Dear Student:

No matter what your age, past education or current situation, you need security, respect and pride in your accomplishments. Everyone dreams of succeeding, being able to provide not just the necessities but the things they really want for themselves and those they love.

It isn't just a dream. Success can be within your grasp when you make the commitment to learn the skills business and industry want today. With millions of dollars in state-of-the-art equipment, modern facilities and industry-experienced faculty, there's simply no finer, more accessible source of these skills than Bessemer Tech. And, with its lively, contagious spirit and campus camaraderie, you'll form life-long friendships at Bessemer Tech, too, while you grow socially and intellectually.

We invite you to look carefully at our programs and activities and become a part of the great tradition of excellence at Bessemer Tech, where we'll help you succeed.

Sincerely,

Mike Bailey

Mike Bailey, Ed. D.
President, Bessemer State Technical College
### FALL TERM, 1999

<table>
<thead>
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<tr>
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</tr>
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The catalog of Bessemer State Technical College is published annually by the college. U.S. Highway 11 Southwest, Interstate 20/59, Bessemer, Alabama. Bessemer State Technical College reserves the right to revise contents of this publication periodically without giving prior notice. The college also reserves the right to make adjustments to each term's schedule and to cancel classes for which there is not sufficient enrollment. The information contained in this catalog can be provided in an accessible format upon request. Please notify the college's Special Needs Coordinator for assistance.
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GENERAL INFORMATION

HISTORY

During the 1963 session of the Alabama Legislature, a tax was approved that created a comprehensive system of technical colleges and institutes. Recognizing the urgent need to provide technical and skill training for persons in Jefferson County, Bessemer business and industrial leaders and city officials proposed a resolution to the State Department of Education requesting that Bessemer be selected as the site for one of the technical institutes. The resolution was approved in the fall of 1963.

After a 34-acre site on US Highway 11 South was selected, the city of Bessemer purchased the property and deeded the property to the Alabama Trade School and Junior College Authority.

On April 4, 1966, the college, known then as the State Vocational-Technical School, accepted its first 47 day and 38 night students, in six programs of study. Although its first official name was the John R. Pelham Technical-Trade School, on August 16, 1966, the name was changed by legislative action to Bessemer State Technical Institute. Bessemer Tech was accredited by the Southern Association of Colleges and Schools in 1972 and in August, 1973, achieved college status. Accreditation enabled Bessemer State Technical College to award an Associate in Applied Technology degree.

In order to meet the demands created by a rapidly increasing student body, the city of Bessemer acquired and donated an additional 29 acres of property in 1973 to allow for future expansion of the college. Construction on the new property began in 1975. Additions were added in 1975, 1977, 1978, 1993, and 1998.

Today, Bessemer State Technical College (BSTC) is Alabama's largest technical college.

PHILOSOPHY

Bessemer State Technical College was created by legislative act for the purpose of providing skill and technical training for the citizens of Alabama. The college has adopted a philosophy that meets this mandate.

Bessemer State Technical College provides education that will train an individual for meaningful employment, leadership, and citizenship. The college is committed to the development of the individual's ability to think clearly and critically, to communicate effectively, and to use various disciplines to solve the problems that face a productive worker. The college operates according to the principle that theory and knowledge gained in the classroom should be reinforced by practical experience in shops and laboratories and that safe work practices will be strongly emphasized. The college believes that the necessary skills and knowledge can be acquired best under the instruction and supervision of an instructor who is proficient in his/her field.

There are three primary groups served by the college.

1. Students who attend on a full-time basis;
2. Students who attend on a part-time basis;
3. Students who attend special industry courses offered through both the regular programs and short-term, industrial programs.

In all cases, the emphasis includes quality instructional programs and support services. Therefore, the institution seeks to offer training that is designed to meet the needs of students with varied educational backgrounds and wide ranges of interests, aptitudes, and abilities; to furnish a disciplined environment conducive to learning; to provide proficient instructors who offer leadership, guidance, and inspiration; and to develop a curriculum to meet the needs of business, industry, and the community.

MISSION STATEMENT

To provide technical and academic preparation and support services for individuals who seek to develop the knowledge, skills, and attitudes necessary for successful employment and future education, and to provide training, testing, and consulting services for business and industry.

VISION STATEMENT

Bessemer State Technical College intends to meet the challenges that individuals and businesses face in a competitive, global economy through corporate partnerships and technical education.

