of the surgical technologist in the health care team and in dealing with the patient. Major emphasis is placed on the identification and handling of surgical instruments and equipment. The surgical hand scrub, gowning and gloving, and safety procedures are also included.

Prerequisites: DSR 0853 or equivalent skills, RSM 0703 or equivalent skills

ALH 1002 BASIC SKILLS LABORATORY **1 Credit**
3 Laboratory Hours

Designed to complement ALH 1001, Introduction to Surgical Technology. Students receive additional time to practice the skills and concepts introduced in ALH 1001. Open gloving, positioning, draping, prepping, vital signs, measuring using the metric system, gowning and gloving the surgeon, preparing material for sterilization, and discovering sources of bacterial contamination will be covered. Students will receive some additional practice with handling instruments.

Prerequisites: DSR 0853 or equivalent skills, RSM 0703 or equivalent skills

Corequisite: ALH 1001

ALH 1010 CLINICAL EXPERIENCE FOR SURGICAL TECHNOLOGISTS **15 Credits**
5 Class Hours, 32 Laboratory Hours

Provides practical experience in surgical technology duties. Students observe general surgery and scrub under supervision on selected cases. The surgical specialty areas of gynecology, urology, cardiovascular, plastic, otolaryngology, ophthalmology, neurosurgery, and orthopedic services are also covered.

Prerequisites: All academic coursework and program director approval are required before taking ALH 1010.

AUTOMOTIVE SERVICE TECHNOLOGY

AMT 1110 AUTOMOTIVE SERVICE **2 Credits**
1 Class Hour, 3 Laboratory Hours

Introduces shop operation, customer relations, flat rate manuals, safety, organizational design, pay structure, equipment, tools, and basic operational theories. Emphasis is placed on the proper use of hand tools, measuring instruments, and equipment. Also included are service procedures for lubrication, batteries, the cooling system, wheels and tires, and new car pre-delivery service.

Prerequisite: DSM 0813 or equivalent skills

AMT 1122 STANDARD TRANSMISSIONS/DRIVE LINES/DIFFERENTIALS **3 Credits**
2 Class Hours, 3 Laboratory Hours

A study of automotive drive shafts, universal joints, axles, differentials, bearings and seals, and standard shift transmissions.

Prerequisite: AMT 1110

AMT 1124 AUTOMOTIVE BRAKES **3 Credits**
2 Class Hours, 2 Laboratory Hours

A detailed study of types of braking systems and their service requirements. Machine turning of brake drums and rotors is included. Emphasis is on system operation, diagnosis, adjustment, testing, replacement, and repair procedures.

Prerequisite: AMT 1110

AMT 1126 SUSPENSION AND STEERING **3 Credits**
2 Class Hours, 2 Laboratory Hours

Involves the study of suspension systems with emphasis on wheel alignment and suspension rebuilding.

Prerequisite: AMT 1110

AMT 1220 FORD ELECTRICAL SYSTEMS **4 Credits**
3 Class Hours, 2 Laboratory Hours

Covers the automobile electrical system including batteries, wiring, lighting, alternators, generators, starters, and voltage regulators. Course covers the use of electrical test equipment and schematics and stresses the proper care and use of tools.

AMT 1310 AUTOMOTIVE ENGINES I **5 Credits**
3 Class Hours, 4 Laboratory Hours

Studies the operational theory of the internal combustion engine. Course introduces engine rebuilding, mechanical diagnosis, and failure analysis.

Prerequisite: AMT 1110

AMT 1320 GM AUTOMOTIVE ENGINES I **3 Credits**
2 Class Hours, 3 Laboratory Hours

Studies the operational theory of the internal combustion engines currently in use in General Motors vehicles. Course introduces engine rebuilding, mechanical diagnosis, and failure analysis.

Prerequisite: AMT 1110

AMT 2110 FORD ELECTRONIC SYSTEMS/COMPUTERS **4 Credits**
3 Class Hours, 2 Laboratory Hours

An introduction to electronic devices (transducers) and associated computers used to regulate, monitor, and control various systems on Ford Motor Company vehicles.

Prerequisite: AMT 1220

AMT. 2120 AUTOMATIC TRANSMISSIONS I **3 Credits**
2 Class Hours, 3 Laboratory Hours

Covers the theory, operation, and diagnosis of automatic transmissions. Course introduces rebuilding of automatic transmissions.

Prerequisite: AMT 1122

AMT 2210 AUTOMATIC TRANSMISSIONS II **3 Credits**
2 Class Hours, 3 Laboratory Hours

A continuation of Automatic Transmissions I. Transmission rebuilding is covered with emphasis on in-service automobile repair.

Prerequisite: AMT 2120

AMT 2212 AUTOMATIC TRANSMISSIONS **5 Credits**
4 Class Hour, 2 Laboratory Hours

Covers the theory, operation, diagnosis, and repair of front and rear wheel drive transmissions.

Prerequisite: AMT 21 IO

AMT 2225 AUTOMOTIVE ENGINES II **2 Credits**
1 Class Hour, 2 Laboratory Hours

A continuation of Engines I, AMT 1310. This course focuses on the techniques of engine rebuilding.

Prerequisite: AMT 1310

AMT 2250 DIESEL ENGINE OPERATIONS **2 Credits**
1 Class Hour, 2 Laboratory Hours

Designed to teach operational concepts, repair, and driveability problem solutions related to diesel engine operations.

Prerequisite: AMT 1310 or AMT 1320

AMT 2310 FUEL AND EMISSIONS **3 Credits**
2 Class Hours, 3 Laboratory Hours

Covers the principles and functions of the automotive fuel system including the carburetor, fuel pump, gas tank, and emission control systems. Course stresses diagnosis, repair, and adjustment of emission control systems, repair and adjustment of the carburetor, fuel injection, and their components.

Prerequisite: AMT 1310

AMT 2315 FORD FUEL AND EMISSIONS **2 Credits**
1 Class, Hour, 3 Laboratory Hours

Covers the principles and functions of the Ford vehicle automotive fuel system. Course stresses diagnosis, repair and adjustment of the entire system including emission control devices.

Prerequisite: AMT 1110

AMT 2320 AUTOMOTIVE UPDATE **1 Credit**
1 Class Hour

The final segment of the automotive program is devoted to a discussion of the newest products and plans for, these products.

Prerequisite: AMT 1310

AMT 2330 CLIMATE CONTROL **4 Credits**
3 Class Hours, 2 Laboratory Hours

Focuses on the principles of operation and service techniques applied to automobile heating and air conditioning systems. Topics include components, testing, diagnosing, charting, and repair practices.

Prerequisite: AMT 1220 or ***EET 1190 or EET 1192***

AMT 2340 FORD ENGINE PERFORMANCE **6 Credits**
4 Class Hours, 4 Laboratory Hours

Covers techniques for diagnosing the automobile engine and other areas and stresses electronics and conventional ignition systems. Carburetion and injection systems are introduced. Complete tune-up procedures, using the latest test equipment, are studied to insure proper application to the automobile.

Prerequisite: AMT 2110

AMT 2345 ENGINE PERFORMANCE AND TESTING **1 Credit**
2 Laboratory Hours

Designed to teach the student concepts of engine driveability. Instructor will explain common faults found in working engines, along with appropriate repair and alignment procedures.

Prerequisite: EET 2192

AMT 2350 DEVELOPMENTAL PROJECT **2 Credits**
2 Class Hours

Illustrates automotive developmental concepts as they relate to future computer uses in automotive design.

Prerequisite: EET 2292

AMT 2360 FORD AUTOMOTIVE PROJECT **. 2 Credits**
2 Class Hours

Illustrates automotive developmental concepts as they relate to future computer uses in automotive design.

Prerequisite: AMT 2110

BIOLOGY

BIO 1000 MEDICAL TERMINOLOGY **3 Credits**
3 Class Hours

Includes a study of roots, prefixes, and suffixes commonly used in the medical field and terminology related to body systems and disorders.

BIO 1002 MICROBIOLOGY FOR SURGICAL TECHNOLOGY **2 Credits**
2 Class Hours

Introduces microbial techniques and concepts. Course emphasizes application of these concepts to the operating room environment and personnel. Topics include an overview of microorganisms and their implication in disease, use and monitoring of the' autoclave, and the control of microorganisms in the hospital environment. Course is for certificate programs.

Prerequisite: DSR 0853 or equivalent skills

BIO 1004 BASIC ANATOMY AND PHYSIOLOGY **3 Credits**
3 Class Hours

Introduces the structure and function of the human body. Covers skeletal, muscular, nervous, endocrine, immune,

cardiovascular, respiratory, excretory, and reproductive systems. Emphasizes interrelationships, malfunctions and diseases of cells, tissues, organs, and organ systems. Course is for certificate programs.
Prerequisite: DSR 0853 or equivalent skills

BIO 1006 FIRST AID AND CARDIOPULMONARY RESUSCITATION **3 Credits** **3 Class Hours**

Teaches the theory and practice of first aid, emergency care and basic cardiac life support following cardiac arrest. Course prepares the student for basic CPR certification and provides essential information for developing functional first aid and CPR capabilities of lay persons. ***This course does not satisfy a Natural Science requirement.***

BIO 1010 BIOLOGY **3 Credits** **3 Class Hours**

Introduces the biological sciences. Topics include cell structure and function, animal and plant structure, cellular chemistry, cell reproduction, human structural systems, genetics, and ecosystems. This course may not transfer without the associated laboratory, BIO 1011.
Prerequisite: DSR 0853 or equivalent skills

BIO 1011 BIOLOGY LABORATORY **1 Credit** **2 Laboratory Hours**

A laboratory course to accompany BIO 1010. Topics include microscopy, plant and animal cell structure and physiology, genetics, and energy systems.
Prerequisite or Corequisite: BIO 1010

BIO 1130 ANATOMY AND PHYSIOLOGY I **4 Credits** **3 Class Hours, 2 Laboratory Hours**

Designed primarily for students in allied health fields and those in the biological sciences. Course topics include cell structure and physiology, tissues, and the integumentary, skeletal, muscular and nervous systems. A laboratory accompanies this course. It is strongly suggested that the student have a background in general chemistry and biology before attempting this course.
Prerequisite: DSR 0853 or equivalent skills

BIO 1140 ANATOMY AND PHYSIOLOGY II **4 Credits** **3 Class Hours, 2 Laboratory Hours**

Designed primarily for students in allied health fields and those in the biological sciences. This is a continuation of BIO 1130, which should be completed before attempting this course. Course topics include studies the anatomy and physiology of the endocrine, cardiovascular, respiratory, immune, reproductive, and urinary systems. A laboratory accompanies this course. It is strongly suggested that the student have a background in general chemistry and biology before attempting this course.
Prerequisite: DSR 0853 or equivalent skills

BIO 1250 PRINCIPLES OF NUTRITION **3 Credits** **3 Class Hours**

A general course in nutrition with emphasis on scientific principles, metabolism, and requirements for nutrients. Topics of interest to those in health care and related professions are discussed.
Prerequisites: DSR 0853 and DSM 0803 or equivalent skills

BIO 2000 ENVIRONMENTAL SCIENCE **4 Credits** **3 Class Hours, 2 Laboratory Hours**

Environmental problems, ecosystems, and human populations are discussed. The availability and conservation of natural, living, and energy resources are stressed. The politics and economics of world resources will be discussed. A laboratory accompanies this course and will include both on-campus and off-campus activities.
Prerequisite: DSR 0853 or equivalent skills

BIO 2010 MICROBIOLOGY **4 Credits** **3 Class Hours, 3 Laboratory Hours**

Provides a foundation in bacteriology. Topics covered include microbial structure, growth, metabolism, genetics,' and the role of microorganisms in disease with discussions on applied microbiology and medically significant fungi and viruses. A laboratory accompanies this course and will introduce the student to aseptic techniques, staining, growth media, and the identification of bacteria and fungi. It is strongly suggested that the student have a background in general chemistry and biology before attempting this course.
Prerequisite: DSR 0853 or equivalent skills

BANKING

BNK 1110 PRINCIPLES OF BANKING **3 Credits** **3 Class Hours**

An overview of banking services and functions, including loans, investments, and trust operations. Covers basic principles of banking transactions and item processing, focusing on deposit and payment functions of banking. The student deals directly with procedures and forms relative to opening accounts, cash and collection item processing, proof operations, paying and returning checks, and bookkeeping functions. Course also emphasizes internal controls and external regulations.
Prerequisites: DSR 0853

BNK 1210 CONSUMER LENDING **3 Credits** **3 Class Hours**

A study of the fundamental principles of extending consumer credit. The practical approach is taken by actually studying and practicing taking loan applications, verifying credit histories, evaluating credit reports, making credit decisions, processing and disbursing the loan, and recognizing the importance of collateral. Also included are exercises in computing interest charges and rebates, insurance of consumer credit, pricing of loans, collections, and consumer compliance.
Prerequisite: DSR 0853 and RSM 0703

BNK 1215 COMMERCIAL BANK MANAGEMENT **3 Credits** **3 Class Hours**

The study and application of principles outlined provide students with a working knowledge of bank management.

Course touches on objectives, planning, structure, control, and the interrelationship of various bank departments. Also included are trends that have emerged in philosophy and practice of bank management. Case studies stress current bank problems.
Prerequisite: DSR 0853

BNK 2110 MONEY AND BANKING **3 Credits**
3 Class Hours

Presents basic economic principles most closely related to the subject of money and banking. Course stresses the practical application of the economics of money and banking in the individual bank and in the banking system. Some of the subjects covered include the structure of the commercial banking system; the nature and functions of money; banks and the money supply; the money market and the capital market; bank investments, loans, earnings, and capital; the Federal Reserve System, its policies and operation; Treasury Department operations; and the changing international monetary system.
Prerequisite: DSR 0833 and RSM 0703

BNK 2115 NEGOTIABLE INSTRUMENTS **3 Credits**
3 Class Hours

Explores the relevant legal implications of the normal activities and transactions in bank operations. Course is designed to teach legal principles related to negotiable instruments and to influence attitudes of bank personnel by providing information about the impact of the law and applicable bank regulations. Highlights include holder in due course, check losses, and liability. Instructor uses illustrative cases extensively.
Prerequisite: DSR 0853

BNK 2210 THE TRUST BUSINESS **3 Credits**
3 Class Hours

Presents a complete picture of the services and duties of institutions engaged in the trust business. Course is an excellent overview of wills, trust agreements, property ownership, and investments of trust departments. Class discusses the organization and history of the trust business.
Prerequisite: DSR 0853

BNK 2230 IN-VESTMENT BASICS **3 Credits**
3 Class Hours

Provides basic information on investments in securities, options, commodities, tax shelters, art, and more. Explores traditional and modern methods of analyzing investment opportunities for the beginning investor. Students will also trade in the securities market (using real prices and making their own decisions) by using a special microcomputer software package.
Prerequisites: DSR 0853 and RSM 0703 or equivalent skills

BUSINESS

BUS 1000 INTRODUCTION TO CUSTOMER SERVICE **3 Credits**
3 Class Hours

Covers the basic concepts of customer service, applying it to all areas of customer interaction. How to transmit a positive attitude, identify and provide for customer needs, measure your service, and cultivate repeat business will be taught.
Prerequisite: DSR 0853

BUS 1113 INTRODUCTION TO BUSINESS **3 Credits**
3 Class Hours

Acquaints students with the private enterprise system. Topics covered include forms of business organizations, business finance, human resource management, production, marketing, business ethics, information management, and the changing business environment.
Prerequisites: DSR 0853 and RSE 0733 or equivalent skills

BUS 1500 ENTREPRENEURSHIP **3 Credits**
3 Class Hours

Explores the nature of small business. Entrepreneurial alternatives such as startup, buyout, and franchising are discussed. Preparing a business plan, choosing a form of ownership, small business marketing, and operations are stressed. Financial and administrative controls as well as the social and legal environment of business are introduced.
Prerequisites: DSR 0853 and RSE 0733 or equivalent skills

BUS 2111 HUMAN RELATIONS IN BUSINESS **3 Credits**
3 Class Hours

Studies the importance of understanding human relations in the workplace and explains how interpersonal relationships have evolved in this century from an emphasis on production to an emphasis on developing and utilizing the whole person. Through such topics as personality, communication, conflict, motivation, power, decision making, and self-esteem, the student is brought face to face with the reality of 21st century human relationships. In an atmosphere of confidence and expectation, the student and teacher address meeting the challenges of succeeding - not just surviving - in the workplace, and living a life in the process.
Prerequisites: DSR 0853 and RSE 0733

BUS 2240 PERSONAL MONEY MANAGEMENT **3 Credits**
3 Class Hours

Designed to aid the student in planning personal financial objectives. Topics covered include budgeting, consumer borrowing, renting and buying, insurance, taxation, investing, and planning for retirement.
Prerequisites: DSR 0853 and RSM 0703

BUS 2250 HUMAN RESOURCE MANAGEMENT **3 Credits**
3 Class Hours

Provides information about basic principles of managing human resources: laws that relate to all aspects of HR function, HR planning, job analysis, job specifications, employee selection, training and development, performance

evaluations, salary determination, benefits, labor relations, and current techniques used to improve productivity and morale.

Prerequisites: DSR 0853 and RSE 0733 or equivalent skills

BUS 2310 - BUSINESS ETHICS **3 Credits**
3 Class Hours

Introduces basic ethical theories and value systems and applies these perspectives to moral issues, problems, and situations which arise within the business environment. Course encompasses codes of ethics, conflict of interest, social responsibility, the work ethic, white collar crime, and fiduciary responsibilities.

Prerequisites: DSR 0853 and RSE 0733 or equivalent skills

BUS 2311- LEADERSHIP **3 Credits**
3 Class Hours

Explores the nature and attributes of leadership through case studies and biographies. Examines the difference between leadership ability and management skills. Attempts to identify traits and abilities which have distinguished effective leaders from ineffective ones.

Prerequisite: DSR 0853 and RSE 0733 or equivalent skills

BUS 2400 - PRINCIPLES OF MANAGEMENT **3 *Credits***
3 Class Hours

An overview of how a business organization works and the relationships of the people within the organization. Develops the topics of managerial functions, motivation of employees, the decision-making process, communication, authority, responsibility and personnel management through class discussion and case studies.

Prerequisites: DSR 0853 and RSE 0733 or equivalent skills

BUS 2600 - BUSINESS LAW: CONTRACTS **3 Credits**
3 Class Hours

Introduces the study of law in relation to the proper conduct of business, including the nature and source of law, *courts* and courtroom procedure, contracts and sales.

Prerequisites: DSR 0853 and RSE 0733 or equivalent skills

CHEMISTRY

CHE 1000 BASIC CHEMISTRY AND PHARMACOLOGY **2 Credits**
2 Class Hours

Familiarizes surgical technologists with the substances used to induce and maintain local and general anesthesia. Anesthetic shock and its treatment, anticoagulants, antibiotics, and irrigation solutions will also be discussed. Additional topics include basic chemical concepts as they apply to these substances and the metric system. Course is for certificate programs.

Prerequisite: DSR 0853 or equivalent skills, RSM 0703 or equivalent skills

CHE 1050 CHEMISTRY **3 Credits**
3 Class Hours

Emphasizes basic chemical principles and their application to technical and environmental problems. Topics include properties of matter, elements and compounds, atomic structure, periodic properties, chemical bonds, reactivity, energy, raw materials, organic chemicals, polymers, toxic substances, and chemistry of the air and water.

CHE 1051 CHEMISTRY LABORATORY **1 Credit**
3 Laboratory Hours

Laboratory exercises to accompany CHE 1050.