ORGANIZATIONAL GOALS

1. Instruction: To develop and maintain educational programs that prepare students for employment, job advancement, occupational change, further educational opportunities, and personal growth.
2. Finance: To utilize available financial resources effectively in order to provide educational opportunities to students.
3. Student Services: To provide professional services of the college.
4. Public Information: To inform the public of the educational opportunities provided through Bessemer State Technical College.
5. Organizational Management: To maintain a management system that achieves institutional goals and objectives.
6. Economic Development: To enhance the college's service to the community through advisory councils, networking, and the Business and Industry Training Division of Bessemer State Technical College.
7. Facilities/Environment: To provide buildings, grounds, and equipment to support the programs and services of the college.
GENERAL INFORMATION

THE CAMPUS

Bessemer State Technical College occupies approximately 50 acres of rolling, wooded property in southwestern Jefferson County. The main campus is composed of 34 acres and is connected with the North campus by a drive paralleling the interstate system.

CAMPUS BUILDINGS AND FACILITIES

The campus of Bessemer State Technical College is comprised of eight buildings. The buildings and the functions they contain are as follows:

Building A is located at the main entrance to the campus and provides facilities for administrative offices, the college's bookstore, and cafeteria. Instructional programs in this building are Licensed Practical Nursing, Nursing Assistant, Emergency Medical Technology, Dental Assisting, Computer Science, Data Entry, Retail Merchandising, Industrial Electronics, Student Support Services, Office Administration, Horticulture, Accounting, and general education courses. The Library/Learning Resource Center is also located in this building.

Building B is located adjacent to Building A. Programs occupying the building are Graphics and Printing Communication, Air Conditioning/Refrigeration, Welding, Drafting, Commercial Art, and automotive training.

Building C is located behind the Jess Lanier Building and provides facilities for automotive training.

Building D is located on the southern most area of the main campus and houses the Diesel Mechanics program.

Ethel H. Hall Automotive Technology Center is a facility housing four General Motors classrooms/labs and an auditorium for satellite telecasts. The President's Office and the Dean of Instruction's Office are also located in this building.

Jess Lanier Building is located adjacent to Ethel H. Hall Automotive Technology Center and provides facilities for specialized automotive training programs.

Millsap Industrial Training Center is designed to provide classroom and laboratory instruction for apprenticeship, upgrade, and multi-craft training for industry. The Office of the Assistant to the Dean of Instruction (Director of Community Relations), MIRROR Program, Corporate Services Director's Office, and the State Vocational Rehabilitation Office are located in this building.

North Campus is composed of a cluster of buildings housing Building Construction and Horticulture greenhouses/labs.

CORPORATE SERVICES

For over 21 years, Bessemer State Technical College has been actively involved in specialized/custom training courses, competency testing, and consulting for both business and industry. All three of these services have been offered with great success to companies in the Birmingham area, the State of Alabama, and the Southeastern United States.

The College has the capability through its Corporate Services Division to develop a unique training program or testing program for any company and to administer the program at the company's facility or at the college. The services offered include the following:

A Quality Product—Bessemer State Technical College provides educational programs that span the occupational spectrum. Training begins with entry-level skills, moves into specialized technologies, and includes retraining that provides for individual advancement.

Start-Up Training—The college offers start-up training which is implemented before or immediately after the employee is hired. The program assures quality training standards that will provide for a productive employee without additional on-the-job training or a time consuming break-in period.

Program Flexibility—On-site training is just one aspect that has earned Bessemer State Technical College a reputation for flexibility in meeting the needs of business and industry in Alabama. Scheduling, location, and instructor utilization are all tailored to specific needs. One-time sessions, ongoing instruction, or around-the-clock training can be provided by the college.

Enrichment Programs—Bessemer State Technical College offers programs to enrich employee skills in traditional or non-traditional areas. Training in CPR, first aid, management, technical areas, word processing, and the like, are just a few of the topics of interest and benefits available to both the employee and the employer.

Saving Dollars—One of the best characteristics of Bessemer State Technical College's program is its reasonable cost. The College is nationally recognized for its long-standing commitment to quality and low-cost business and industry training programs.

FOR MORE INFORMATION . . .