CHE 1110 GENERAL. CHEMISTRY I **3 Credits**
3 Class Hours,

Includes fundamental concepts of chemistry, atomic and molecular structure, nomenclature, states and properties of matter, chemical bonds, kinetic theory, and gas laws.

Prerequisite: DSM 0813 or permission of instructor.

CHE 1111 GENERAL CHEMISTRY LABORATORY I **1 Credit**
3 Laboratory Hours

Laboratory exercises to accompany CHE 1110.

Corequisite: CHE 1110

CHE 1120 GENERAL CHEMISTRY II **3 Credits**
3 Class Hours

A continuation of CHE 1110. Topics include solutions, acids, bases, salts, colloids, oxidation and reduction reactions, and an introduction to organic chemistry.

Prerequisite: CHE 1110

CHE 1121 GENERAL CHEMISTRY LABORATORY II **1 Credit**
3 Laboratory Hours

Laboratory exercises to accompany CHE 1120.

Corequisite: CHE 1120

COMPUTER INFORMATION SYSTEMS

CIS. 1010 INTRODUCTION TO ELECTRONIC DATA PROCESSING **3 Credits**
3 Class Hours

An overview of electronic data processing. Major subjects include historical development, number systems, data representation, hardware, software, computer concepts, and types of programming languages. Emphasizes essential principles and functions rather than specific details of the machine. Includes hands-on activities on the microcomputer.

Prerequisite: RSR 0753

CIS 1020 COMPUTING ENVIRONMENTS **3 Credits**
3 Class Hours

Introduces students to computer hardware, operating environments, and procedures for utilizing computer resources. Environments include DOS, Windows, Vax's VMS, and IBM's OS/MVS. Text editors such as SPFPC, EDIT and ISPF are examined and utilized in, constructing testing procedures for the various environments. Students are also instructed on moving files between the various environments.

Students may substitute CPT 2325 for this course.

CIS 1030 PROGRAM LOGIC AND DESIGN **4 Credits**
4 Class Hours

Designed to provide the basic logic necessary in business applications programming. In addition to logic, course covers correct techniques of structured design, flowcharting, and other methods of illustrating logic.

Prerequisite: RSM 0703
Corequisite: CIS 1020 or CPT 2325

CIS 1120 ASSEMBLER LANGUAGE PROGRAMMING **4 Credits**
4 Class Hours

A comprehensive treatment of symbolic machine assembly language concepts employing the IBM System OS/MVS/XA Assembler Language. Course emphasizes a thorough understanding of the System ES-9000 hardware, standard and decimal instruction set, input/output operations, and the use of the storage dumps in the program debugging. Several business applications are flowcharted, programmed, and run on the computer.

Prerequisite: CIS 1030

CIS 1130 PASCAL **3 Credits**
3 Class Hours

Introduces the various programming concepts of Pascal using business applications. Emphasizes problem-solving methods and algorithm development. Students gain experience in the design, debugging, and documentation of programs using structured programming techniques.

Prerequisite: CIS 1030

CIS 2010 ANS COBOL PROGRAMMING **4 Credits**
4 Class Hours

Introduces various programming concepts, using structured program design and structured coding by means of a series of programs illustrating typical business applications. Topics include sequential disk processing, file maintenance, table processing, and the use of library facilities.

Prerequisite: CIS 1030

CIS 2110 SYSTEMS DESIGN AND DEVELOPMENT **3 Credits**
3 Class Hours

Designed to present the tools, techniques, and concepts needed by analysts to develop information systems in the rapidly changing business environment. It includes systems development methodologies, data dictionaries and codes, user interface and terminal dialogue design, physical data flow diagrams, logical data flow diagrams, data modeling with entity relationships diagrams and data-base design.

Prerequisites: Two programming languages

CIS 2120 OPERATING SYSTEMS **3 Credits**
3 Class Hours

Explores individual features of operating systems. Students are exposed to how basic operating system functions are implemented at the micro, midrange, and mainframe, platform levels. Topics covered are job control, supervisors, libraries, and utilities. This course presents a cohesive functional picture of complete computer systems.

Prerequisite: CIS 1120

CIS 2130 RPG PROGRAMMING **3 Credits**
3 Class Hours

A comprehensive treatment of RPG II, RPG III and RPG/400 concepts utilizing the IBM System AS400. Emphasis is placed upon the understanding and coding of specification forms and the concepts involved in writing programs in a structured format for typical business applications. Areas covered are fundamentals, control breaks, multiple record types, exception output, tables and arrays, matching records, sequential, indexed files, and interactive screen handling.

Prerequisite: CIS 1120

CIS 2140 ANS COBOL APPLICATIONS **5 Credits**
5 Class Hours

A study of more comprehensive methods and problems using Common Business Oriented Language. Students learn advanced programming techniques using structured program design by using disk in sequential and index sequential. Several business problems will be presented and solved by the students using various file arrangements, sorts, and input/output devices.

Prerequisite: CIS 2010

CIS 2150 INTRODUCTION TO CICS PROGRAMMING **4 Credits**
4 Class Hours

Introduces the fundamentals of CICS/ESA systems and CICS/ESA command level programming in COBOL. Topics include the structure of a CICS/ESA system, the task flow in the CICS/ESA system, the main CICS/ESA control programs, the main CICS/ESA control tables, the command level commands used in program control, BMS mapping, file control, storage control, etc., and the coding techniques used in pseudo-conversational mode of processing. Video terminals are utilized as tools in understanding the design and programming of several data communication applications using CICS/ESA command level programming.

Prerequisite: CIS 2010

CIS 2160 DATA BASE PROGRAMMING **4 Credits**
4 Class Hours

Introduces the fundamentals of data base programming on mainframes. Acquaints students with the concepts, structure, and programming of a popular data base management system. Students write several programs, using COBOL, to access the data base system. Students are also exposed to an interactive query facility and the use of SQL for generating on-line reports and inquiries.

Prerequisite: CIS 2010

CIS 2215 BASIC PROGRAMMING FOR ENGINEERING TECHNOLOGIES **3 Credits**
2 Class Hour, 2 Laboratory Hours

Presents the BASIC programming language and instruction in the development and execution of computer programs for the solution of technical problems on the microcomputer. Introduces flowcharting and pseudocode as a means of organizing the logical solutions to problems and documenting solutions. Presents output formatting and simple plotting techniques for students to practice.

Corequisite: MAT 1140

CIS 2216 C LANGUAGE FOR ENGINEERING TECHNOLOGIES **3 Credits**
2 Class Hour, 2 Laboratory Hours

Presented as an introduction to the C programming language. Technical programs are coded that exercise the various aspects of the language such as flow of control, input and output, arithmetic operations, and function definitions and calls. An introduction to program logic and design is presented using flowcharting and pseudocode to organize the program solution.

Corequisite: MAT 1140

CIS 2217 VISUAL BASIC **4 Credits**
4 Class Hours

Designed to prepare the student to create attractive and useful business applications for the Microsoft Windows Environment. Students learn to create user interfaces by selection and placement of objects on the user screen, to set priorities on those objects to refine their appearance and behavior, and to write code procedures to react to events that occur in the user interface. Typical business applications are assigned to allow students to develop skills in the use of ransom file processing, database access, Dynamic Data Exchange (DDE), and Object Linking and Embedding (OLE).

Prerequisite: CIS 2010

CIS 2218 ADVANCED TOPICS IN VISUAL BASIC **4 Credits**
4 Class Hours

This course is a continuation of the study of Visual Basic. Course topics cover Professional Edition of Visual Basic and focus on single-user applications. The course will cover current topics in the application of Visual Basic to the solution of contemporary computing and information systems problems.

Prerequisite: CIS 2217

CIS 2220 C LANGUAGE PROGRAMMING **4 Credits**
4 Class Hours

Introduces the student to the various concepts of the ANSI C language within the MS-DOS operating system environment. Practical business exercises, for coding by the students, are assigned to reinforce various aspects of the language. Topics targeted for emphasis include stream I/O, flow of control, function definition and use, complex data types and pointers. Prerequisite: CIS 1130

CIS 2221 C++ PROGRAMMING **3 Credits**
3 Class Hours

Designed to introduce the student to the new features and differences offered by the C++ language over the C language as well as object-oriented program design. Object-oriented programming properties such as encapsulation, inheritance, and polymorphism are explained and used. Students implement several programs that illustrate the above properties through the design, creation and use of C++ objects. The student must have a prior knowledge of the C language.

Prerequisite: CIS 2220

CIS 2230 MICROCOMPUTING DATABASE PROGRAMMING **3 Credits**
3 Class Hours

Covers programming concepts and syntax of Relational data base management systems for microcomputers. Acquaints students with the high-level programming capabilities and development tools of the DBMS. This course also covers SQL concepts and database design. Students code and test a database system on the microcomputer

Prerequisite: CIS 1030

CIS 2240 MICRO SYSTEMS DESIGN PROJECT **3 Credits**
3 Class Hours

A senior project course in which students select and design a computerized business application for microcomputers. Course covers entire design, including systems study, software selection, and detailed systems specifications. Prerequisites: Two microcomputer programming courses

CIS 2250 MICRO OPERATING SYSTEMS AND NETWORKING **3 Credits**
3 Class Hours

Provides in-depth training on installation and configuration of a Novell local area network. Emphasis is on installing and configuring server software and generating workstation start-up software. Additionally, this course contains topics and exercises on communications media, communications protocols, drive mapping, login scripts, print services, NetWare utilities, and installation requirements for application software.

Prerequisite: Successful completion of at least two computer-based courses

CIS 2270 ADVANCED MICRO CONCEPTS **3 Credits**
3 Class Hours

This course is designed to present students with current topics in computing. The focus of this course is currently web based programming using JAVA.

Prerequisites: CIS 1020 or CPT2325 and CIS 1130

CIS 2280 DELPHI-RAPID APPLICATION DEVELOPMENT **4 Credits**
4 Class Hours

This course is designed to introduce students to Windows software development using Delphi and the Object Pascal language. Students will design and implement user interfaces utilizing visual components such as dialog boxes, data entry forms, menus, list boxes, check boxes, and radio buttons. Typical business applications will be assigned to expose students to the database access, MDI and SDI application development, printing, debugging, OCX, DDE, and DDL capabilities of Delphi.

Prerequisite: CIS 1130

CIVIL AND CONSTRUCTION ENGINEERING TECHNOLOGY

CIT 1112 BOARD DRAFTING BASICS **2 Credits**
6 Laboratory Hours

introduces the fundamentals of board drafting. Lettering, line quality, use of instruments, geometric constructions, drawing layout, orthographic projection, sectional views, basic dimensioning, pictorial drawings (isometric and oblique),

drafting symbols and an introduction to mapping are covered.
Corequisites: DSM 0803 and DSR 0853 or equivalent skills

CIT 1150 ENVIRONMENTAL TECHNOLOGY I **3 Credits 3 Class Hours**
Introduces water and wastewater technology. Topics include hydrology, water chemistry, pressure flow, open channel flow, population prediction, storm runoff, water quality, and pollution.
Corequisite: MAT 1140

CIT 1220 MATERIALS AND METHODS OF CONSTRUCTION **3 Credits 3 Class Hours**
Introduces construction procedures that cover responsibilities of the contract parties, the subsurface report, excavating, dewatering, earthworks, foundations, walls, and frames. Materials discussed include concrete, steel, masonry, timber, copper, aluminum, and glass.
Corequisite: ENG 1111

CIT 1230 TESTING OF MATERIALS **2 Credits 1 Class Hour, 3 Laboratory Hours**
Covers methods of testing soils and concrete and evaluation of test results. Tests include mechanical analysis, moisture content, Atterberg Limits, hydrometer analysis, unconfined compression, compaction, field density, slump, and cylinder.
Corequisite: DSM 0813 and ENG 1111

CIT 2110 STRUCTURAL MECHANICS **3 Credits 3 Class Hours**
A course on structural analysis to acquaint the student with the forces and loads acting on structures and how they are resisted by the structural system. Topics include components and resultants of forces; equilibrium equations; reactions for beams, frames, and trusses; centroids; moments of inertia; shear and moment diagrams; and analysis of trusses. Students analyze structures with both calculators and computers.
Prerequisite: MAT 1140

CIT 2130 SURVEYING I **3 Credits 2 Class Hours, 3 Laboratory Hours**
The first in a two-course sequence on surveying, with emphasis on the basics of field and office work. Lectures cover errors and accuracy, bearings, azimuths, traverses, level lines, topographic mapping, construction surveys, and horizontal circular curves. Laboratory exercises explore the use of the steel tape, transit, theodolite, level rod, and electronic distance measuring devices. Instructor introduces students to the use of the computer in surveying applications.
Prerequisite: MAT 1140

CIT 2250 ENVIRONMENTAL TECHNOLOGY II **3 Credits 2 Class Hours, 2 Laboratory Hours**
Covers water distribution systems and wastewater disposal systems. Topics include source development, raw water treatment and distribution, wastewater collection and treatment, and sludge disposal. Laboratory exercises include water testing and sewer line design and drafting.
Prerequisite: MAT 1140

CIT 2300 SITE DESIGN WITH CAD **3 Credits 1 Class Hour, 6 Laboratory Hours**
Designed to use students' prior knowledge of drafting, surveying, and storm water runoff in the subdivision and development of property. Topics include subdivision regulations, street pattern variables and intersections, site planning, drainage, utilities, and earthwork calculations. Students draw on mylar and on computer-aided drafting equipment.
Prerequisites: ACT 1432, CIT 1150 and CIT 2130

CIT 2310 SURVEYING II **3 Credits 2 Class Hours, 3 Laboratory Hours**
The second in a two-course sequence on surveying, with emphasis on horizontal circular curves, spiral curves, vertical curves, radial surveys, boundary surveys, construction surveys, slope stakes, celestial observations, state plane coordinates, and earthwork quantities. Laboratory exercises are on the use of the steel tape, theodolite, level, level rod, and electronic distance measuring devices in applying the lecture material. The computer is used in many of the solutions.
Prerequisite: CIT 2130

CIT 2400 STRUCTURAL DESIGN **3 Credits 3 Class Hours**
Covers the design and detail of elements of structural steel buildings according to the AISC Code and reinforced concrete buildings according to the ACI Code. Topics include the design of slabs, beams, columns, walls, trusses, foundations, connections and splices, and the detailing of steel members and reinforcing bars. Introduces the use of the computer instructural design and detailing.
Prerequisite: CIT 2110

COMMUNICATIONS TECHNOLOGY

CMT 1010 SURVEY OF COMMUNICATIONS TECHNOLOGY **3 Credits 3 Class Hours**
An overview of the entire field of communications including voice and data communications, services, networks, and equipment.

CMT 1110 COMMUNICATIONS EQUIPMENT AND TRANSMISSION MEDIA **3 Credits 2 Class Hours, 2 Laboratory Hours**
Provides instruction on how to use a digital multimeter, analog and digital storage oscilloscopes, function generator, logic probe, logic analyzer, breakout box, and related equipment. Also covered are properties of cabling (metal and fiber optic) types of connectors, cable and fiber termination, as well as PS-232, T-l, ISDN, and X.25 applications.
Prerequisite: EET 1130

CMT 2010 PROTOCOLS AND TOPOLOGIES **3 Credits 3 Class Hours**
Covers the ISO model, TCP/IP, star, ring, and bus networks, circuit switching, packet switching, tokens, CSMA/CD, and PBX's.
Prerequisite: CMT 1010

CMT 2020 DIGITAL COMMUNICATIONS AND NETWORK EXTENSIONS **4 Credits 3 Class Hours, 2 Laboratory Hours**

Covers UARTs, modems, error detection, data compression, encryption, time and frequency division multiplexing, repeaters, bridges, routers, intelligent hubs, and gateways.

Prerequisite: CPT 1400
Corequisite: CMT 2010

CMT 2030 WINDOWS NT INSTALLATION AND CONFIGURATION **3 Credits 3 Class Hours**

Covers the fundamentals of installing and configuring Windows NT, client and server. Lectures and class exercises are designed to prepare students to establish a functional network utilizing Windows NT.

Prerequisite: CPT 2325, CIS 2250, or equivalent experience

CMT 2100 NETWORK MANAGEMENT AND ANALYSIS **4 Credits 4 Class Hours**

Replaces two separate courses, Network Management and Network Analysis, combining the concepts of managing networks and analyzing networks into a cohesive body of knowledge. Physical network planning, implementation, testing, and security are among the topics covered. Additionally, network management protocols, concepts and software are covered in this course.

Prerequisite: CPT 2325, CIS 2250, or equivalent experience

CMT 2130 APPLIED NETWORKING **2 Credits 1 Class Hour, 2 Laboratory Hours**

A hands-on capstone course in which students connect and test various networking configurations.

Corequisite: CMT 2120

CMT 2150 PRINCIPLES OF TCP/IP **4 Credits 4 Class Hours**

Prepares students to st up and maintain networks that utilize the TCP/IP protocol. Topics covered focus on network interoperability and interconnectivity across multiplatform networks. Student will learn how to install and configure TCP/IP on the classroom network, troubleshoot connections among platforms and monitor data transfer through IP.

Prerequisite: CMT 2020, CIS 2250, or equivalent experience

VISUAL COMMUNICATIONS

COM 1110 INTRODUCTION TO VISUAL COMMUNICATIONS **3 Credits 3 Class Hours**

Orients students to the field of visual communications through a survey of the history, current trends and techniques, and societal impact of this growing field.

Prerequisites: RSE 0733, RSM 0703, RSR 0753

COM 1111 GRAPHIC PROCESSES AND TECHNIQUES **4 Credits 3 Class Hours, 3 Laboratory Hours**

An introductory course designed to acquaint the beginning student with graphic arts processes, techniques and terminology. Topics in safety, graphic arts measuring systems and mathematics, careers, pre-press, press and bindery systems are presented. Projects acquaint students with the use of design tools and basic drawing techniques.

Prerequisites: RSM 0703, RSR 0753

COM 1130 GRAPHIC DESIGN I **3 Credits 2 Class Hours, 2 Laboratory Hours**

Introduces the principles of design and production of art for visual communications. Topics include the development of graphic design from thumbnail sketches, rough layouts, and comprehensive design presentations. Various media and techniques are introduced.

Prerequisites: COM 1111, COM 1150, COM 1210

COM 1150 TYPE CONCEPTS **3 Credits 2 Class Hours, 2 Laboratory Hours**

Introduces typography and methods for the production of type for use in visual communication projects. Typestyles, specifications, measurement, and markup are emphasized. The use of type as a design element is stressed.

Corequisites: COM 1111, COM 1210

COM 1170 TECHNOLOGY FOR PRINT PRODUCTION **3 Credits** 2 **Class Hours, 2 Laboratory Hours**

A course which translates traditional mechanical art preparation skills to the current industry-standard of digital file preparation for reproduction. Topics include terminology, printing specifications, and printing and finishing processes.

Prerequisites: COM 1150, COM 1210
Corequisite: COM 1130

COM 1210 INTRODUCTION TO ELECTRONIC MEDIA **3 Credits** 2 **Class Hours, 2 Laboratory Hours**

Acquaints the student with the technology of design and production of visual material using the computer and various software packages as a tool.

COM 1220 GRAPHIC DESIGN II **3 Credits 2 Class Hours, 2 Laboratory Hours**

Advanced instruction in the creative aspects of the design and production of art for visual communications. Students apply concepts from Graphic Design I to solve problems in design techniques and styles, types of advertising, creating the right impression, illustration and photography in design, designing with type, selecting paper stock, package design, working with color, and marker techniques.

Prerequisite: COM 1130
Corequisite: COM 1170

COM 1230 INTRODUCTION TO DIGITAL IMAGING **3 Credits 2 Class Hours, 2 Laboratory Hours**

Introduces the equipment, software, and procedures used in digital technology to capture, manipulate and store photographic images.