The Corporate Services Division at Bessemer State Technical College welcomes the opportunity to assist any company with all its training, testing, and consulting needs. Contact the Corporate Services office at (205) 428-6391, ext. 367.
ADMISSIONS

ADMISSION OF FIRST-TIME COLLEGE STUDENTS

An applicant who has not previously attended any regionally accredited postsecondary institution will be designated a first-time college student or native student.

Admission to Course Creditable Toward an Associate Degree

To be eligible for admission to a course creditable toward an associate degree, a first-time college student must meet one of the following criteria:

1. Hold a diploma issued by a regionally and/or state accredited high school; or

2. Hold a high school diploma and have passed the Alabama High School Graduation Examination; or

3. Hold a high school diploma and have achieved a minimum ACT score of 16 or the equivalent score on the SAT; or

4. Hold a GED Certificate issued by the appropriate education agency.

A student who meets one of the above criteria shall be classified as a “degree-eligible” student.

The college may establish additional admission requirements when student enrollment must be limited or to assure ability-to-benefit.

Admission to a Course Not Creditable Toward an Associate Degree

An applicant to courses not creditable toward an associate degree and programs comprised exclusively of courses not creditable toward an associate degree may be admitted provided he/she meets the above standards or provided he/she is at least 16 years of age and has not been enrolled in secondary education for at least one calendar year (or upon the recommendation of the local superintendent) and has specifically documented ability-to-benefit.

The student shall be classified as a “non-degree-eligible” student and shall not be allowed to enroll in a course creditable toward an associate degree unless appropriate conditions are met.

The college may establish higher or additional admission requirements for specific programs or services when student enrollment must be limited or to assure ability-to-benefit.

Unconditional Admission of First-time College Students

For unconditional admission, an applicant must have on file at the college a completed application for admission and at least one of the following:

1. An official transcript showing graduation from a regionally and/or state accredited high school; or

2. An official transcript showing graduation from high school and proof of passage of the Alabama High School Graduation Examination; or

3. An official transcript showing graduation from high school and evidence of a minimum ACT score of 16 or the equivalent score on the SAT; or


Each male student between the ages of 18 and 26 must show proof of registration with the U.S. Selective Service System in accordance with 36-26-15.1 of the Code of Alabama of 1974 (as amended).

For admission to a course not creditable toward an associate degree, an applicant with less than a high school diploma or GED must also have on file documented ability-to-benefit.

Conditional Admission of First-Time College Students

An applicant who does not have on file an official transcript from the high school attended or an official GED Certificate may be granted conditional admission. No student shall be allowed to enroll for a second semester/term unless all required admissions records have been received by the college prior to registration for the second semester/term.

If all required admissions records have not been received by the college prior to the issuance of first semester/term grades, the grades will be reported on the transcript, but the transcript will read CONTINUED ENROLLMENT DENIED PENDING RECEIPT OF ADMISSION RECORDS. This notation will be removed from the transcript only upon receipt of all required admission records.

Conditional Admissions of Transfer Students

A transfer student who does not have on file official transcripts from all postsecondary institutions attended and any additional documents required by the college, may be granted conditional admission. No transfer student shall be allowed to enroll for a second semester/term unless all required admissions records have been received by the college prior to registration for the second semester/term.

If all required admissions records have not been received by the college prior to issuance of first semester/term grades, the grades will be reported on the transcript, but the transcript will read CONTINUED ENROLLMENT DENIED PENDING RECEIPT OF ADMISSIONS RECORDS. This notation will be removed from the transcript only upon receipt of all required admissions records.
Initial Academic Status of Transfer Students
1. A transfer student whose Cumulative Grade Point Average at the transfer institution(s) is 2.0 or above on a 4.0 scale will be admitted on CLEAR academic status.

2. A transfer student whose Cumulative Grade Point Average at the transfer institution(s) is less than 2.0 on a 4.0 scale will be admitted only on Academic Probation. The transcript will read ADMITTED ON ACADEMIC PROBATION.

3. An applicant who has been academically suspended from another regionally accredited postsecondary institution may be admitted as a transfer student only after following the appeal process established at the college for "native" students who have been academically suspended. If a transfer student is admitted upon appeal, the student will enter the institution on Academic Probation. The transcript will read ADMITTED UPON APPEAL – ACADEMIC PROBATION.

General Principles for Transfer of Credits
1. Courses completed at other regionally accredited postsecondary institutions with a passing grade will be accepted for transfer as potentially creditable toward graduation requirements. For a student admitted on academic probation, only courses in which he/she has earned a course grade of "C" or better will be accepted for transfer.