Prerequisite: COM 1210

COM 2110 ELECTRONIC PUBLISHING **3 Credits 2 Class Hours, 2 Laboratory Hours**

Teaches electronic publishing skills using the Macintosh computer and various software packages for desktop publishing, word processing, and graphic image generation.

Stresses principles of publication design and typography. Students produce various projects which include newsletters, brochures, business cards, etc.
Prerequisite: COM 1210

COM 2170 VISUAL COMMUNICATIONS PORTFOLIO **4 Credits 2 Class Hours, 4 Laboratory Hours**

Provides instruction in the development of a Visual Communications portfolio and resume. Includes practice in job interview skills, speakers from the industry, portfolio reviews by industry professionals and tours of creative businesses.
Corequisites: COM 1170, COM 1220

COM 2210 ELECTRONIC DESIGN AND ILLUSTRATION **3 Credits 2 Class Hours, 2 Laboratory Hours**

Develops greater expertise and more sophisticated skill in the use of page layout and illustration software on the Macintosh computer.
Prerequisite: COM 2110

COM 2220 ELECTRONIC PUBLISHING PRACTICUM **3 Credits 2 Class Hours, 2 Laboratory Hours**

An advanced class in which students design and execute a variety of electronic publishing projects appropriate for print production, utilizing graphic design, computer and photographic techniques.
Prerequisite: COM 2210

COM 2240 ADVANCED DIGITAL IMAGING FOR PHOTOGRAPHERS **3 Credits 2 Class Hours, 2 Laboratory Hours**

Designed specifically for photographers with computer skills and basic knowledge of Adobe PhotoShop software, this course concentrates on manipulation of photographic images in a digital format. Image editing, combining multiple images, color correction techniques, and special effects will be included.
Prerequisites: COM 0132 or COM 1230; and COM 0121 or COM 2210 or PHO 1230

COM 2250 ADVANCED DIGITAL IMAGING FOR DESIGNERS **3 Credits 2 Class Hours, 2 Laboratory Hours**

Designed for graphic designers or desktop publishers with computer skills and basic knowledge of Adobe PhotoShop software, this course concentrates on the software as an illustration program in addition to manipulating digital images. Students will combine illustration and photographic images to produce a variety of design projects.
Prerequisites: COM 0132 or COM 1230

COM 2260 ADVANCED QUARKXPRESS PRODUCTION TECHNIQUES **3 Credits 2 Class Hours, 2 Laboratory Hours**

This course continues the exploration of QuarkXPress software in the preparation of single and multiple page, documents. Features of the software' including trapping adjustments, customizing H&J settings, using the Frame Editor, and internal image manipulation will be covered. The class will concentrate on problem-solving techniques from the design and production aspect.
Prerequisites: COM 0117 or COM 2110 or equivalent experience

COM 2270 ADVANCED COMPUTER ILLUSTRATION TECHNIQUES **3 Credits 2 Class Hours, 2 Laboratory Hours**

A course that concentrates on advanced illustration techniques for students who have mastered basic skills in Adobe Illustrator. Students will combine techniques and explore complex effects including perspective and dimensional aspects of their designs.
Prerequisites: COM 0121 or COM 2210

COM 2330 INTRODUCTION TO ELECTRONIC PRE-PRESS **3 Credits 3 Class Hours**

An overview course which discusses the impact of desktop publishing and digital imaging on the pre-press industry. The topics include image input and output; digital color and mechanicals; data storage, and different proofing methods. The course will acquaint students with the variety of jobs offered in this field from customer service representative, to file evaluation, through digital stripping of color separated files.
Prerequisite: at least three Macintosh computer classes or equivalent experience.

COMPUTER TECHNOLOGY

CPT 1400 DIGITAL. CIRCUITS **3 Credits 2 Class Hours, 2 Laboratory Hours**

Presents the concepts of Boolean Algebra and their applications to designing with and analyzing digital integrated circuits. Examines binary and other number base systems and codes. The 7400 series of ICs is used in the laboratory exercises to support classroom presentations of logic circuits. Presents A/D and D/A converters, counters, shift registers, adders, multiplexers, and encoders. Covers various memory devices and their operation.
Corequisites: EET 1110 or EET 1130, MAT 1140

CPT 2310 MICROPROCESSOR PRINCIPLES **5 Credits 4 Class Hours, 3 Laboratory Hours**

Provides instruction in assembly language programming of a single-chip microprocessor and in the use of associated circuit chips. Students use IBM PC-compatible hardware, along with MS-DOS. Students also use editor, an assembler, linker and debugger. The instruction set of the 8088/8086 microprocessor is used by the student to write application programs. Course covers hardware and hardware/software interface, system timing, memory, peripheral device control, and interrupt capabilities. Laboratory exercises involve program generation and breadboard construction.
Prerequisites: CIS 2215 or CIS 2216, CPT 1400

CPT 2320 TELECOMMUNICATIONS **3 Credits**
2 Class Hours, 2 Laboratory Hours

Studies communications techniques and systems used for digital data transfer. Covers digital transmission and various modulation techniques. Examines error detection, data compression, encryption, protocols, ISDN, CCITT, and ISO standards. Presents telephone networks and characteristics, satellite communications, and fiber optics. Covers the RS-232 standard, UARTs, a PBX, and asynchronous and synchronous modems extensively in both lecture and laboratories.

Prerequisites: CPT 2310, CPT 2325

CPT 2325 OPERATING SYSTEMS I **3 Credits**
3 Class Hours

Studies the MS-DOS Operating System and the MS-Windows Graphical User Interface. Components of an operating system and graphical user interface are identified. Installation, configuration and performance tuning are emphasized. Concepts and uses of the file system hierarchy, batch files, application installation, memory management, and device drivers are covered.

Students may substitute CIS 1020 for this course.

CPT 2410 COMPUTER PERIPHERALS **3 Credits**
2 Class Hours, 2 Laboratory Hours

Studies the architecture and functional operations of up-to-date computer peripherals. Covers RS-232, parallel, TTL, and GPIB interfaces. Includes peripheral devices, disk and tape drives, CD-ROM drives, printers, monitors, keyboards, flat-panel displays, plotters, mice and other position digitizers, optical readers, speech recognition/synthesis units, and the MIDI musical interface. Laboratory sessions provide practice in following procedures according to technical manuals to install, operate, adjust, perform preventive maintenance on, and troubleshoot peripheral devices.

Prerequisites: CPT 2310, CPT 2325

CPT 2425 UNIX **3 Credits**
3 Class Hours

Studies the Xenix/Unix Operating Systems. The characteristics of shared resources, multiuser systems, multi-tasking systems, security and device drivers are examined. Hardware and software requirements of Unix/Xenix are examined. Installation, configuration, and performance tuning are emphasized.

Prerequisite: CPT 2325 or CIS 1020

CPT 2430 SYSTEM TROUBLESHOOTING **4 Credits**
2 Class Hours, 4 Laboratory Hours

A comprehensive study of microcomputer hardware and software and their interrelationships. Emphasizes the determination of software and/or hardware failures using equipment bugged with canned or actual failures. Also includes the use of diagnostic programs to identify and isolate a non-functioning device or sub-system, the proper techniques for performing a reliable repair, and the performance of preventive maintenance.

Corequisite: CPT 2410

CPT 2440 DIGIT' DESIGN/CONSTRUCTION PROJECT **1 Credit**
2 Laboratory Hours

A design fabrication course that allows the student to gain and demonstrate proficiency in selecting a digital/computer project, designing the project, obtaining parts, building the project, troubleshooting and demonstrating the completion of the project. A final written report includes cost analysis and a summary of problems and successes the student encountered.

Corequisite: CPT 2310

CULINARY SCIENCE

CUL 1010 HOSPITALITY MANAGEMENT **3 Credits**
3 Class Hours

An overview of the hospitality industry, including the structure and role of lodging and food service organizations, management and operational functions, the future of the industry, and career opportunities.

CUL 1015 SANITATION AND SAFETY **2 Credits**
2 Class Hours

Covers sanitation and safety considerations in food preparation using the Hazard Analysis Critical Control Point (HACCP) food safety system. Proper storage and handling of food and utensils, cleanliness standards, and workplace safety are taught.

CUL 1040 FOOD PRODUCTION I - SKILLS **3 Credits**
1 Class Hour, 4 Laboratory Hours

Emphasis in this course is on learning basic theory, skills, terminology, tools, and techniques of commercial food preparation. Experiences include menu planning, recipe selection, preparation, and delivery of various food types.

Prerequisite: CUL 1015

CUL 1050 MENU PLANNING AND NUTRITION **3 Credits**
3 Class Hours

Familiarize students with basic nutritional principles and dietary requirements. The basic nutrients, carbohydrates, lipids, proteins, minerals, and vitamins are covered. Students learn to plan meals and menus for individuals and special functions using nutrition, cost, and presentation as a basis.

This course does not meet the requirements for a Natural Science Elective.

CUL 2010 PURCHASING AND COST CONTROL **3 Credits**
3 Class Hours

Focuses on inventory and cost control. Effective purchasing practices and techniques are studied as a major factor affecting costs and profits. Appropriate inventory levels, spoilage and waste and quantity calculations are covered. Also included is determination of sales and sales percentages.

CUL 2020 BAKING PRINCIPLES **3 Credits**
1 Class Hour, 4 Laboratory Hours

An introductory course in the principles of baking and the skills necessary to make breads, rolls, and cakes. Students will be introduced to the primary baking ingredients, their properties, and use. Students will demonstrate effective

baking skill and specific knowledge of baking tools and equipment.
Prerequisite: CUL 1015

CUL 2030 CATERING AND TABLE SERVICE **3 Credits**
1 Class Hour, 4 Laboratory Hours
Focuses on planning and execution of food service for special events. Topics include menu selection pricing, on-site and off-site preparation, staffing and equipment needs, and techniques for high-quality, high-quantity delivery. Lab activities include catering an actual event.
Prerequisite: CUL 1040

CUl 2050 FOOD PREPARATION II **3 Credits**
1 Class Hour, 4 Laboratory Hours
A continuation of CUL 1040. Students build on basic skills and techniques. Activities include complete meal preparation. Emphasis is placed on food quality and presentation. A wide variety of foods are prepared.
Prerequisite: CUL 1040

CUL 2055 FOOD PREPARATION III **3 Credits**
1 Class Hour, 4 Laboratory Hours
A continuation of CUL 2050. A complete variety of foods including meats, sauces, and vegetables will be prepared. Students will plan menus, order, and prepare food. Emphasis is placed on achieving quality results with efficiency and speed.
Prerequisite: CUL 2050

CUL 2210 INTERNSHIP I **1.5 Credits**
300 Contact Hours
Work experience in a culinary or related position in a food service establishment. Internship must be approved by the program coordinator.
Prerequisite: CUL 1040

CUL 2220 INTERNSHIP II **1.5 Credits**
300 Contact Hours
Work experience in a culinary or related position in a food service establishment. Internship must be approved by the program coordinator.

DEVELOPMENT.. ENGLISH

DSE 0833 DEVELOPMENTAL WRITING **4 Credits**
ESL Sections offered **4 Class Hours**
Students combine writing and reasoning skills with research skills to produce paragraphs and short essays based on observation, interviews, and written materials. Papers are developed using narrative, description, comparison and contrast, cause and effect, and persuasion. Group discussion and one short documented paper are required.
Prerequisite: RSE 0733 or equivalent skills

DEVELOPMENTAL MATHEMATICS

DSM 0800 BASIC ARITHMETIC AND ALGEBRA ELEMENTARY **6 Credits**
6 Class Hours
The study of mathematics competencies that emphasizes fractions, decimals, percents, and includes the first course in algebra which emphasizes the fundamental operations of real numbers, polynomials, exponents, factoring, ratio, proportion, linear equations and applications, single variable inequalities, evaluating algebraic expressions, solving quadratic equations by factoring, and introduction to graphing. Recommended for students who completed high school Algebra II, but placement scores require RSM 0703.
Prerequisite: Must have Academic Skills advisor's approval.

DSM 0803 ELEMENTARY ALGEBRA **4 Credits'**
4 Class Hours
The first course in algebra emphasizes the fundamental operations of real numbers, polynomials, exponents, factoring, ratio, proportion, linear equations and applications, single variable inequalities, evaluating algebraic expressions, solving quadratic equations by factoring, and introduction to graphing.
Prerequisite: RSM 0703 or equivalent skills

DSM 0813 INTERMEDIATE ALGEBRA **4 Credits**
4 Class Hours
A second course in algebra emphasizes sets, the real number system, fundamental operations of algebraic factoring, algebraic linear' equations and linear inequalities, stated problems, rational expressions and equations, exponents and radicals, inequalities, linear systems, and graphing linear and quadratic equations.
Prerequisite: DSM 0800 or DSM 0803 or equivalent skills

DEVELOPMENTAL READING

DSR 0853 DEVELOPMENTAL READING **4 Credits**
ESL Sections offered **4 Class Hours**
Designed to develop necessary literal and critical comprehension skills for reading textbook passages ranging from paragraphs to chapters and to enhance vocabulary skills.
Prerequisite: RSR 0753 or demonstrated equivalent skills

COLLEGE LIFE AND LEARNING

DSS 0863 COLLEGE LIFE AND LEARNING **2 Credits**
ESL Sections offered **2 Class Hours**
Emphasizes how to succeed in college, while developing such academic skills as managing time and environment, analyzing and mastering the contents of lectures and textbook chapters, and preparing for and taking tests. Also included in the course are units about setting goals, making career and academic decisions, utilizing resources, and coping with anxiety.

ECONOMICS

EC0 1111 PRINCIPLES OF MACROECONOMICS 3 Credits
3 Class Hours

Economics is the study of the countless problems of surviving and making a living all over the world. Emphasis is on national income, the monetary system, economic fluctuations, fiscal policy, and the international economy. A study of institutions that help develop the national and international economy. Defines the principles of economics in a study of the problems of scarcity, choice, and the law of supply and demand through class discussion and analysis of current economic events.

Prerequisites: DSR 0853 and RSE 0733 or equivalent skills

EC0 1121 PRINCIPLES OF MICROECONOMICS 3 Credits
3 Class Hours

Emphasizes decision making by households and businesses, production, competition and market structures, government, labor markets, unions and the distribution of income. The principles of scarcity, choice, and the laws of supply and demand are examined through class discussions and analysis of current economic events.

Prerequisites: DSR 0853 and RSE 0733 or equivalent skiLLs

PARAEDUCATOR TECHNOLOGY

EDU 1111 INTRODUCTION TO EDUCATION 3 Credits

Introduces the student to a brief history of American education, present philosophies of education, major problems of education, present practices, and the school as a social institution.

EDU 1112 INTRODUCTION TO COMMUNICATIONS AND HUMAN RELATIONS 3 Credits

Presents students in training with a basic understanding of the communication process, and how improved communication skills can enhance performance on the job. Students will discuss readings and participate in application exercises of several concepts related to human relations and the communication process.

EDU 1113 HEALTH AND SAFETY ISSUES AND IEP WRITING INTERPRETATION 3 Credits

Provides the student with an overview of health and safety issued related to Special Education. Also, the student will acquire a basic understanding of the IEP, its purpose, how it is developed, and the responsibilities of the individuals involved in its implementation. Through role playing, the student will experience an M-team and IEP development from the viewpoint of parents, paraeducators and education professionals.

EDU 1114 TEAMING AND COLLABORATIVES 3 Credits

Familiarizes students currently in training with a variety of practices which will enhance the teamwork process. Students will also explore some of the theoretical bases for these practices.

EDU 1115 OVERVIEW OF EXCEPTIONALITIES 3 Credits

Explores the characteristics of students with special needs. Causes and classification of disabling conditions will be presented. The history of special education and the impact of legislation on education will be discussed.

EDU 1116 INSTRUCTIONAL STRATEGIES 3 Credits

Provides an overview of instructional strategies used in teaching basic academic skills and methods to facilitate success in classrooms. These strategies and methods can be applied to regular as well as special needs classroom settings.

EDU 2100 PRACTICUM 3 Credits

A practicum that gives the student the opportunity to apply all the skills learned in classes to a real classroom or other educational setting.

EDU 2110 HUMAN GROWTH AND DEVELOPMENT 3 Credits

Studies the physical, intellectual, social, emotional, and language behavior of the individual from birth to young adulthood. Also, discusses causes and results of an interruption in or interference with the development process.

EDU 2111 CLASSROOM MANAGEMENT 3 Credits

Provides an overview of classroom management for grades Pre K-12. The materials presented in this course will provide students with skills to manage discipline and the use of consequences and rewards within a classroom setting.

EDU 2114 LEGAL ISSUES IN SPECIAL EDUCATION 3 Credits

Provides the student with an overview of special education law, including P.L. 94-142, IDEA, and Section 504 so that the student will be knowledgeable of educators' legal obligations to all students.

EDU 2115 TRANSITION AND JOB TRAINING 3 Credits

Provides the student with an overview of transition and job training for school age children and young adults.

ELECTRICAL-ELECTRONIC ENGINEERING TECHNOLOGY

EET 1008 MEDIA EQUIPMENT MAINTENANCE 5 Credits
3 Class Hours, 6 Laboratory Hours

A hands-on course in repairing and maintaining audio-visual equipment. Presents service concepts and techniques for such equipment as motion picture projectors, filmstrip projectors, slide projectors, overhead projectors, record players, cassette recorders, video tape recorders, cameras, monitors, and public address systems.

Prerequisite: EET 1100

EET 1100 TECHNICAL ORIENTATION 3 Credits
2 **Class Hours, 2 Laboratory Hours**

Acquaints the beginning student with the tools, equipment, and language of the electrical and electronic fields. Students learn to read and draw schematic diagrams, proper laboratory safety practice, and the proper use of measuring instruments. Covers the use of computer programs for word processing and computer literacy.

Prerequisite: DSM 0803 or equivalent skills

EET 1110 ELECTRIC CIRCUITS **5 Credits**
4 Class Hours, 2 Laboratory Hours

Covers voltage, current, resistance, and power in D.C. and A.C. circuits, series, parallel, and more complex circuits using Kirchhoff's laws and selected network theorems, capacitance and inductance; presents resonance as a special topic. Transformers and polyphase concepts conclude the course.

Prerequisite: DSM 0813 or equivalent skills
Corequisite: MAT 1140

EET 1130 INTRODUCTION TO ELECTRONICS **5 Credits**
4 Class Hours, 2 Laboratory Hours

Covers theory, problem solving, and laboratory experiments in the following electronic areas: DC series/parallel circuits, open/shorts, AC series/parallel, capacitors, inductors, diodes, switching transistors (BJT and CMOS), and linear devices.

Corequisite: MAT 1140

EET 1190 GM AUTOMOTIVE ELECTRICITY I **4 Credits**
3 Class Hours, 3 Laboratory Hours

Covers basic concepts in D.C. and A.C., including Ohm's Law, series and parallel circuits, Kirchhoff's Voltage and Current Laws, Thevenin's equivalent circuits, and A.C. power generation. Upon satisfactory completion of this course, the student receives a certificate of attendance for General Motors Specialized Electronics Training (GM/SET) course #18001.02. All the circuits have practical application to GM automobiles.

EET 1192 AUTOMOTIVE ELECTRICITY **4 Credits**
3 Class Hours, 2 Laboratory Hours

Covers basic concepts in D.C. and A.C. including Ohm's Law, series and parallel circuits, Kirchhoff's Voltage and Current Laws, Thevenin's equivalent circuits and A.C. power generation. Course emphasizes concepts of starting systems, charging systems, and basic ignition systems. Includes operation, testing, and diagnostic procedures.

Corequisite: MAT 1140

EET 1210 ELECTRONIC CIRCUITS **5 Credits**
4 Class Hours, 2 Laboratory Hours

Covers solid state electronics as circuit elements, including diodes, bipolar transistors, rectifier circuits, Zener diode regulators, power supplies, power amplification, junction and MOSFETs, and applications in selected linear circuits. Operational amplifiers in various feedback configurations comprise the final phase of the course.

Prerequisite: EET 1110

EET 1220 TRANSFORMERS AND ROTATING MACHINES **3 Credits**
2 Class Hours, 2 Laboratory Hours

Provides an understanding of electrical machinery. The study includes transformer theory and application, single-phase and three-phase connections, auto-transformers and special instrument transformers. The course also includes a study in the development of horsepower, torque, efficiency as related to the operation of D.C. motors and generators, single-phase and three-phase motors, and alternators, step-motors, resolvers and synchros. Comparisons in the performance of machines are made.

Prerequisite: EET 1110

EET 1260 ELECTRICAL TECHNOLOGY **4 Credits**
3 Class Hours, 2 Laboratory Hours

Reviews the basics of electrical power for non-electrical/electronic students. Covers such topics as D.C. and A.C. circuits, transformers, rotating machinery, electrical and electronic controls, and electrical energy.

Prerequisite: MAT 1140

EET 1290 GM AUTOMOTIVE ELECTRICITY II **3 Credits**
2 Class Hours, 3 Laboratory Hours

Studies semiconductor devices with emphasis on the junction diode, the bipolar transistor, and the field effect transistor. The student becomes familiar with electro-mechanical devices, specifically the operation and fault diagnosis and repair of self-rectifying D.C. generators and cranking motors. The student also becomes familiar with mechanical and electrical testing equipment used to diagnose malfunctions of the GM ignition systems and to determine the general condition of the engine.

Prerequisite: EET 1190

EET 2020 INDUSTRIAL CONTROL SYSTEMS **4 Credits**
3 Class Hours, 2 Laboratory Hours

Studies control circuits and devices commonly used in the industrial environment. The course shows the various ways used to control machinery. The student is required to design control circuits using relay logic and solid-state logic. Solid-state control of D.C. motors, A.C. motors, and step motors is covered in detail. Switches, sensors, and transducers are included, and industrial models are evaluated.

Prerequisite: EET 1220

EET 2110 INDUSTRIAL ELECTRONICS **5 Credits**
4 Class Hours, 2 Laboratory Hours

Studies electronic devices and circuits most often found in industrial equipment controlling machinery and processes in industry. Includes power supplies, operational amplifiers, thyristors, transducers, timers, optical, and thermal devices. Introduces other components, such as programmable controllers, to show how closed-loop processes and automated equipment can be accurately controlled.

Prerequisite: EET 1210

EET 2120 ELECTRONIC DESIGN PROJECT **1 Credit**
2 Laboratory Hours

A design-fabrication course involving an approved electronic project. Construction includes layout and fabrication of printed circuit boards, chassis fabrication, wiring and assembly. The student tests and analyzes the performance of the project and submits a written report.

Prerequisite: EET 1210

EET 2190 GM ADVANCED ELECTRONICS **3 Credits**
2 Class Hours, 2 Laboratory Hours

Introduces the vehicle parameter sensing devices that" provide information to Electronic Control Modules (ECM computer). The student also becomes familiar with the characteristics of proper operation and malfunction diagnosis using the Assembly Line Data Link and other on-board diagnostic equipment.

Prerequisite: EET 1290

EET 2192 AUTOMOTIVE ELECTRONICS **4 Credits**
3 Class Hours, 2 Laboratory Hours

Introduces the vehicle parameter sensing devices that provide information to Electronic Control Modules (ECM computer). The student also becomes familiar with the characteristics of proper operation and malfunction diagnosis using the Assembly Line Data Link and other on-board diagnostic equipment.

Prerequisite: EET 1192

EET 2210 CIRCUIT ANALYSIS **2 Credits**
1 Class Hour, 2 Laboratory Hours

An application of previous training to troubleshoot solid state electronic circuits and systems using basic tools. Includes a review of two-port networks, filters, and transfer functions.

Prerequisite: EET 1210

EET 2215 INTRODUCTION TO FIRER OPTICS **3 Credits**
2 Class Hours, 2 Laboratory Hours

This course introduces optical fiber as another medium in which information can be transmitted, received, multiplexed, demultiplexed and distributed. It covers light sources, detectors, connectors and splices, and couplers. This course also introduces students to fiber-optic systems and includes discussions on installation and types of fiber-optic equipment.

Prerequisite: EET 1210

EET 2220 COMMUNICATION CIRCUITS **4 Credits**
3 Class Hours, 2 Laboratory Hours

Acquaints the student with the operations and theory of electronic communications systems. Covers the theory of amplitude and frequency modulation/demodulation; transmission lines; antennas; radiation and propagation of waves; pulse communications; multiplexing in broadband systems covering coaxial cables; and fiber optic links and their practical uses.

Prerequisite: EET 1210

EET 2230 NETWORK ANALYSIS **2 Credits**
4 Laboratory Hours

Studies two-port networks, filters, and transfer functions. Investigates selected topics using digital computer analysis techniques.

Prerequisite: EET 1210

EET 2240 INSTRUMENTATION **3 Credits**
2 Class Hours, 2 Laboratory Hours

Studies industrial transducer devices most commonly used by industry in Automated Process Control Systems. Students learn electrical and mechanical transducers applied in the measurement of temperature, pressure, flow and position, and. complete exercises using computers and computer interfacing to give a realistic approach to the industrial application of these devices.

Prerequisite: EET 1210

EET 2280 VIDEO SYSTEMS **3 Credits**
2 Class Hours, 2 Laboratory Hours

A comprehensive course covering the basics of television recording, broadcasting, and reception. Covers all concepts used to record video information on magnetic tape and how to retrieve it. Material includes scanner systems, tape formats, tape transports, luminance processing, and color signal processing.

Prerequisite: EET 1210

EET 2290 GM AUTOMOTIVE COMPUTER SYSTEMS I **3 Credits**
2 Class; Hours, 3 Laboratory Hours

Introduces digital systems and microprocessors, which includes the study of the on-board GM computers used to regulate, monitor, and control various systems of the vehicle.

Prerequisite: EET 2190

EET 2292 AUTOMOTIVE COMPUTER SYSTEMS **3 Credits**
2 Class Hours, 2 Laboratory Hours

Introduces digital systems and microcomputers, which includes the study of the on-board automotive computers used to regulate, monitor, and control various systems on the vehicle.

Prerequisite: EET 1192

EET 2295 GM AUTOMOTIVE COMPUTER SYSTEMS II **3 Credits**
2 Class Hours, 3 Laboratory Hours

A continuation of EET 2290, which includes the GM Buick and Cadillac Divisions' Body Control Modules (BCM computers).

Prerequisite: EET 2290

EET 2530 POWER SYSTEMS **4 Credits**
3 Class Hours, 2 Laboratory Hours

An expanded analysis of the three-phase system, focusing on the power system and its various components. Analyzes the parameters of the transmission line and problems of system operation. Students explore equipment and perform fault studies.

Prerequisite: EET 1110

EET 2600 AUTOMATIC CONTROL SYSTEMS **4 Credits,**
3 Class Hours, 2 Laboratory Hours

Designed to introduce the student to a wide range of industrial automatic controls. The programmable logic controller is the base of study with the emphasis on programming. Included are the various types of transducers common to the industrial environment and the interfacing of I/O devices to the PLC. Modes of controls, process response, and the final correcting devices are discussed.

Prerequisite: ART 2510

EET 2640 POWER DISTRIBUTION **4 Credits**
3 Class Hours, 2 Laboratory Hours

An overview of electrical power distribution systems with a focus on the design of electrical distribution systems for industrial and commercial buildings, including services, transformers, unit substations, switchboards, distribution

circuit components, and fault, voltage, and power factor studies.
Prerequisites: EET 1110, MET 1013

EET *2660* ELECTRICAL DESIGN PROJECT **1 Credit**
2 Laboratory Hours
Designed to demonstrate proficiency in analysis, layout, and construction of an electrical project. The student checks the design, analyzes the performance of the project, and submits a written and oral report.
Prerequisite: EET 1220

ELECTRICAL MAINTENANCE

EMC 1112 INTERPRETING TECHNICAL INFORMATION ***4*** **Credits**
3 **Class Hours,**
3 Laboratory Hours
A comprehensive course in wiring practice as required by the National Electrical Code (N.E.C.). The course includes blueprint reading, load calculations, service equipment, disconnect means, circuit protection, sizing of conductors, over current protection, feeder bus systems, panel boards, subfeeders, and unit substations.

EMC 1122 ELECTRICAL MAINTENANCE ORIENTATION **4 Credits**
3 Class Hours,
3 **Laboratory Hours**
Studies measurements, measuring instruments, power and hand tools, including the voltmeter, ohmmeter, ammeter, vernier, and micrometer. Power and hand tools include drills, saws, pipe threaders, conduit benders and other tools. Compares the English and metric systems.

EMC 1131 BASIC D.C. CIRCUITS ***4*** **Credits**
3 Class Hours, 3 Laboratory Hours
Studies the basic principles of electricity including voltage, current, resistance, power, Ohm's Law, Kirchhoff's Law and how they relate to D.C. series, parallel, and combination circuits. The study also includes batteries, magnetism and electro-magnetic induction. Laboratory experiments give the student practical illustration of these laws and principles.

EMC 1136 BASIC D.C. AND A.C. CIRCUITS **8 Credits**
6 Class Hours, 6 Laboratory Hours
Studies the basic principles of electricity including voltage, current, resistance, power, Ohm's Law, Kirchhoff's Law and how they relate to D.C. series, parallel, and combination circuits. Laboratory experiments give the student practical illustrations of these laws and principles. The course includes complex A.C. circuits, power factor, metering, and a working knowledge of A.C. principles, also covering the generation of polyphase, delta and wye sources and loads.

EMC 1161 BASIC A.C. CIRCUITS ***4*** **Credits**
3 Class Hours, 3 Laboratory Hours
Studies A.C. voltage and current concepts, including more complex circuits, power factor, metering, and a working knowledge of A.C. principles. The course also covers the generation of polyphase, delta and wye sources and loads.
Corequisite: EMC 1131

EMC 1216 ELECTRICAL MACHINES AND CONTROLS **8 Credits**
6 Class Hours,
6 Laboratory Hours
An introductory course in electrical machines and transformers including D.C. motors and generators; single- and three-phase A.C. motors, alternators and synchronous motors; single- and three-phase transformers; instrument transformers and auto transformers. The course compares the performance of A.C. machinery to D.C. machinery and covers horsepower, torque, RPM, and efficiency. Subjects in the transformer area include the turns ratio, the equivalent circuit, and power factor relationships and efficiency with various loads and connections.
Prerequisite: EMC 1136 or EMC 1161

EMC 1218 DIGITAL PRINCIPLES ***4*** **Credits**
3 Class Hours, 3 Laboratory Hours
An introductory course in logic circuits and their application to designing with digital integrated circuits laboratory exercises to support classroom presentation of gates, flip flops, adders, counters, shift registers, and other functions. A to D and D to A conversion techniques are examined.
Prerequisite: EMC 1136 or EMC 1161

EMC 1222 BASIC HYDRAULICS AND PNEUMATICS **5 Credits**
4 Class Hours,
3 Laboratory Hours
Studies fluid power, including basic theory and application covering the relationship between fluid flow and pressure, accumulators, actuators, and the control of both fluid and air.

EMC 1312 CONTROL APPLICATIONS ***4*** **Credits**
3 Class Hours, 3 Laboratory Hours
Designed to show the student various ways to control A.C. and D.C. machinery and the use of relays and NEMA logic. Also includes reading electrical drawings, troubleshooting circuits and the interfacing of programmable controllers with relay logic.
Prerequisite: EMC 1216

EMC 1322 PROGRAMMABLE LOGIC CONTROLLERS **5 Credits**
3 **Class Hours,**
4 Laboratory Hours
Designed for EMC personnel to gain knowledge of programmable controllers. Includes history, application, memory organization, I/O configuration and programming, times, counter, storage registers, data transfer, data comparison, and maintenance procedures. The conversion of ladder diagrams to PLC programming is discussed.

ENGLISH

ENG 1110 RESEARCH METHODS **1 Credit**
1 Class Hour
Assists students in preparing accurately documented and effective academic reports and research projects. Course content includes instruction in research strategies, use of the library, and documentation and bibliographic form. Students work with actual writing projects they have in their technical and degree programs.
Prerequisites: DSR 0853 and DSE 0833 or equivalent skills
Corequisite: ENG 1111

ENG 1111 COMPOSITION I **3 Credits**
Honors Section Offered, ❑ **3 Class Hours**
Concentrates on style and basic organizational patterns. Students read essays and samples of literature for discussion and write a minimum of six compositions and a research paper to apply the principles of organization that they have learned.
Prerequisites: DSR 0853 DSE 0833 or equivalent skills

ENG 1112 COMPOSITION II **3 Credits**
Honors Section Offered, ❑ **3 Class Hours**
Second semester composition class emphasizes argumentative and analytical writing. Literature from the text serves as a catalyst for student discussion and writing. Students study advanced methods of composition through the analysis and explication of literature/essays and apply these techniques to their own writing. Emphasis is given to using library resources and to researching, organizing, and writing research papers.
Prerequisite: ENG 1111

ENG 2111 CORRESPONDENCE COMPOSITION **3 Credits**
3 Class Hours
Explains the principles of business correspondence and provides practice in writing typical business letters and reports. The course develops logical and critical thinking in the preparation of various types of correspondence.
Prerequisite: ENG 1111
Note: ENG 2111 Will not meet the requirements for a General Education course.

ENG 2112 REPORT WRITING **3 Credits**
3 Class Hours
Introduces students to the basic principles of effective report writing. Written assignments provide practice in organizing and composing brief reports and a formal report. Throughout the semester, students learn practical application of report writing skills.
Prerequisite: ENG 1111
Note: ENG 2112 will not meet the requirements for a General Education course.

ENG 2131 INTRODUCTION TO LITERATURE I: FICTION **3 Credits**
3 Class Hours
❑, **Honors Section Offered**
Provides the opportunity, through class discussions and assigned papers, to analyze short stories and novels in terms of their literary characteristics. Designed to give students experience in reading and interpreting literature.
Prerequisite: ENG 1111
Note: ENG 2131 meets the requirement for a Humanities elective.

ENG 2132 INTRODUCTION TO LITERATURE II: POETRY AND DRAMA **3 Credits**
3 Class Hours
❑, **Honors Section Offered**
Introduces students to the works of major poets and dramatists. Through reading and film, students examine poetry and drama, relating the works to major literary themes, including historical/social events that influenced the writers. Gives students experience in both reading and writing, with emphasis on interpretation.
Prerequisite: ENG 1111
Note: ENG 2132 meets the requirement for a Humanities elective.

ENG 2133 MULTI-CULTURAL LITERATURE **3 Credits**
3 Class Hours
Introduces students to the works of American authors and poets of various ethnic backgrounds, Emphasizes biography, essays, poetry, and short fiction by African Americans, Asian Americans, Hispanic Americans, and Native Americans, and gives students experience in both reading and writing, with emphasis on the cultural heritage.
Prerequisite: ENG 1111
Note: ENG 2133 meets the requirement for a Humanities elective.

ENG 2134 AMERICAN LITERATURE **3 Credits**
3 Class Hours
A survey of selected readings, especially fiction, poetry, and drama, with emphasis on major themes in American literature. Students learn to discuss the literature and to analyze it in essays.
Prerequisite: ENG 1111
Note: This course meets the requirement for a Humanities elective.

ENG 2140 INTRODUCTION TO FILM **3 Credits**
❑ **3 Class Hours**
Introduces the basic elements of film. Emphasis is on the understanding and appreciation of purpose and techniques and analyzing and evaluating cinematic productions.
Prerequisite: ENG 1111
Note: This course meets the requirement for a Humanities elective.

ENG 2135 BRITISH LITERATURE **3 Credit Hours**
3 Class Hours
Readings in prose, poetry, and drama that express prominent ideas and values evident in British culture.
Prerequisite: ENG 1111
Note: This course meets the requirements for a Humanities elective.

ENG 2136 WORLD LITERATURE **3 Credit Hours**
Honors Section Offered **3 Class Hours**
Readings in Eastern and Western prose, poetry, and drama which reflect or which have influenced historical and literary developments.
Prerequisite: ENG 1111
Note: This course meets the requirements for a Humanities elective.

FRENCH

FRE 1111 FRENCH I **4 Credit Hours**
4 Class Hours

Introduces students to the French language, and provides a foundation in reading, writing, speaking, and aural comprehension.

Prerequisite: DSE 0833 or equivalent skills

FRE 1112 FRENCH II **4 Credit Hours**
4 Class Hours

Continues development of the reading, writing, speaking, and aural skills mastered in FRE 1111.

Prerequisite: FRE 1111 or equivalent skills

GEOLOGY

GEO 1100 ENVIRONMENTAL GEOLOGY **4 Credits**
3 Class Hours, 2 Laboratory Hours

The basic principles of physical geology are presented in the context of the environmental needs and concerns of our time. The makeup of the earth, its internal processes, soil, water, mineral, and energy resources are discussed. A laboratory accompanies this course. Both on-campus and off-campus laboratory activities will be included.

Prerequisite: DSR 0853 or equivalent skills

HISTORY

HIS 2111 THE AMERICAN PEOPLE TO MID-19TH CENTURY **3 Credits**
3 Class Hours

Honors Section Offered

Studies the social, cultural, economic, and political aspects of American life from the colonial period through the mid-19th century.

Prerequisites: DSE 0833 and DSR 0853 or equivalent skills

Note: HIS 2111 meets the requirement for a Social Sciences elective.

HIS 2112 THE AMERICAN PEOPLE SINCE MID-19TH CENTURY **3 Credits**
3 Class Hours

Studies the social cultural, economic, and political aspects of American life since the mid-19th century.

Prerequisites: DSE 0833 and DSR 0853 or equivalent skills

Note: HIS 2112 meets the requirement for a Social Sciences elective.

HIS 2121 WORLD CIVILIZATION I **3 Credits**
Honors Section Offered **3 Class Hours**

Studies the social, cultural, economic, and political aspects of significant civilizations from the period of unwritten history through the seventeenth century.

Prerequisites: DSE 0833 and DSR 0853 or equivalent skills.

Note: HIS 2121 meets the requirement for a Social Sciences elective.

HIS 2122 WORLD CIVILIZATION II **3 Credits**
3 Class Hours

Studies the social, cultural, economic, and political aspects of significant civilizations from the seventeenth century to the present.

Prerequisites: DSR 0853 and DSE 0833 or equivalent skills

Note: HIS 2122 meets the requirement for a Social Sciences elective.

HONORS

HON 1111-15 HONORS SEMINAR **1 Credit**
1 Class Hour

Interdisciplinary seminars will be offered each term. Students must be currently enrolled in an Honors course.

HUMANITIES

HUM 1111 APPRECIATION OF THE ARTS **3 Credits**
3 Class Hours

Provides students an opportunity to understand the arts that have helped to shape our civilization. Through readings, discussion, and audio-visual resources, students learn how the arts have reflected society's development and influenced it. Course gives students the opportunity to analyze through writing and discussion the progress of painting, sculpture, architecture, and other arts in our culture.

Prerequisites: DSE 0833 and DSR 0853 or equivalent skills

Note: HUM 1111 meets the requirement for a Humanities elective.