2. Awarding of transfer credit to fulfill graduation requirements will be based on applicability of the credits to the requirements of the degree sought.

3. Credit may be extended based on a comprehensive evaluation of demonstrated and documented competencies and previous formal training.

ADMISSION OF INTERNATIONAL STUDENTS
Each international applicant should have a valid passport and an F-1 visa. F-1 visa holders are required to be enrolled full-time (12 credit hours per semester/term), and should progress satisfactorily toward a certificate, diploma, or degree.

Bessemer State Technical College admits only a prospective international student who submits documentation of the following academic, linguistic, and financial requirements:

1. Completed and signed BSTC application to the Admissions Office.

2. Original, certified, and English translated copies of his/her high school or secondary school transcript(s).

3. Original copies of his/her Test of English as a Foreign Language (TOEFL) scores to the Admissions Office or designated advisor.

4. A current signed and notarized letter of financial support. A student will be responsible for all college related expenses while attending Bessemer State Technical College, and

5. Policy/contract number and expiration date as well as the name, address, and telephone number of the student’s accident and health insurance company.

EARLY ADMISSION FOR ACCELERATED HIGH SCHOOL STUDENTS
A high school student is eligible for early admission if he/she meets all of the following criteria:

1. A student has successfully completed the 10th grade.

2. A student provides a certification from the local principal and/or his or her designee certifying that a student has a minimum cumulative "B" average and recommending a student be admitted under this policy;

3. A student may enroll only in postsecondary courses for which high school prerequisites have been completed. (For example: A student may not take English Composition while attending Bessemer State Technical College, and

4. An applicant accepted for admission will be notified and provided directions for registration.

PROCEDURE FOR ADMISSION
1. An applicant must obtain an application from the Admissions Office, Building A. The application must be completed, signed, and submitted to the college as early as possible prior to the planned term of enrollment.

2. A first-time college applicant must request an official transcript from the high school attended or have an official GED Certificate mailed to the Admissions Office.

3. A transfer student must request colleges or universities previously attended to mail official transcript(s) of academic records directly to the Admissions Office.

4. An applicant must be administered the ACT/ASSET placement instrument according to the State Board Policy. Upon receipt of the application, the Admissions Office schedules each applicant to take the ACT/ASSET. An applicant who needs accommodations to take the ACT/ASSET should contact the Coordinator of Special Needs at least two weeks in advance of the testing date.

5. An applicant accepted for admission will be notified of placement test prior to registration.

ASSESSMENT
Each student who enrolls for more than three semester credit hours or six weekly contact hours per semester/term must take the ACT/ASSET Placement Test prior to registration.

ADVANCED PLACEMENT CREDIT
A student may be awarded credit based on nationally recognized advanced placement examinations. A maximum of 20 semester hours of credit may be awarded and applied toward graduation. A student desiring to apply for advanced placement must have test scores sent to the college and submit a written request to the Registrar.

The college will accept a score of three (3) or higher on Advanced Placement (AP) subject examinations for credit for a course in the subject area corresponding to the test.

The college offers a student, who enters an occupational program and can document previous education or experience in the occupation, an opportunity to receive advanced placement credit based on a comprehensive evaluation of demonstrated and documented competencies and previous formal training.
AWED HEALTH PROGRAMS

Because graduates of the Dental Assisting, Nursing Assistant/Home Health Care Aide, Emergency Medical Technician and Licensed Practical Nursing Programs must pass formal state and/or national licensure/certification examinations upon completion of their respective programs, separate policies and guidelines, higher than the institutional standards, have been established. Each student will be given a copy of the appropriate policies upon registration and admission to the program.

For more information on the School of Practical Nursing, the Emergency Medical Technician program, or other Allied Health programs, contact the Allied Health Programs Department Chair.

Each applicant must:
1. Have a high school diploma or GED Certificate.
2. Complete an application to Bessemer State Technical College.
3. Submit official transcripts from all high schools and/or colleges attended.
4. Provide scores on any entrance test; specifically for the program to which the applicant is applying (see specific program information).
5. Take the ACT/ASSET exam and score appropriately for the specific program.
6. Present proof of CPR certification prior to entering the clinical area.

Transfer credit may be approved for selected courses with an official transcript and a grade of "C" or better in each course. Anatomy and physiology, nursing, and allied health courses must be completed within two (2) years of application date.