MATHEMATICS

MAT 0995 GEOMETRY **3 Credits**
3 Class Hours

Studies two- and three-dimensional figures that emphasize symmetry, similarity, and congruence; properties and relationships of the right triangle; measurement and calculation of areas and volumes; the use of logic and geometrical thought to solve for unknown quantities; and basic geometrical constructions.

Prerequisite: DSM 0800 or DSM 0803 or equivalent skills

MAT 1107 APPLIED WORKPLACE MATHEMATICS **3 Credits**
3 Class Hours

A course that emphasizes the use of applied mathematics in the workplace. Topics include fractions, percents, decimals, and basic finance mathematics.

MAT 1110 BUSINESS MATHEMATICS **3 Credits**
3 Class Hours

Covers business mathematics presented from an algebraic base. Topics include discounts, taxes, logarithms, mathematics of finance (simple and compound interest, loans and investments, depreciation), and descriptive statistics.

Prerequisite: DSM 0813, or equivalent skills and two high school credits in algebra

MAT 1120 COLLEGE ALGEBRA **3 Credits**
3 Class Hours

Topics include a rapid review of intermediate algebra, radicals, polynomials, exponential and logarithmic functions, matrices and determinants, elementary counting techniques, sequences, and series.

Prerequisite: DSM 0813, or equivalent skills and two high school credits in algebra

MAT 1130 TRIGONOMETRY **3 Credits**
3 Class Hours

Topics include trigonometry of the general angle, right and oblique triangles, graphs of trigonometric functions and their inverses, vectors, complex numbers, identities, and equations.

Prerequisite: DSM 0813, or equivalent skills and two high school credits in algebra

MAT 1140 TECHNICAL MATHEMATICS **5 Credits**
5 Class Hours

An integrated course in algebra and trigonometry. Topics include a rapid review of elementary algebra, functions and graphs, exponents and radicals, inequalities, algebraic fractions, right triangle trigonometry and trigonometry of the general angle, vectors, oblique triangles, complex numbers and their operations, exponential and logarithmic functions, determinants and matrices, and trigonometric identities.

Prerequisite: DSM 0813, or equivalent skills and two high school credits in algebra

MAT 1150 BASIC CALCULUS **3 Credits**
3 Class Hours

Topics include differentiation and integration of algebraic and transcendental functions and applications.

Prerequisites: MAT 1120 and MAT 1130, or MAT 1140

MAT 1160 FINITE MATHEMATICS **3 Credits**
3 Class Hours

An introductory course in data processing mathematics. Topics include number bases and operations, sets, logic, and an introduction to probability and statistics.

Prerequisite: DSM 0813, or equivalent skills and two high school credits in algebra

MAT 2000 INTRODUCTION TO CALCULUS **3 Credits**
3 Class Hours

A survey of limits, continuity, differentiation, and integration, with applications to business, economics, social, and life sciences. Topics include limits, continuity, rates of change, maximum-minimum problems, related rates, exponential growth and decay, and supply and demand. Rules and techniques are emphasized.

Prerequisite: MAT 1120

MAT 2110 STATISTICS **3 Credits**
3 Class Hours

This introductory course focuses on basic concepts and formulas for both descriptive and inferential statistics. Topics covered include the nature of data, uses and abuses of statistics, methods of sampling, summarizing data, pictures of data, counting techniques, measures of central tendency, measures of variation, measures of position, understanding classical and simulated probability, the binomial and normal distributions, the central limit theorem, confidence intervals, the fundamentals of hypotheses testing for both large and small samples, linear regression, and a brief introduction to nonparametric statistics.

Prerequisite: MAT 1110 or equivalent skills

MAT 2120 INTERMEDIATE STATISTICS **3 Credits**
3 Class Hours

This course continues the study of statistics and focuses on techniques and applications for research and business. Hypothesis testing deals with inferences from two or more samples. Both parametric and comparable nonparametric tests are presented. These tests include independent and dependent t tests, variance tests, proportion tests, chi-square tests, analyzes of variance, several regression analyzes, Wilcoxon tests, the sign test, and the Kruskal-Wallis test. Selecting the most appropriate test for specific research problems, analyzing the data, and interpreting the results are emphasized.

Prerequisite: MAT 2110 or an equivalent introductory statistics course

MAT 2210 DISCRETE MATHEMATICS **3 Credits**
3 Class Hours

Topics studied include sets, number bases. Boolean algebra, induction, recursion and algorithms, graphs and networks, matrices, and other topics and projects as appropriate.

Prerequisite: MAT 1120 or MAT 1140 or MAT 1160 with permission of the instructor

MARKETING

MKT 1227 SALES TECHNIQUES **3 Credits**
3 Class Hours

Covers the fundamentals of selling, from the determination of the customer needs and wants to the close of the sale. Includes buying motives, sales psychology, customer approaches, and sales strategies.

Prerequisite: DSR 0853 and RSE 0733 or equivalent skills

MKT 2220 MARKETING **3 Credits**
3 Class Hours

A survey course which presents information concerning the practices and basic principles of marketing from origin to the ultimate consumer. Emphasizes the marketing mix, buyer behavior, organization and planning, channels of distribution and promotion.

Prerequisites: DSR 0853 and RSE 0733 or equivalent skills

MANUFACTURING ENGINEERING TECHNOLOGY

MFG 1013 TECHNICAL DRAWING **2 Credits**
1 Class Hour, 2 Laboratory Hours

An introductory drawing course designed to develop the necessary skills in interpreting engineering drawings. The course covers the essential concepts of lines, geometric

constructions, freehand sketching, multiview projection techniques, and sectional views. Additionally, the student will, with the use of the microcomputer and the AutoCAD program, become familiar with the various functions and commands necessary to make simple computer-aided drawings.
Prerequisite: DSR 0813 or equivalent skills

MFG 1120 MACHINE TOOL AND CNC OPERATIONS **4 Credits 3 Class Hours, 2 Laboratory Hours**
A study of the various machines and methods used to make parts from stock materials. Covers all standard types of machines used or metal removal, including their various accessories and cutter. Explores the selection of proper cutting tools and speeds for use on mills, lathers, shapers, and drills. Explores methods of inspection, measurement, gauging, and using computer numeric control programming. The student gains experience in operating and programming a CNC lathe and milling machine.
Prerequisite: MAT 1140

MFG 1220 PRODUCTION, INVENTORY AND COST CONTROL **3 Credits 3 Class Hours**
Studies production planning based on sales forecasts, routing, scheduling, purchasing, dispatching, expediting, and inventory control.
Prerequisite: MAT 2110

MFG 1500 WORK MEASUREMENT/METHODS **3 Credits 2 Class Hours, 2 Laboratory Hours**
Studies the basic techniques and principles of stopwatch time study. The course includes continuous and snapback timing methods, performance rating, allowances and normal/standard times. The course also includes methods of improvement using charts, motions study principles and operations analysis.
Prerequisite: DSR 0853 or equivalent skills

MFG 1900 STRENGTH OF MATERIALS/STATICS **4 Credits 3 Class Hours, 2 Laboratory Hours**
Course covers the theory and application of engineering mechanics, basic quantities, units, force, position vectors, equivalents for systems, center of gravity, moments of inertia and section modules. The course also studies internal stresses and deformation caused by externally applied loads to structural members.
Prerequisite: MAT 1140

MFG 2010 HYDRAULICS AND PNEUMATICS **3 Credits 2 Class Hours, 2 Laboratory Hours**
Studies fluid mechanics with emphasis on the use of hydraulics and pneumatics for power transmission and control purposes. Explores the use of hydraulics and pneumatics in automated systems. The laboratory work includes hands-on experience with various hydraulic and pneumatic circuits on trainers.
Prerequisite: MAT 1140

MFG 2130 INDUSTRIAL SAFETY/ERGONOMICS **3 Credits 3 Class Hours**
Studies occupational safety and ergonomics including OSHA requirements, right to know, hazardous materials communication, design for safety, personal protection equipment and ergonomic considerations.
Prerequisite: MAT 1140

MFG 221O QUALITY CONTROL **3 Credits 2 Class Hours, 2 Laboratory Hours**
Introduces statistical quality control covering control charts for variables, control charts for attributes, and sampling. Reliability concepts and ISO 9000 topics are also covered.
Prerequisite: MAT 2110

MFG 2710 INTRODUCTION TO AUTOMATED SYSTEMS AND ROBOTS **4 Credits 3 Class Hours, 3 Laboratory Hours**
Introductory course in the terminology, development, status, and future trends of modern automated industrial systems, including robots. Class studies various training robots and three industrial robots. Students learn and use IBM's AML/E programming language. Course introduces programmable controllers and automated systems integration. Safety considerations are an important part of this course.
Prerequisite: EET 1130

MUSIC TECHNOLOGY

MUS 111O FUNDAMENTALS OF MUSIC **3 Credits 3 Class Hours**
Designed to introduce the student to basic music notation, time signature, chord progressions, and music theory. The ***"Nashville Number System"*** of charting music is explained in depth.

MUS 1130 INTRODUCTION TO STUDIO RECORDING **3 Credits 2 CLass Hours, 2 Laboratory Hours**
A basic introduction to the recording studio. Topics include microphones, tape machines, the recording console, signal processing, and recording techniques.

MUS 1140 INTRODUCTION TO MIDI **3 Credits 3 Class Hours**
An introduction to basic MIDI (Musical Instrument Digital Interface) concepts and techniques.

MUS 1230 ADVANCED STUDIO RECORDING **3 Credits 2 Class Hours, 2 Laboratory Hours**
Emphasizing hands on training in the recording studio. This course covers advanced topics including: digital audio, tape machine alignment, mixing, stereo microphone techniques, and the creative use of signal processors.
prerequisite: MUS 1130

MUS 1260 ADVANCED MIDI **3 credits 2 Class Hours, 2 Laboratory Hours**
Course continues the study of MIDI and computers. Topics include sequencing, editing, and music production techniques.
Prerequisite: MUS 1140

OFFICE ADMINISTRATION

OAD 1010 RECORDS AND DATABASE MANAGEMENT **4 Credits** **4 Class Hours**

Emphasizes proper management, storage, and retrieval of paper, image, and digital records. Covers basic application of filing classification skills using American Records Management Association rules for manual and computerized systems and a microcomputer database program.

Prerequisite: DSE 0833

OAD 1115 OFFICE REFERENCE MANUAL REVIEW **4 Credits** **4 Class Hours**

To further develop the students' language skills and abilities to find information by completing exercises that require locating and applying rules related to English style, grammar, and usage. Also emphasized are techniques and procedures related to the preparation of letters, memos, reports, and manuscripts, as well as guidelines for dictation, transcription, editing, and proofreading.

Prerequisite: OAD 1120 or demonstrated equivalent skill

OAD 1120 KEYBOARDING/SPEEDBUILDING **4 Credits** **4 Class Hours**

An introductory keyboarding course using computers with emphasis on technique, mastery of the keyboard, and speedbuilding. Students are guided through touch-typing and speedbuilding exercises with software that immediately calculates speed and accuracy.

OAD 1220 BEGINNING WORD PROCESSING **4 Credits** **4 Class Hours**

A hands-on introductory course designed to present the basic functions of word processing software for Windows.

Prerequisite: OAD 1120 or demonstrated equivalent skill

OAD 1230 ADVANCED WORD PROCESSING **4 Credits** **4 Class Hours**

A continuation of OAD 1220 with emphasis on the advanced features of word processing software for Windows.

Prerequisite: OAD 1220

OAD 1240 INTRODUCTION TO DESKTOP PUBLISHING **4 Credits** **4 Class Hours**

Designed to teach students to produce documents on a microcomputer for publication or for the office using the desktop publishing features of word processing software for Windows. Included in the course is a study of basic typography and page layout design.

Prerequisite: OAD 1230 (A.A.S., Degree)
corequisite: OAD 1230 (Certificate of Completion)

OAD 1260 SPREADSHEET SOFTWARE FOR THE ADMINISTRATIVE ASSISTANT **3 Credits** **3 Class Hours**

An introductory course that provides hands-on experience using the basic commands, formulas, functions, and graphs of spreadsheet software. Applications commonly used in today's offices are included.

OAD 1400 ELECTRONIC OFFICE PROCEDURES **4 Credits** **4 Class Hours**

Prepares students to meet the challenges and opportunities presented by today's evolving offices. Students complete projects that require good judgment in implementing the most appropriate, effective, and efficient procedures. An introduction to electronic mail, bulletin board, and the internet is also included.

Prerequisite: OAD 1120

OAD 1500 PRESENTATION SOFTWARE **3 Credits** **3 Class Hours**

An introductory course that provides hands-on experience creating computer-based electronic presentations. Students will be taught the techniques for using text, graphics, outlines, and clip art required to develop and make presentations on selected topics.

Prerequisites: OAD 1120 and AIS 1180

OAD 2400 OFFICE ACCOUNTING **4 Credits** **4 Class Hours**

Acquaints the student with accounting procedures, accounting for cash, payroll accounting, end-of-period statements, and adjusting and closing procedures. Students complete a practice set related to their option, as well as a computerized accounting exercise.

Prerequisite: MAT 1110

OAD 2500 LEGAL MACHINE TRANSCRIPTION **4 Credits** **4 Class Hours**

Introduces and emphasizes the application of English and typing skills to the production of legal instruments, documents, forms, and letters. Includes an intensive study of spelling, pronunciation, capitalization, and definitions of legal terms.

Prerequisites: OAD 1115 and OAD 1220

OAD 2540 LAW OFFICE PRACTICES **4 Credits** **4 Class Hours**

Acquaints the student with law office ethics, law office procedures, and an understanding of the principles of research, family law, wills and estates, bankruptcy, criminal law, real estate, business organizations, and litigation.

Prerequisite: OAD 1220

OAD 2600 MEDICAL MACHINE TRANSCRIPTION I **4 Credits** **4 Class Hours**

An introductory machine transcription course which emphasizes medical terminology and reinforces the use of English language skills in the production of medical documents, including history and physical, X-ray, operative, consultant, autopsy, and other medical records.

Prerequisite: OAD 1115

OAD 2610 MEDICAL MACHINE TRANSCRIPTION II **4 Credits** **4 Class Hours**

An advanced machine transcription course with continued emphasis on medical terminology and the production of reports generated by 15 medical specialties in a hospital or clinical setting.

Prerequisite: OAD 2600

OAD 2620 MEDICAL OFFICE PROCEDURES **4 Credits**
4 Class Hours

Designed to acquaint the student with the responsibilities encountered by medical office personnel during the normal day. This course instructs the student in the proper preparation of medical and financial records, filing, billing, scheduling, handling mail and telephones. Confidentiality and release of information will be studied.
Perquisite: OAD 1120

OAD 2630 ICD-CM CODING **4 Credits**
4 Class Hours

A study of the coding and classification of symptoms, operations, and procedures according to the International Classification of Disease, Clinical Modification (ICD-CM).
Prerequisites: BIO 1000 and BIO 1130

OAD 2635 CPT CODING **3 Credits**
3 Class Hours

A study of the descriptive terms and identifying codes for reporting medical services and procedures performed by physicians according to the latest edition of Physician's Current Procedural Terminology (CPT).
Prerequisite: OAD 2630 or BIO 1000

OAD 2650 MEDICAL INSURANCE **3 Credits**
3 Class Hours

Designed to instruct the student in insurance billing procedures. Instruction is given for completing Medicare, TennCare, Blue Cross/Blue Shield, Worker's Compensation and other pertinent forms for third-party payers.
Prerequisites: BIO 1000 and OAD 1120

OAD 2660 PHARMACOLOGY **2 Credits**
2 Class Hours

Designed to familiarize the student with generic and product names of a variety of medications, drug classifications, and general therapeutic applications.
Prerequisite: BIO 1000

OAD 2700 ADMINISTRATIVE MACHINE TRANSCRIPTION **4 Credits**
4 Class Hours

Teaches students to transcribe a wide variety of business communications from machine dictation. Course offers a review of the language arts skills of punctuation, spelling, editing, proofreading, and vocabulary.
Prerequisites: OAD 1115 and OAD 1220

OAD 2800 OFFICE MANAGEMENT **3 Credits**
3 Class Hours

Studies office organization and function; layout and equipment; selection, training, and supervision of personnel; and planning, organizing, and controlling office services. Course uses the case study method of applying management skills to the electronic office.
Prerequisite: ENG 1111

OCCUPATIONAL THERAPY ASSISTANT TECHNOLOGY

OTT 1100 ORIENTATION TO OCCUPATIONAL THERAPY **1 Credit**
1 Class Hour

Orients the student seeking admission to the Occupational Therapy Assistant Technology Program to the general scope of the profession. Acquaints the student with the equipment, medical terminology, therapeutic media and restorative environment of the occupational therapy field. This course is highly recommended for those students who have tested into remedial/developmental courses.
The following OTT courses require admission to the OTA program or OTA department chair approval to register for these classes.

OTT 1110 OCCUPATIONAL THERAPY THEORY AND PRACTICE I **3 Credits**
2 Class Hours, 3 Laboratory Hour

Introduces the basic concepts of occupational therapy. Presents the foundation, history and philosophical base of the profession and its personnel. Content includes the concepts of basic needs and adaptive skill development as the basis of the individual's occupational performance. Delineates the role of the assistant. Introduces the role of the occupational therapy assistant as a member of the health care team. Presents cultural/ethnic, legal and ethical issues as they relate to the occupational therapy assistant. A fieldwork component emphasizes the practice of OT in different settings.

OTT **1120 THERAPEUTIC ACTIVITIES I** **3 Credits**
2 Class Hours, 3 Laboratory Hours

Presents the principles of design and the fundamentals of manual arts as they relate to clay and woodworking. Emphasis is on clay handbuilding and construction of OT equipment, as well as practical experiences with hand and power woodworking tools. Students are introduced to setting up and maintaining equipment in a safe environment. Attention is focused on the correct body mechanics when using equipment. Students are encouraged to develop problem solving skills through independent planning and research. This course presents the guidelines for an effective teaching technique. Introduces the concept of purposeful activity, adaption, and activity analysis.

OTT **1230 HUMAN DEVELOPMENT** **4 Credits**
4 Class Hours

Studies the physical, intellectual, social, emotional, and language behavior of the normal person from birth to death. Discusses the causes and results of an interruption in or interference with the developmental process.
Corequisite: OTT 1240

OTT 1240 THERAPEUTIC ACTIVITIES II **4 Credits**
1 Class Hour, 9 Laboratory Hours

Provides an opportunity for skill development in self care, leisure and work which are appropriate to the developmental stage being presented simultaneously in human development from infancy through old age. Crafts, games, work activities and life skills are emphasized. Provides opportunities for teaching, activity analysis,

ordering, and maintaining supplies and equipment. A fieldwork component emphasizes performing activities with children, adolescents, and the elderly.
Prerequisite: OTT 1120
Corequisite: OTT 1230

OTT 1260 KINESIOLOGY **3 Credits**
2 Class Hours, 3 Laboratory Hours
The kenetics of normal and abnormal human motion of the musculo-skeletal system will be discussed. Included are evaluation procedures for range of motion and functional muscle strength. Principles and techniques of body mechanics, transfers, and positioning will be addressed. Neuromotor treatment techniques for physical dysfunction are introduced.
Prerequisite: BIO 1130 with lab

OTT 1170 INTERPERSONAL AND GROUP SKILLS **3 Credits**
3 Class Hours
This course covers professional behaviors, interpersonal skills and explores group process and skills needed to lead therapeutic groups.

OTT 2110 OCCUPATIONAL THERAPY THEORY AND PRACTICE II **3 Credits**
2 **Class Hour, 3 Laboratory Hours**
Provides an opportunity to integrate academic knowledge of occupational therapy functions in a Level I Fieldwork experience which includes a psychosocial school system/developmental disability and physical treatment setting. The class hours will be presented in a seminar format emphasizing the role of the occupational therapy assistant.
Prerequisites: OTT 1110, OTT 1230, OTT 1240, OTT 1260, OTT 1170

OTT 2120 PSYCHOSOCIAL DYSFUNCTION **3 Credits**
3 Class Hours
Discusses cultural/ethnic, age and sexual diversity as it applies to normal and abnormal, behavior. Studies the major patterns of abnormal behavior with emphasis on descriptions, possible causes, symptoms, and prognosis. Assessments and treatment are discussed.
Prerequisite: OTT 12.30, OTT 1170, PSY 1111
Corequisite: OTT 21.30

OTT 2130 TREATMENT OF PSYCHOSOCIAL DYSFUNCTION **4 Credits**
3 Class Hours, 3 Laboratory Hours
Coordinates the presentation of treatment rationale and application of therapeutic relationships and techniques with those diagnoses being presented in OTT 2120. The OTA treatment and management process for mental health settings are included. Laboratory experiences provide the students an opportunity to lead groups. Simulated treatment groups emphasize interpersonal relationships, value clarification, prevocational activities, communication, and leisure skills.
Prerequisite: OTT 1110, OTT 1120, OTT 1230, OTT 1240, OTT 1170, PSY 1111
Corequisite: OTT 2120

OTT 2140 PHYSICAL DYSFUNCTION 2 **Credits**
2 **Class Hours**
Studies the physical disease processes, pathologies, or disabilities commonly seen in occupational therapy.
Prerequisites:, OTT 1260
Corequisite: OTT 2150

OTT 2150 TREATMENT OF PHYSICAL DYSFUNCTION **5 Credits**
4 Class Hours, 3 Laboratory Hours
Presents methods and techniques utilized in the application of the occupational therapy process with the client/patient exhibiting dysfunction of physical capabilities. Also includes treatment support skills and evaluation techniques. Laboratory activities include field trips to clinics.
Prerequisites: OTT 1110, OTT 1120, OTT 1170, OTT 1230, 0TT 1260, OTT 1240
Corequisite: OTT 2140, OTT 2110

OTT 2220 **LEVEL II FIELDWORK - PSYCHOSOCIAL** **8 Credits**
8 Class Hours
Provides the OTA student with the opportunity to apply didactic learning and theory of occupational therapy in psychosocial dysfunction in a clinical or community setting under the supervision of a registered occupational therapist. Academic and clinical educators collaborate on fieldwork objectives and experiences to ensure that the role and functions expected of an entry-level occupational therapy assistant are reinforced.
Prerequisite: All academic coursework and department bead approval are required before taking Level II Fieldwork courses.

OTT 2230 LEVEL II FIELDWORK - PHYSICAL **8 Credits**
8 Class Hours
Provides the OTA student with the opportunity to apply didactic learning and theory of occupational therapy in physical dysfunction in a clinical or community setting under the supervision of a registered occupational therapist. Academic and clinical educators collaborate on fieldwork objectives and experiences to ensure reinforcement of the role and functions expected of an entry-level occupational therapy assistant.
Prerequisite: All academic coursework and department bead approval are required before taking Level II Fieldwork courses.

OTT 2240 **FIELDWORK III** **4 Credits**
4 Class Hours
Provides OTA students with an optional experience in a clinical or community setting in which they have a special interest; e.g., geriatrics and developmental disabilities. The fieldwork coordinator and clinical educator determine the assignments.
Prerequisites: OTT 2220, OTT 2230 and approval of department bead

OTT 2250 FIELDWORK IV **4 Credits**
4 Class Hours

Provides the OTA student with an opportunity for an advanced training experience in a clinical or community setting; e.g., sensory integration or advanced rehabilitation techniques. The fieldwork coordinator and clinical educator determine the assignments.

Prerequisites: OTT 2220, OTT 2230 and approval of department bead

OTT 2260 OCCUPATIONAL THERAPY RESEARCH PROJECT **1 Credit**
1 Class Hour

Provides an opportunity for the nontraditional OTA student to pursue a special interest in the field of occupational therapy. The research project required is determined by the staff and student.

Prerequisite: Approval of department bead

OTT 2270 OCCUPATIONAL THERAPY CURRENT ISSUES AND TECHNIQUES **3 Credits**
3 Class Hours

Provides the nontraditional OTA student with the opportunity to participate in a seminar on current issues and techniques in occupational therapy.

Prerequisite: Approval of department bead

PHILOSOPHY

PHI 1000 CRITICAL THINKING AND PROBLEM-SOLVING **3 Credit Hours**
3 Class Hours

Introduces elements of critical thinking as a cognitive process and applies thinking abilities and problem-solving skills to issues and concepts drawn from academics, current events, and life experiences.

Prerequisite: DSE 0833 and DSR 0853 or demonstrated skills

PHI 1111 INTRODUCTION TO ETHICS **3 Credits**
Honors Section Offered, **3 Class Hours**

Introduces the study of moral reasoning and judgment; defines the meaning and importance of individual and social morality in human life; discusses the major systems of ethical theory (ethics of virtue, ethics of duty); and applies ethical theory to the study of such moral problems as sexual morality, pornography, abortion, euthanasia, capital punishment, and job discrimination.

Prerequisites: DSE 0833 and DSR 0853 or equivalent skills

Note: PHI 1111 meets the requirement for a Humanities elective.

PHOTOGRAPHY

PHO 1110 BASIC PHOTOGRAPHY **3 Credits**
3 Class Hours

Introduces the operation of a 35mm camera. Topics include camera controls, films, composition, lenses, flash, exposure, light meters, filters, close-up, special effects, and a basic introduction to studio lighting. Emphasis is on color photography.

PHO 1115 PHOTOGRAPHIC VISUAL PRINCIPLES **3 Credits**
3 Class Hours

Presents an overview of the ways we see, use, and communicate with photography. Topics include sensory perception, work of historically significant and contemporary photographers, uses of photography in media and advertising, visual ethics, and new imaging technologies.

PHO 1120 FILM AND VIDEO PRODUCTION **3 Credits**
2 Class Hours, 2 Laboratory Hours

Introduces the skills used in film and video production. Topics include lighting on location and in the studio, audio, the camera, switching operation, the video recorder, and basic editing.

PHO 1150 PHOTOGRAPHY I **3 Credits**
3 Class Hours

Introduces the basic aspects of photography. Provides instruction in the history as well as the future of still photography. Topics include camera formats, films, electronic photography, light, color and composition.

PHO 1160 PHOTO DARKROOM I **3 Credits**
2 Class Hours, 2 Laboratory Hours

Introduces the custom black-and-white darkroom. Provides basic experience in setting up a darkroom, selecting equipment, lenses, and safety considerations. Darkroom time gives each student practical experience with film developing and black-and-white enlarging.

Prerequisite or corequisite: PHO 1110, PHO 1150 or equivalent

PHO 1210 BLACK-AND-WHITE PHOTOGRAPHY I **3 Credits**
2 Class Hours, 2 Laboratory Hours

Provides instruction and practical lab experience in various black-and-white shooting and developing techniques. Topics include films, filters, film development, photographic papers, and retouching.

Prerequisite or corequisite PHO 1110, PHO 1150 or equivalent

PHO 1230 COLOR LAB TECHNIQUES I **3 Credits**
2 Class Hours, 2 Laboratory Hours

Introduces color printing, which includes both broad printing areas: printing from a color negative and printing directly from a color slide.

Prerequisite: PHO 1210 or PHO 1160

PHO 1240 STUDIO AND LIGHTING TECHNIQUES **3 Credits**
2 Class Hours, 2 Laboratory Hours

Provides an in-depth study of studio lighting with an emphasis on medium- to large- format cameras. Topics include tungsten and studio flash lighting, camera movements, lenses, exposure calculations, and commercial view camera applications.

Prerequisite: PHO 1110 or PHO 1150

PHO 1270 PORTFOLIO PRACTICUM **3 Credits**
2 Class Hours, 2 Laboratory Hours

Designed to help build a professional portfolio. Emphasizes portfolio design and presentation. Shooting time gives the

students a variety of studio and field shooting experiences in various film formats.
Prerequisite: PHO 1110 or PHO 1150, PHO 1210 or 1160, PHO 1230 and PHO1240 or PHO 2260

PHO 1310 BLACK-AND-WHITE PHOTOGRAPHY II **3 Credits 2 Class Hours, 2 Laboratory Hours**
Covers advanced use of black-and-white films and papers. Topics include zone system, densitometry, black-and-white reversal, contrast control, and print finishing.
Prerequisite: PHO 1210 or PHO 1160

PHO 1320 COLOR LAB TECHNIQUES II **3 Credits 2 Class Hours, 2 Laboratory Hours**
Gives students hands-on experience in various color processes. Topics include C-41 film process, internegatives, masking, and quality custom printing techniques.
Prerequisite: PHO 1230

PHO 1410 NATURE PHOTOGRAPHY TECHNIQUES **3 Credits 2 Class Hours, 2 Laboratory Hours**
A field course in nature photography. Includes techniques for lighting and photographing plants and animals in both the field and studio.
Prerequisite: PHO 1110 or PHO 1150

PHO 1430 PORTRAIT AND WEDDING TECHNIQUES **3 Credits 3 Class Hours**
Covers all aspects of portrait and wedding techniques: equipment, outdoor and studio lighting, films, client relationship, and the business aspects of both portrait and wedding photography.
Prerequisite: PHO 1110 or PHO 1150

PHO 1440 MEDICAL PHOTOGRAPHY TECHNIQUES **3 Credits 3 Class Hours**
Introduces the techniques of medical photography by concentrating on the specific approaches used in medical illustration, preparing slides, and copying.
Prerequisite: PHO 1110 or PHO 1150

PHO 1450 INDIVIDUAL STUDY **3 Credits 1 Class Hour, 6 Laboratory Hours**
Allows the advanced student time for an in-depth exploration of still photography, multi-media, TV production, or audio recording production.
Prerequisites: All 1100 and 1200 level Photography courses. Approval by department bead according to availability of lab/studio space.

PHO 1460 OPEN DARKROOM **3 Credits 2 Class Hours, 2 Laboratory Hours**
Gives intermediate and advanced students practice and experimentation time in the color lab.
Prerequisite: PHO 1110 or PHO 1150
Corequisites: PHO 1210, PHO 1230

PHO 1470 PHOTOJOURNALISM **3 Credits 2 Class Hours, 2 Laboratory Hours**
Covers all aspects of photojournalism. Emphasizes techniques and equipment needed for shooting for publication, as well as the skills needed for visual communication.
Prerequisite: PHO 1110 or PHO 1150

PHO 2260 PHOTOGRAPHY II **3 Credits 2 Class Hours, 2 Laboratory Hours**
Introduces the still photography studio. Topics include camera formats, lighting equipment, and exposure calculations. Shooting time gives the students an opportunity to build their portfolios.
Prerequisite: PHO 1110 or PHO 1150

PHO 2270 PHOTO DARKROOM II **3 Credits 2 Class Hours, 2 Laboratory Hours**
An intermediate course in black-and-white printing. Topics include fiber base papers, photo preservation, densitometry and print finishing. Darkroom experiences are provided with the emphasis on quality.
Prerequisite: PHO 1110 or PHO 1150 and PHO 1210 or PHO 1165

PHYSICS

PHY 0900 TECHNICAL PHYSICS BASICS **3 Credits 3 Class Hours**
Designed as a review to prepare students with no previous physics background and with weak mathematical skills for success in the usual college physics series. Topics include a review of relevant mathematics such as basics of algebra, algebraic equations, trigonometry, and vectors. An introduction to mechanics is included. This is a preparatory course that is generally not transferable or accepted toward any degree.

PHY 1010 APPLIED PHYSICS I **3 Credits 3 Class Hours**
An introductory algebra/trigonometry-based course in the principles and applications of the mechanics of non-deformable bodies, elasticity, fluids, and heat that emphasizes technical applications.
Prerequisites: MAT 1120 and MAT 1130 or MAT 1140
Corequisites: PHY 1011

PHY 1011 APPLIED PHYSICS LABORATORY I **1 Credit 2 Laboratory Hours**
Applied laboratory exercises to demonstrate the concepts covered in PHY 1010.
corequisite: PHY 1010

PHY 1020 APPLIED PHYSICS II **3 Credits 3 Class Hours**
An introductory algebra/trigonometry-based course in the principles and applications of wave motion, sound, light and optics, electricity and magnetism, and the elements of modern physics that emphasizes technical applications.
Prerequisite: PHY 1010
Corequisite: PHY 1021

PHY 1021 APPLIED PHYSICS LABORATORY II **1 Credit**
2 Laboratory Hours

Applied laboratory exercises to demonstrate the concepts covered in PHY 1020.

Corequisite: PHY 1020

PHY 1030 SOLAR SYSTEM ASTRONOMY **3 Credits**
3 Class Hours

An introductory course in the astronomy of our Solar System. Topics include the history of astronomy; astronomical coordinates; Newton's Laws; gravitation; properties of light; kinds of telescopes and their uses; the Moon; eclipses; the Sun and its planets; asteroids, comets, and other interplanetary objects. This course may not transfer without the associated laboratory.

Prerequisite: DSR 0853 and DSM 0803 or equivalent skills

PHY 1031 SOLAR ASTRONOMY LABORATORY **1 Credit**
2 Laboratory Hours

A laboratory course to demonstrate physical concepts and data collection studied in PHY 1030.

Prerequisite: DSR 0853 and DSM 0803 or equivalent skills

PHY 1040 STELLAR AND GALACTIC ASTRONOMY **3 Credits**
3 Class Hours

An introductory course in the astronomy of stars and galaxies. Topics include the history of astronomy, astronomical coordinates, Newton's Laws, gravitation; properties of light, kinds of telescopes and their uses, the Sun, stars and stellar properties, nebulae, star clusters, galaxies and galactic distributions, pulsars, quasars, neutron stars, black holes, and cosmology. This course may not transfer without the associated laboratory.

Prerequisite: DSR 0853 and DSM 0803 or equivalent skills

PHY 1041 STELIAR ASTRONOMY LABORATORY **1 Credit**
2 Laboratory Hours

A laboratory course to demonstrate physical concepts and data collection studied in PHY 1040.

Prerequisite: DSR 0853 and DSM 0803 or equivalent skills

PHY 1050 CONCEPTUAL PHYSICS I **3 Credits**
3 Class Hours

A conceptual introduction to the physical nature of our world using a minimum of mathematics. The course includes topics in mechanics, heat, waves, and sound. Practical applications are emphasized. This course may not transfer without the associated laboratory.

Prerequisite: DSR 0853 and DSM 0803 or equivalent skills

PHY 1051 CONCEPTUAL PHYSICS LABORATORY I **1 Credit**
2 Laboratory Hours

A laboratory course to demonstrate physical concepts covered in PHY 1050.

Prerequisite: DSR 0853 and DSM 0803 or equivalent skills

PHY 1060 CONCEPTUAL PHYSICS II **3 Credits**
3 Class Hours

A continuation PHY 1050 that includes topics in electricity, magnetism, optics, modern physics, and astrophysics. This course may not transfer without the associated laboratory.

Prerequisite: PHY 1050 or permission of instructor

PHY 1061 CONCEPTUAL PHYSICS LABORATORY II **1 Credit**
2 Laboratory Hours

A laboratory course to demonstrate physical concepts covered in PHY 1060.

***Corequisite: PHY* 1060**

PHY 1110 COLLEGE PHYSICS I **3 Credits**
3 Class Hours

An algebra/trigonometry-based course in the concepts and principles of the mechanics of non-deformable bodies, fluids, and heat.

Prerequisite: MAT 1120 and MAT 1130, or MAT 1140
Corequisite: PHY 1111

PHY 1111 PHYSICS LABORATORY I **1 Credit**
2 **Laboratory Hours**

Laboratory exercises to accompany PHY 1110.

Corequisite: PHY 1110

PHY 1120 COLLEGE PHYSICS II **3 Credits**
3 Class Hours

An algebra/trigonometry-based course in the concepts and principles of wave motion, sound, electricity and magnetism, light and optics, and elements of modern physics.

Prerequisite: PHY 1110
Corequisite: PHY 1121

PHY 112 1 PHYSICS LABORATORY II **1 Credit**
2 Laboratory Hours

Laboratory exercises to accompany PHY 1120.

Corequisite: PHY 1120

PHY 1140 DIRECTED STUDY I **1 Credit**

Designed to give the student additional work in physics. Topics covered are chosen based upon students' backgrounds and curriculum needs.

Prerequisite: Approval of department bead

PHY 1150 DIRECTED STUDY II **1 Credit**

This course is a continuation of PHY 1140.

Prerequisite: Approval of department bead

PHY 1160 DIRECTED STUDY III **1 Credit**

This course is a continuation of PHY 1150.

Prerequisite: Approval of department bead

PHYSICAL SCIENCES

PSC 1010 PHYSICAL SCIENCE I **3 Credits**
3 Class Hours

Begins an overview of the physical sciences which covers the basic principles of physics, chemistry, astronomy, meteorology, and geology. Topics include Newton's Law 'of

Motion, the structure of matter, topics in applied physics, basic and applied electricity and magnetism, wave motion, sound, electromagnetic waves, and basic optics. This course may not transfer without the associated laboratory.
Prerequisite: DSR 0853 and DSM 0803 or equivalent skills

PSC 1011 PHYSICAL SCIENCE LABORATORY I **1 Credit**
2 Laboratory Hours
A laboratory to demonstrate the concepts studied in PSC 1010.
Prerequisite: DSR 0853 and DSM 0803 or equivalent skills
Corequisite: PSC 1010

PSC 1020 PHYSICAL SCIENCE II **3 Credits**
3 Class Hours
A continuation of PSC 1010. Topics include radioactivity, basic principles of chemistry, an introduction to organic chemistry and biochemistry, astronomy, geology, meteorology, energy, and the environment. This course may not transfer without the associated laboratory.
Prerequisite: PSC 1010 or permission of instructor

PSC 1021 PHYSICAL SCIENCE LABORATORY II **1 Credit**
2 Laboratory Hours
A laboratory to demonstrate the concepts studied in PSC 1020.
Corequisite: PSC 1020

POLICE SCIENCE TECHNOLOGY

PST 1000 INTRODUCTION TO CRIMINAL JUSTICE **3 Credits**
3 Class Hours
Studies the administration of criminal justice: their purposes, goals, and functions. Covers evaluation of law enforcement responsibilities, techniques, and methods of how police patrol is conducted. Students are provided with a basic understanding of the criminal justice components, including history of law enforcement; DUI enforcement; officer survival; police corruption; sects, cults, and deviant movements; police administration; firearms; and defensive tactics.

PST 1005 INTRODUCTION TO CRIMINOLOGY **3 Credits**
3 Class Hours
Studies societal problems including deviant behavior, its causes, patterns, treatment and prevention.

PST 1010 CRIMINAL LAW AND PROCEDURE **3 Credits**
3 Class Hours
Provides a study of trial procedures, a history of constitutional rights, rules of evidence admissibility, types of evidence, and laws of arrest, search and seizure.

PST 1015 SURVEY OF CORRECTIONS INSTITUTIONS **3 Credits**
3 Class Hours
Introduces students to the concepts and practices of administration operation and management of modern correctional institutions for juveniles and adults.

PST 1020 POLICE ADMINISTRATION **3 Credits**
3 Class Hours
Studies the principles of organization and personnel management functions of the police agency. Topics include policy procedures, operational duties and commands, and evaluation of the research, planning, and development processes.

PST 1025 COMMUNITY-BASED CORRECTIONS **3 Credits**
3 Class Hours
Focuses on alternatives to criminal incarceration including diversion programs such as pre-trial intervention, substitutes for jail, short-term treatment and deferred prosecution programs. Studies the various aspects of resocialization and reintegration into the community.

PST 1030 CRIMINAL EVIDENCE **3 Credits**
3 Class Hours
Develops an understanding of the types, proper treatment and disposition of criminal evidence. Also studies the problems of admissibility in court proceedings. Other topics include rules for obtaining the evidence, types of evidence, principles of exclusion, evaluation and examination of the evidence, proof, competence of witnesses, hearsay rule, opinion, pre-trial discovery, and testimony in court.
Prerequisite: PST 1010

PST 1040 UNARMED DEFENSIVE TACTICS **3 Credits**
3 Class Hours
Introduces students to a complete basic police defensive tactic system through physical practice of tried and proven uncomplicated movements and control of distance. Emphasis is placed on learning to apply five basic physical control principles to an assaultive or resistive subject. Physical practice gradually increases static, fluid, and dynamic stages of physical interaction. Mental conditioning for survival and a use-of-force continuum are presented. Students correctly demonstrate basic physical control principles.

PST 1050 TACTICAL SHOTGUN **3 Credits**
3 Class Hours
Develops the student's knowledge and operating skills of "tactical response shotgun." Special emphasis is placed on safety, gunhandling, ammo selection, position shooting, marksmanship and tactical movement. Upon completion, the student will be able to explain and demonstrate the safe and proper use of the "tactical shotgun" and have a working knowledge of weapon function, ammunition selection, shotgun wounding characteristics, various applied shotgun techniques, and basic mechanical troubleshooting for the shotgun.

PST 1060 BASIC SURVEILLANCE TECHNIQUES **3 Credits**
3 Class Hours
Examines basic police surveillance and counter-surveillance procedures and methods, including foot and vehicle; one-, two- and three-person or ABC surveillance; aerial platform; and electronic and stationary surveillance operations. Hands on training includes these topics: definition and history of surveillance, four basic methods of surveillance, foot surveillance operations, vehicle surveillance procedures, stationary surveillance methods, aerial platform surveillance,

counter-surveillance operations, detecting and eluding surveillance operatives, and presentation of surveillance evidence in court.

PST 1070 OFFICER SURVIVAL **3 Credits**
3 Class Hours

Studies the basics of police work needed to survive both mentally and physically. The student gains an understanding of basic officer survival tactics and techniques and will be able to explain and demonstrate proper survival techniques used during field interviews, unknown risk calls and traffic stops. Also, provides a working knowledge of survival skills used during domestic calls, crimes in progress, and high risk traffic stops.

PST 1080 INTERVIEWING AND INTERROGATION TECHNIQUES **3 Credits**
3 Class Hours

Provides a study of the techniques utilized in interviewing victims, witnesses, and subjects of interrogations. Topics include preparation and strategy, legal aspects, interpretation of verbal and physical behavior, causes of denial, interviewing, establishing credibility, reducing resistance, obtaining the admission, and the use of video equipment.

PST 1090 TRAFFIC ACCIDENT INVESTIGATION **3 Credits**
3 Class Hours

Studies traffic collisions using scientific methods of vehicle speed calculation, timed distance speed, report writing, and diagramming. Explores the legal, statistical and professional aspects of this interesting field. Includes dynamic vehicle experiments and practical exercises in gathering facts for traffic investigators.

PST 2000 DRUG IDENTIFICATION AND EFFECTS **3 Credits**
3 Class Hours

Provides students with the fundamentals for identifying both the appearance and effects of controlled substances. Students receive guides to controlled substances: their color, trade name and drug code. Gives critical examination of the physiological, sociological, psychological, and legal aspects of drug abuse, and many complexities that have developed as a direct or indirect result of their abuse in our society.

PST 2005 CONSTITUTIONAL RIGHTS OF PRISONERS **3 Credits**
3 Class Hours

Studies the legal rights of prisoners including constitutional amendment rights, legal advice and counsel, civil rights, equal protection of the laws and disciplinary proceedings.

PST 2010 CRIMINAL INVESTIGATION **3 Credits**
3 Class Hours

Studies the fundamentals of criminal investigation including crime scene search and recording; collection and preservation of evidence; a survey of related forensic science; interviews and interrogations; and methods of surveillance. Techniques of case preparation and presenting the case to court are also studied.

PST 2015 CORRECTIONAL MANAGEMENT **3 Credits**
3 Class Hours

Examines the organizational structure, training techniques, and roles of correctional administrators including supervision and a study of non-traditional procedures such as community-based programs.

PST 2020 POLICE FIREARMS AND DEFENSIVE TACTICS **3 Credits**
3 Class Hours

Introduces students to police combat firearms training, firearms tactics, deadly force policies and shoot/don't shoot decisions. Course also covers practical, safe operation and firing of handguns; basic defensive tactics, including hand and foot strikes; pressure points and control tactics; basic baton and handcuffing techniques; and use-of-force policies, including different deadly force policies. Students learn how to safely operate and fire a handgun and make use-of-force decisions in both firearms and defensive tactics. Upon completion, students are able to handcuff using proper techniques.

PST 2025 PROBATIONS, PARDONS AND PAROLE **3 Credits**
3 Class Hours

Provides a study of the functions and duties of a probation and/or parole officer with emphasis on the historical aspects, philosophies and standards associated with probation, pardon and parole.

PST 2030 SEMINAR IN POLICE SCIENCE TECHNOLOGY **3 Credits**
3 Class Hours

Provides an opportunity for Police Science Technology students to study the role of law enforcement and corrections in a seminar setting. Also includes off-campus experiences which involve supervised field activities, field site visits and extensive research activities.

PST 2035 JUVENILE PROCEDURES *3* **Credits**
3 Class Hours

Introduces students to the concepts of youth crimes and techniques practiced by police and courts in prevention and control. Studies the development and trends in juvenile court procedures.

PST 2040 VIP EXECUTIVE PROTECTION **3 Credits**
3 Class Hours

Examines the basic procedures and methods currently used in VIP protection operations, both in the U.S. and internationally. Topics include the organization and operation of a VIP protective detail, foot and motorcade procedures, special operations concerning VIP protective aerial details, basic counter-surveillance and counter sniper operations, emergency driving procedures, low profile unarmed defensive training, and advance team duties and operations. Hands-on training includes: definition of a protective operation and detail; history of VIP protection; employment and training market; foot and motorcade procedures and operations; basic bomb identification and search procedures; counter-surveillance and sniper operations; duties of the VIP detail member; advance arrangement and support operations; emergency driving operations; weapons and special training of VIP protective detail; detecting and eluding surveillance operatives; close-in protective procedures; and special access procedures, badges and identifications.

PST 2045 INTRODUCTION TO CRIMINALISTICS **3 Credits**
3 Class Hours

The scientific evaluation of physical evidence in the crime lab; firearms examination, comparative micrography, toxicology, serology, polygraph, and microanalysis of hair, fiber, paint, and glass; and legal photography applications.

PST 2050 POLICE TACTICAL TRAINING (SWAT) **3 Credits** **3 Class Hours**

Provides an overview of the historical development of special weapons and tactical teams. Techniques of urban and rural movements are discussed and practiced. Breaching techniques and forced entry methods are also covered. Methods of surreptitious and dynamic entry and clearing and hostage rescue are practiced with tactical diagramming and aid planning.

PST 2055 GANGS, CULTS, DEVIANT MOVEMENTS **3 Credits** **3 CLass Hours**

Acquaint the student with the gang problems in the United States, precepts, and current philosophies of Paganism, Neo-Paganism, Witchcraft, Satanism, Santeria, and Brujeria. Examine ceremonial and magical rituals, signs, symbols, secret alphabets, ritualized abuse, and Cuot-Occult crime investigation; psychological and sociological effects of media on adolescents.

Prerequisite: Consent of instructor

PST 2060 EVIDENCE PHOTOGRAPHY **3 Credits** **3 Class Hours**

Studies photographic aspects used in criminal investigation with emphasis on types of cameras and lighting for purpose of recording evidence.

PST 2070 BUSINESS AND INDUSTRIAL SECURITY **3 Credits** **3 Class Hours**

Studies the functions and concepts of security personnel forces of industrial plants, airports, hospitals, and commercial stores.

POLITICAL SCIENCE

POL 1111 POLITICAL SCIENCE **3 Credit Hours** **3 Class Hours**

Introduces the comparative theories, systems, processes, and institutions of world government.

Prerequisite: DSE 0833 and DSR 0853 or equivalent *Skills*

PSYCHOLOGY

PSY 1111 INTRODUCTION TO PSYCHOLOGY **3 Credits**
Honors Section Offered, **3 Class Hours**

Introduces the fundamentals of human behavior. Major topics include biological bases of behavior, sensation and perception, motivation, learning and memory, maturation and development, personality, and social psychology. On completion of the course, the student should be able to utilize basic psychological principles to achieve a better understanding of self and others.

Prerequisites: DSE 0833 and DSR 0853, or equivalent skills

Note: PSY 1111 meets the requirement for a Social Sciences elective.

PSY 1115 PSYCHOLOGY OF ADJUSTMENT **3 Credits**
Honors Section Offered **3 Class Hours**

Studies personal and social adjustment in modern society. Topics include maturing self-concept, healthy interpersonal relationships, constructive management of emotion and stress, and prevention of maladjustment.

Prerequisites: DSE 0833 and DSR 0853, or equivalent skills

Note: PSY 1115 meets the requirement for a Social Sciences elective.

PSY 2111 PSYCHOLOGY OF HUMAN GROWTH AND DEVELOPMENT **3 Credits** **3 Class Hours**

Survey of the biological and environmental factors influencing the physical, intellectual, social, emotional, and language development from birth until death. Explores causes and results of interruption in or interference with the developmental process.

Prerequisites: DSE 0833 and DSR 0853, or equivalent *Skills*

Note: PSY 2111 meets the requirement for a Social Sciences elective.

PSY 2113 SOCIAL PSYCHOLOGY **3 Credits** **3 Class Hours**

Studies the individual in society. Explores topics of social behavior: conformity, interpersonal relationships, perceptions, prejudice, altruism, aggression, and attitude formation. (This course is the same as SOC 2113.)

Prerequisites: DSE 0833 and DSR 0853, or equivalent skills

Note: PSY 2113 meets the requirement for a Social Sciences elective.

REMEDIAL ENGLISH

RSE 0733 BASIC WRITING **4 Credits**
ESL Sections Offered **4 Class Hours**

Students study the parts of speech, subject-verb agreement, pronoun usage, punctuation, spelling, and practice writing simple, compound, and complex sentences. Students also write topic sentences in preparation for writing effective paragraphs and practice various methods of paragraph development in a minimum of eight writing assignments, culminating in a fully developed multi-paragraph essay. Writing skills may be further improved through a computer-assisted laboratory.

REMEDIAL MATHEMATICS

RSM 0703 BASIC MATHEMATICS **3 Credits** **3 Class Hours**

Studies mathematics competencies that includes whole numbers, fractions, decimals, ratio and proportion, percents, and topics in algebra that include signed numbers, exponents, algebraic expressions with sums and differences, and solving simple algebraic equations.

REMEDIAL READING

RSR 0753 BASIC READING **4 Credits**
ESL Sections Offered **4 Class Hours**

Helps improve students' reading comprehension. Topics will include vocabulary improvement, literal reading comprehension, (recalling story detail, recognizing sequence, identifying main ideas, identifying major and minor support)

and inferential reading comprehension (drawing conclusions, making inferences, recognizing implied main ideas).

SOCIOLOGY

SOC 1111 INTRODUCTION TO SOCIOLOGY **3 Credits**
Honors Section Offered, ❑ **3 Class Hours**
Introduces the study of society, social groups, and social interaction. Topics include culture and society, socialization, social stratification, minorities, education, religion and social change.
Prerequisites: DSE 0833 and DSR 0853, or equivalent skills
Note: SOC 1111 meets the requirement for a Social Sciences elective.

SOC 1112 SOCIAL PROBLEMS **3 Credits**
3 Class Hours
Focuses on issues and topics identified as social problems in American society, such as crime, drug and alcohol abuse, environment, changing family and gender relationships, poverty, and violence.
Prerequisites: DSE 0833 and DSR 0853, or equivalent skills
Note: SOC 1112 meets the requirement for a Social Sciences elective.

SOC 1120 INTRODUCTION TO ANTHROPOLOGY **3 Credits**
3 Class Hours
Introduces the study of human culture. Focuses on human adaptation and diversity, development and variety of economic, political, religious, family and expressive institutions.
Prerequisites: DSE 0833 and DSR 0853, or equivalent skills
Note: SOC 1120 meets the requirement for a Social Sciences elective.

SOC 2000 OBTAINING GAINFUL EMPLOYMENT **1 Credit**
1 Class Hour
Provides students the opportunity to develop a comprehensive plan for successful career employment. Selected topics include resume preparation, interviewing techniques, dressing for success, networking, and employment communications.

SOC 2112 MARRIAGE AND FAMILY **3 Credits**
3 Class Hours
Studies the social, cultural, and personal factors relating to mate selection and family life. Assists students in understanding the values, marriages, and families of contemporary America. Topics discussed include human intimacy, family relations through the life cycle, kinship, child rearing, sources of strain and violence, and sources of bonding in family life.
Prerequisites: DSE 0833 and DSR 0853, or equivalent skills
Note: SOC 2112 satisfies the requirement for a Social Sciences elective.

SOC 2113 SOCIAL PSYCHOLOGY **3 Credits**
3 Class Hours
Studies the individual in society. Explores topics of social behavior: conformity, interpersonal relationships, perceptions, prejudice, altruism, aggression, and attitude formation. (This course is the same as PSY 2113.)
Prerequisites: DSE 0833 and DSR 0853, or equivalent skills
Note: SOC 2113 meets the requirement for a Social ScIences elective.

SOC 2150 LITERACY IN THE WORKPLACE **3 Credits**
3 Class Hours
Provides students with fundamentals of literacy tutoring including Laubach Literacy Action and Literacy Volunteers of America curricula. Opportunities are offered to tutor students and adults with Metro schools and Nashville READ.

SPANISH

SPA 1111 SPANISH I **4 Credits**
4 Class Hours
Develops the student's ability to use Spanish. Students develop proficiency in hearing, speaking, reading, and writing elementary Spanish.
Prerequisite: DSE 0833 or equivalent skills
Note: SPA 1111 meets the requirement for a Humanities elective.

SPA 1112 SPANISH II **4 Credits**
4 Class Hours
Refines the student's ability to use Spanish. Students improve proficiency in hearing, speaking, reading, and writing elementary Spanish.
Prerequisite: SPA 1111 or permission of instructor

SPEECH AND COMMUNICATIONS

SPE 1111 SPEECH **3 Credits**
Honors Section Offered **3 Class Hours**
Introduces students to the fundamentals of speech. Impromptu speeches, informative speeches, and a formal proposal give students experience in oral communication, particularly as it relates to business. Students also take part in mock job interviews.
Prerequisite: ENG 1111

SPE 1112 FUNDAMENTALS OF SPEECH COMMUNICATION **3 Credits**
3 Class Hours
Honors Section Offered
Explores aspects of communication in various contexts: interpersonal, small group, and public speaking. Practical applications allow students to improve their understanding of and enhance their skills in communication.
Prerequisites: ENG 1111

SPE 2 111 INTERPERSONAL SKILLS **3 Credits**
3 Class Hours
Increases students' understanding and ability to implement competent interpersonal communication behaviors. Various principles and theories are covered. (This course may be substituted for OTT 1170.)
Prerequisite: ENG 1111

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MA, 1971, Appalachian State University
ED.D., 1981, North Carolina State University

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AS., 1985, Nashville State Technical Institute
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INTERNAL AUDIT

Ann B. Collett ..... **Internal Auditor**
B.B.A., 1985, Lambuth College
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MBA, 1996, Tennessee State University
Certified Government Financial Manager, 1996

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Cindy C. Vick ..... **Secretary III**

Dale Braden ..... **Technical Services Manager**

Larry Brown ..... **Programmer/Analyst I**
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AE, 1982, Nashville State Technical Institute

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Frank Sullivan ..... **Computer Lab Technician**
A.S., 1983

Tim Sullivan ..... **Computer Lab Technician**

PUBLICATIONS, MEDIA RELATIONS, & DEVELOPMENT

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BS, 1997, University of Tennessee, Knoxville

ACADEMIC AFFAIRS

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MA, 1970, University of Michigan
Ph.D., 1974, University of Michigan

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Secretarial Science Certificate, 1982, Nashville State Technical Institute
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MS, 1995, University of Tennessee

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Shey Jones ..... **secretary HI**

James R Wright ..... **Tech Prep Director**
BE, 1970, Vanderbilt University

BUSINESS MANAGEMENT
OFFICE ADMINISTRATION & COMPUTER ACCOUNTING

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AS, 1963, Freed-Hardeman College
BS, 1965, David Lipscomb University

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BS, 1969, Tennessee Technological University
JD, 1970, University of Tennessee School of Law

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MBA, 1978, University of North Florida

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American Culinary Federation, Certified Executive Chef

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M.B.E., 1977, Middle Tennessee State University
State of Tennessee Teachers Certificate

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MBA, 1994, Tennessee State University

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BS, 1981, David Lipscomb University
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Certified Professional Secretary, 1976

OFFICE ADMINISTRATION

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BS, 1959, Barber-Scotia College
M.E.D., 1969, Tuskegee University

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MA, 1987, Ohio State University

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MS, 1988, Middle Tennessee State University

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Certified Systems Professional, 1985
MS, 1996, University of Tennessee

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MS, 1,983, Middle Tennessee State University

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Certified Public Accountant, 1978
MBA, 1990, Tennessee State University

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B.B.A., 1987, University of Memphis
MS, 1995, Middle Tennessee State University
Certified Public Accountant, 1990

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AS, 1982, Nashville State Technical Institute
Certified Public Accountant, 1972

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B.B.A., 1953, Southern Methodist University

COMPUTER INFORMATION SYSTEMS & COMPUTER TECHNOLOGY

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AS, 1980, Nashville State Technical Institute
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MBA, 1993, Tennessee State University

Sharon Poindexter ..... Secretary II
AS, 1994, Nashville State Technical Institute

COMPUTER INFORMATION SYSTEMS

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AS, 1984, Nashville State Technical Institute

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M.Ed., 1973, Memphis State University
Ed.D., 1975, Memphis State University
Certificate in DP, 1984, Institute for Certification of Computer Professionals

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MS, 1993, University of Tennessee

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BS, 1966, University of North Alabama
MBA, 1984, Tennessee State University

Jim Graff ..... Instructor

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AS, 1983, Nashville State Technical Institute

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MS, 1996, University of Tennessee, Knoxville

Ed Mummert ..... Instructor

Jacob D. Roberts ..... Associate Professor
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B.B.A., 1983, Tennessee State University
MBA, 1990, Tennessee State University

Joe R Taylor ..... Professor
AS, 1960, Martin College
BS, 1962, Belmont University
Certificate in Data Processing, 1973, Institute for Certification of Computer Professionals

Dwight Watson ..... Lab Technician
AS, 1995, Nashville State Technical Institute

COMPUTER TECHNOLOGY

Cindy A. Greenwood ..... Associate Professor
AS, 1981, Fullerton College
BS, 1983, California State Polytechnic University
MS, 1991, Vanderbilt University
Novell CNA, I996
SCO UNIX ACE, 1995

Fred A. Oster ..... Associate Professor
BA, 1958, Knox College
MBA, 1977, University of Tennessee
Novell CNA, 1994
Novell CNE, 1995

ELECTRONIC, ELECTRICAL, AUTOMOTIVE SERVICE, ELECTRICAL MAINTENANCE & MANUFACTURING ENGINEERING TECHNOLOGY

William H. Maxwell ..... Department Chair/Associate Professor
BS, 1966, North Carolina State University
MS, 1973, Naval Postgraduate School

Miriam L. Sibrel ..... Secretary II
AS, 1979, Nashville State Technical Institute

ELECTRONIC ENGINEERING TECHNOLOGY

Richard G. Mckinney ..... Associate Professor
BA, 1979, Middle Tennessee State University

Innocent I. Usoh ..... Associate Professor
B.S.E.E.; 1980, Mississippi State University
M.S.E.E., 1982, Tuskegee University

Dempsey W. Wright ..... Electronic Technician

ELECTRICAL ENGINEERING TECHNOLOGY & ELECTRICAL MAINTENANCE TECHNOLOGY

David C. Finney ..... Associate Professor
BS, 1974, Middle Tennessee State University
First Class Radio-Telephone License, 1976
FCC Certified Electrical Contractor
GM Professional Instructor
MS, 1995, University of Tennessee

Van H. Phillips ..... **Associate Professor**
AS, 1978, Nashville State Technical Institute
BS, 1983, David Lipscomb University
MS, 1988, Middle Tennessee State University
Certified Associate Engineering Technician, 1978

Donald R Pelster ..... **Associate Professor**
BE, 1969, Vanderbilt University
MS, 1976, Vanderbilt University
Ph.D., 1980, Vanderbilt University
Registered Professional Engineer, 1983

AUTOMOTIVE SERVICES TECHNOLOGY

Gene Crook ..... **Coordinator/instructor**
ASE Master Technician, 1980

Ernest Solomon ..... **Ford ASSET Coordinator/Instructor**
AAS, 1996, Nashville State Technical Institute
ASE Master Technician, 1982
ASIA/ASE World Class Technician, 1993

MANUFACTURING ENGINEERING TECHNOLOGY

Joel Lavalley ..... **Associate Professor**
BS, 1983, Moorehead State University

Billy R. McElhaney ..... **Associate Professor**
BS, 1980, University of Tennessee
M.Ed., 1984, Tennessee State University
Senior Certified Engineering Technician, 1975
Certified Manufacturing Technologist, 1976
Certified Manufacturing Engineer, 1978

Vincent R Mitchell ..... **Assistant Professor**
BS, 1975, Tennessee State University
ME, 1981, Tennessee State University
Registered Professional Engineer, 1981

Jack L. Williams ..... **Associate Professor**
BS, 1971, University of Tennessee
MS, 1988, University of Tennessee
Registered Professional Engineer, 1979
Certified Quality Engineer, 1992

ARCHITECTURAL AND CIVIL ENGINEERING & CONSTRUCTION TECHNOLOGIES

Wallace E. Wilson ..... **Department Chair/Professor**
BE, 1957, Vanderbilt University
MS, 1958, Lehigh University
Ph.D.; 1967, Georgia Institute of Technology
Registered Professional Engineer, 1967

Miriam L. Sibrel ..... **Secretary II**
AS, 1979, Nashville State Technical Institute

ARCHITECTURAL ENGINEERING TECHNOLOGY

Bill D. Finney ..... **Associate Professor**
BA, 1972, University of Tennessee
Registered Professional Architect, 1978
MS, 1995, University of Tennessee, Knoxville

Leopoldo Sapene ..... **Instructor**

CIVIL & CONSTRUCTION ENGINEERING TECHNOLOGY

Gayle W. Hughes ..... **Professor**
BE, 1966, Vanderbilt University
MS, 1993, Vanderbilt University
Registered Professional Engineer, 1978

VISUAL COMMUNICATIONS, PHOTOGRAPHY & AUDIO-VISUAL DEPARTMENT

John R. Chastain ..... **Department Chair/Associate Professor**
BA, 1968, David Lipscomb University
MS, 1995, University of Tennessee, Knoxville

Bobbie D. Armstrong ..... **Secretary II**

VISUAL. COMMUNICATIONS

Pamela A. Hawkins ..... **Assistant Professor**
BS, 1976, University of Tennessee
Graphic Arts Design Certificate

Victoria M. Rasperek ..... **Instructor**
BS, 1973, University of Tennessee

Prisclla K. Nash ..... **Assistant Professor**
B.F.A., 1974, Mississippi State University for Women

Steven A. Solomon ..... **Printing Clerk**
B.F.A., 1968, University of Chicago
Computer Electronics Diploma, 1986, Nashville State Area Vocational-Technical School

David Weilmuenster ..... **Instructor**
B.F.A., 1993, Middle Tennessee State University

PHOTOGRAPHY

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Technical Certificate, Photography, 1983, Nashville State Technical Institute
A.A.S., 1994, Nashville State Technical Institute
Certified Photo Finishing Engineer, 1994

ARTS AND SCIENCES DIVISION

Pamela C. Munz ..... **Dean**
BA, 1966, Murray State University
MA, 1969, Murray State University
Ed.D., 1982, University of Tennessee

Gwenda Gray ..... **Secretary III**

ACADEMIC SKILLLS DEPARTMENT

Mira R. Fleischman ..... **Department Chair/Associate Professor**
BS, 1973, Murray State University
MA, 1978, Western Kentucky University
ACT Work Keys Profiler, 1994

Ellen Lisa Buckner ..... **LD Testing Center Coordinator**
B.S.W., 1980, Middle Tennessee State University

Saundra Cooper ..... **Assistant Coordinator LD Program**
B.A, 1969, Peabody College
MA, 1971, Peabody College
Ph.D., 1980, Vanderbilt University

Mary Anne Dykema ..... **Secretary II**

Mary Ann S. Grigg ..... **Assistant Professor/ learning Center Coordinator**
BA, 1970, James Madison University
M.Ed., 1993, Belmont .University

Dorothy Lynn Lazier ..... **Counselor/Assistant Professor**
BS, 1966, East Tennessee State University
MA, 1978, University of Northern Colorado

Stephen E. Headley ..... **Coordinator Student Disability Services**
BS, 1977, Vanderbilt University
M.Ed., 1996, Vanderbilt University

Rosetta Parks ..... **Counselor/Assistant Professor**
BS, 1972, Tennessee State University
MA Ed., 1975, Tennessee State University

Holly H. Paulus ..... **Assistant Professor**
BA, 1971, Case Western Reserve University
M.Ed., 1984, University of Delaware
Certified Reading Specialist

Betty D. Renfro ..... **Instructor**
AS, 1966, Southeastern Christian College
BS, 1979, Tennessee State University

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BA, 1979, Middle Tennessee State University
MA, 1983, Middle Tennessee State University
Certificate, Graphic Arts, 1986, Nashville State Technical Institute

David A. Sellars ..... **Associate Professor**
AA, 1969, Henderson Community College
BA, 1971, Murray State University
M.A.C.T., 1973, Murray State University
S.C.T., 1973, Murray State University

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BA, 1971, Murray State University
M.A.C.T., 1973, Murray State University
S.C.T., 1973, Murray State University
Certified Developmental Specialist, 1992, Appalachian State University

Diane D. Wood ..... **Instructor**
BA, 1975, David Lipscomb University
Certified Occupational Therapist Assistant, 1977
M.Ed., 1991, Middle Tennessee State University

ENGLISH AND SOCIAL SCIENCES DEPARTMENT

Carolyn Jeans ..... **Secretary II**

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BA, 1982, Union University
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ASTD Certified Learning to Learn Instructor

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BA, 1958, Bethany College
MA, 1967, University of Kansas

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MA, 1966, Northeastern University

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MA, 1973, Vanderbilt University

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BA, 1990, University of Pennsylvania
MS, 1995, Georgia State University
Certified K-12 German, State of Georgia

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MA, 1996, Western Kentucky University

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MA, 1963, George Peabody College of Vanderbilt University
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BA, 1989, Middle Tennessee State University
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MA, 1992, Tennessee State University

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BS, 1954, Middle Tennessee State University
MA, 1959, George Peabody College of Vanderbilt University
Ph.D., 1972, Vanderbilt University

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BA, 1987, Rutgers University
MA, 1990, Tennessee State University

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BS, 1970, Tennessee State University
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BA, 1968, Murray State University
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MA, 1982, Vanderbilt University

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BA, 1967, David Lipscomb University
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Technical Certificate, 1995, Nashville State Technical Institute

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BS, 1969, University of Tennessee
M.Ed., 1973, Memphis State University
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Certificate in Data Processing, 1984, Institute for Certification of Computer Professionals

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MS, 1988, University of Tennessee
MS, 1991, University of Tennessee

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BS, 1965, Missouri Valley College
MA, 1971, Purdue University

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BS, 1976, School of Banking, Iran
MS, 1981, Middle Tennessee State University

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BS; 1981, Manchester College
MS, 1982, University of Tennessee
MS, 1987, Ohio State University

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BS, 1971, Claflin College
M.Ed., 1976, Clemson University

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BA, 1964, McNeese State University
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Ed.D., 1973, McNeese State University

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MA, 1970, University of Cincinnati

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MS, 1978, George Peabody College of Vanderbilt University
Ed.D., 1994, Tennessee State University

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BA, 1985, Canisius College.
A.A.S., 1986, SUNY at Alfred
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Ph.D., 1992, University of Georgia

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BS, 1965, Memphis State University
MA, 1970, Vanderbilt University
Ph.D., 1971, Vanderbilt University

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BS, 1964, Virginia Polytechnic Institute & State University
MS, 1967, Radford University
Ed.D., 1975, University of Virginia

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BS, 1966, Middle Tennessee State University
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BA, 1965, Hartwick College
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MA, 1969, University of Texas

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BS, 1964, Texas Western College
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OCCUPATIONAL THERAPY ASSISTANT TECHNOLOGY AND SURGICAL TECHNOLOGY

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BS, 1966, Washington University
MS, 1978, University of Tennessee
Certified Driver Rehabilitation Specialist, 1996
American Occupational Therapy Association, 1967

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BA, 1973, University of Maryland
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A.D.N., 1992, Tennessee State University
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POLICE SCIENCE TECHNOLOGY

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POST Certified Police Officer, State of Tennessee
Police Instructor Certification, States of Tennessee and Florida
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WORKFORCE & COMMUNITY EDUCATION SERVICES

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B.S., 1992, Tennessee Technological University

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Certified Professional Counselor, State of Tennessee, 1986

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BA, 1992, State University of New York, College at Cortland

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Etta Mason ..... Technical Clerk

COMPUTER RESOURCE AND TRAINING CENTER

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BS, 1979, Tennessee State University
MS, 1982, Southern Illinois University
MBA, 1988, Owen Graduate School of Management, Vanderbilt University,

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CAREER EMPLOYMENT CENTER

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BS, 1967, Middle Tennessee State University
MST, 1971, Middle Tennessee State University
State Certification in Guidance and Counseling, 1975

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TECHNICAL TRAINING CENTER.

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AS, 1975, Clarksville Area Vocational Technical School
BS, 1993, University of Tennessee
MS, 1995, University of Tennessee
GM Certified Trainer
Member, American Society for Training and Development

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John Marse ..... Instructor

COOKEVILLE CAMPUS

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BS, 1990, Tennessee Technological University
MBA, 1992, Tennessee Technological University
M.ED.S., 1995, Tennessee Technological University

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BA, 1966, Oachita Baptist University
MS, 1978, Vanderbilt University

Tim Dean ..... Instructor
BS, 1992, Tennessee Technological University
MS, 1995, Tennessee Technological University

Sam Garner ..... Assistant Professor
Certificate, Electrical Maintenance, Nashville Area Vocational School
AS, 1983, Nashville State Technical Institute
BS, 1989, Middle Tennessee State University

LIBRARY

James R. Veatch, Jr ..... Director
BA, 1965, Sioux Falls College
MA, 1971, Northwest Missouri State
M.L.S., 1975, George Peabody College of Vanderbilt University
Ph.D., 1980, George Peabody College of Vanderbilt University

Nancy Damron-Litchford ..... Library Assistant
AS, 1988, Pensacola Junior College

Sally **A. Robertson** ..... Serials Librarian
BS, 1978, Belmont University
ML.S., 1979, Peabody College of Vanderbilt University

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AE, 1988, Nashville State Technical Institute
A.A.S., 1990, Nashville State Technical Institute

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BA, 1974, University of North Carolina
M.L.S., 1976, George Peabody College of Vanderbilt University

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BA, 1957, Anges Scott College
M.L.S., 1959, George Peabody College of Vanderbilt University

Deborah Tudeme ..... Library Assistant II
Certificate of Computer Operations, 1981, Nashville State Technical Institute
AS, 1986, Nashville State Technical Institute

Edna F. Vaughn ..... Microcomputer Laboratory Technician
AS, 1985, Nashville State Technical Institute

STUDENT SERVICES

Charles R. Weeks ..... Dean
BA, 1969, David Lipscomb University
MA, 1974, Scarritt College

Judith C. Kamm ..... Secretary III
Certified Professional Secretary, 1995

Karen Martin ..... Career Directions Consultant
B.S.N, 1973 Medical College of Georgia
M.D.E., 1991, Appalachian State University
Certified Developmental Education Specialist, 1988

Gail Marzella ..... JTPA Technical Clerk
A.A.S., 1996, Nashville State Technical Institute

ADMISSIONS AND ASSESSMENT

Priscilla D. Tibbs-Crigler ..... Director
BA, 1987, Tennessee State University
MS, 1995, Tennessee State University

Jennifer L. Wilson ..... Secretary II
AS, 1989, Nashville State Technical Institute
A.A.S., 1997; Nashville State Technical Institute

Nancy C. Jewell ..... Assistant Director
BA, 1967, Trevecca Nazarene College

Charlene Anderson ..... Admissions and Records Clerk
AS, 1992, Nashville State Technical Institute

Delphia Green ..... Admissions and Records Clerk

Adriane D. Johnson ..... Admissions and Records Clerk
AS, 1997, Nashville State Technical Institute

Ann P. Lowe ..... Receptionist
AA, 1976, Volunteer State Community College
BS, 1978, University of Tennessee, Nashville
Teacher Certification, State of Tennessee

Dorothy G. Martin ..... Admissions and Records Clerk

Sara C. Maxwell ..... Testing Center Coordinator
BS, 1949, University of Montevallo

Joy H. Williams ..... Testing Technician I

Michelle Renfro ..... Testing Technician I

STUDENT DEVELOPMENT

Evelyn Hadley ..... Director
BA, 1996, Trevecca Nazarene University

Susan J. Belcher ..... Secretary II

Pat Michael ..... Advisor/Recruiter
BS, 1992, Southern Illinois University

Tabitha Vires-Swearingen ..... Advisor/Recruiter
BS, 1995, Austin Peay State University

Colleen Van Fossen ..... Advisor/Recruiter
B.B.A., 1985, Memphis State University
M.Ed., 1995, Middle Tennessee State University

Kimberly Wood ..... Advisor/Recruiter
A.S., 1986, Sacred Heart University

FINANCIAL AID

Stephen F. White ..... Director
BA, 1980, Campbellsville College
M.Div., 1983, Southern Baptist Theological Seminary

Vicki Hammonds ..... Assistant Director
BS, 1981, Eastern Kentucky University

Melissa Smith ..... Coordinator of Technical Support
BS, 1994, Bethel College
MBA, 1996, Middle Tennessee State University

Vilia A. Buckingham ..... Secretary II

Ola M. James ..... Assistant to Director

Leslie P. McMillan ..... Financial Aid Clerk

RECORDS

Linda S. Sullivan ..... Registrar
AA, 1981, Olympic College
B.P.A., 1986, Embry Riddle Aeronautical University
MBA, 1988, Embry Riddle Aeronautical University

Julie H. Duel ..... Graduation/Transcript Analyst

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AS, 1990, Nashville State Technical Institute

Reva J. Hurst ..... Admissions and Records Clerk

Theresa Jennings-Dirugeris ..... Admissions and Records Lead Worker

FTINANCE AND ADMINISTRATIVE SERVICES

Debra D. Simpkins-Bauer ..... Vice President of Finance and Administrative Services
BS, 1977, University of Tennessee at Martin

Francetta B. Blaustone ..... Administrative Secretary
Certified Professional Secretary, 1994

Yvonne Barrett ..... Director of Affirmative Action
Certified Professional Secretary, 1992
BA, 1996, Trevecca Nazarene University

Shelia R. Cook-Jones ..... Buyer
AS, 1984, Nashville State Technical Institute

Annette E. Jordan ..... Technical Clerk
AS, 1984, Nashville State Technical Institute

ACCOUNTING

M. Elaine Davis ..... Controller
BS, 1972, Belmont University
AS, 1983, Nashville State Technical Institute

Bernice G. Batchelor ..... Account Clerk Supervisor Accounts Payable
BS, 1975, Lane College

Laurie W. Rhoton ..... Grants Fiscal Clerk
AS, 1983, Nashville State Technical Institute
A.A.S., 1996, Nashville State Technical Institute
Certified Professional Secretary, 1987

Alma J. Rucker ..... Account Clerk I Accounts Payable

BURSAR'S OFFICE

Linda D. Langiotti ..... Bursar
BA, 1974, Lambuth College
AS, 1983, Nashville State Technical Institute
MBA, 1988, Jack C. Massey Graduate School of Business, Belmont University

Gloria Linzy ..... Lead Cashier

Tracey Korteum ..... Cashier
AS, 1996, Draughons Junior College

Gloria D. Spears ..... Account Clerk II

PROPERTY MANAGEMENT
SHIPPING & RECEIVING

Herbert E. Hunt ..... **Manager**
AS, 1972, Draughons Junior College

Cecil H. Ivy..... **Shipping and Receiving Clerk**

Delaney Thomas..... **Shipping and Receiving Clerk**

HUMAN RESOURCES

Norma M. Sheucraft ..... **Director**

Becky .... Abu-Orf..... **Personnel Records Supervisor/Payroll**

Jim Smith..... **Account Clerk HI**
B.F.A., 1989, University of Memphis
Professional Certification: NCIDQ

Robbie Taylor..... **Personnel Clerk**

Marian McNeil..... **Personnel Assistant**

FACILITIES AND SAFETY

Benjamin H. McHenry..... **Director**

Brenda ..... Harriford..... **Technical Clerk**
AA, 1976, Western Kentucky University

GROUNDS, LANDSCAPING & CUSTODIAL

Jim Wharton ..... **custodial supervisor**

James M. Bond ..... **Grounds Worker**

Jason Bond..... **Grounds Worker**

Eddie L. Brown..... **Custodian**

Carolyn Owens ..... **Custodian**

Gary T. Shannon..... **Custodial Lead Worker**

Sallie L. Short ..... **custodian**

MAINTENANCE & OPERATIONS

Willard J. Frazier..... **Maintenance Supervisor**

James W. Bryant..... **A/C Heating Mechanic III**

Tim Smith..... **Maintenance Worker**

Ray T. Wall..... **Maintenance Worker**

Emmett Watson..... **Maintenance Worker**

SAFETY & SECURITY

G. Derrek Sheucraft ..... **Security Guard Supervisor**

Tyree Bowers..... **Security Guard**

John Dailey ..... **Security Guard I**

Angela Keith..... **Security Guard**

Jeffrey L. Myers ..... **Security Guard I**
AS, 1982, Aquinas Junior College

Evaleane G. Owens..... **Security Guard I**

Henry Short..... **Security Guard**

Eugene Willis..... **Security Guard**

"The real object of education is to have a man in the condition of continually asking questions."

- Bishop Creighton

INDEX

NASHVILLE State Tech

The Nashville Community's Two-Year College

"The most important motive for work in school and in life is pleasure in work, pleasure in its result, and the knowledge of the value of the result to the community."

Albert Einstein