Additional Information Related to Application/ Admission Procedures
1. Each student must be able to provide his/her own transportation to clinical facilities.
2. Each student should have medical insurance prior to the clinical experience. The college assumes no liability in the event of injury/illness.
3. Admission to a program is on a space-available basis and will be based on a comparative evaluation of all test scores, transcripts, and application information.
4. Applicants should review the list of the essential functions that identifies program specific job performance requirements.
5. Each student accepted into a program will be required to complete medical requirements as identified on the Allied Health Programs Physical Examination form.
6. An applicant who is not accepted into his or her preferred program of study is encouraged to see an advisor, who will assist him/her with other career options and/or taking additional courses to improve the chances of acceptance for the next class.
7. Prior convictions (excluding traffic violations) may affect licensure eligibility. (Please see program descriptions for specific information.)
8. Each student accepted into a program must purchase liability insurance.

Retention/Progression Criteria
1. A grade of "C" (75 percent) is required in all courses for progression.
2. A minimum GPA of 2.0 is required for progression in the health programs.
3. Clinical competencies must be satisfactory in order to receive a passing grade in health program courses. A student who is not satisfactory in clinical performance will not pass the course.
4. Competency in drug calculation is mandatory to be considered satisfactory in the clinical setting (this applies to specific programs.)
5. A student who receives less than a "C" grade in a health program course will not progress and must repeat the course. Each program states criteria for the number of repeats allowed in a given program and when repeats would be possible.
6. A student who demonstrates significant problems during the course of the program may be asked to undergo evaluation to determine his/her ability to continue in the program.

NOTE: Application and admission policies and procedures for individual programs may vary slightly.

COURSE AUDITING
A student wishing to take college courses without credit may do so by a process called auditing. A student auditing classes must fulfill admission requirements as stated in this catalog. An "audit" student is required to register and pay the appropriate tuition and fees for the courses audited. The Declaration of Course Audit form must be signed by both a student and instructor and submitted to the Registrar's Office before the end of the drop/add period. Once a student declares a course is "not-for-credit," a student's enrollment in that course cannot be changed back to "for-credit."

An "audit" student will be listed on the official class rolls, but is not required to take tests, final examinations, or make reports. The grade for audit will be shown on a student's transcript as "AU." An "audit" student is not eligible for veteran's benefits, JTPA, or federal financial assistance. A student who desires to change from credit to audit, or audit to credit, must officially request a status change before the end of the drop/add period.

DEADLINES
The third class day of the fall and spring semesters/terms is the last day of the drop/add period. The second class day of the summer term is the last day of the drop/add period. All schedule changes must be made on or before this day.

The last day of the third week of classes each semester/term is the last day to drop a course without loss of quality points.

The last day of the fourth week of the following semester/term is the last day to remove an incomplete grade. If the "I" is not removed during this period, it will automatically change to an "F."

The sixth week of the semester/term in which a student plans to graduate is the last day to apply as a candidate for graduation.

REGISTRATION
Each student is encouraged to pre-register each semester/term. A new student who is accepted for admission will be notified of the pre-registration date(s). Due to the demand for many programs and/or courses, it is imperative that each student pre-register during the period designated. A student who is unable to pre-register during the period assigned or who decides not to enroll, should contact the Registrar's Office immediately.

Pre-registration dates for each semester/term are announced in the college's publications, President's Bulletin, and are displayed on the video information centers in Building A. For additional information, which includes the steps for completion of registration, each student should see his/her faculty advisor or contact the Registrar's Office.
To pre-register or register, a student must meet with his/her faculty advisor who will review and approve a student's course of study for the semester/term. Approval is indicated by the advisor's signature.

Next, each student will present his/her approved schedule to the Registrar.

Finally, registration is completed with the payment of tuition and fees. A student may be required to go to the Office of Student Financial Services for payment authorization before proceeding to the Bookstore to complete the process.

A student will not be allowed to attend classes until his/her financial obligations have been met. A student cannot reserve space in classes without paying tuition and fees. A student who does not register prior to the first day of class will be charged a late fee.

RE-ENROLLMENT OF STUDENTS
A student who has not maintained continuous enrollment (i.e., has dropped during the previous semester/term, has not been enrolled for one or more semesters/terms, or has graduated from the college) and who wishes to re-enroll must complete a Re-entry form that is available in the Admissions Office. Re-enrollment must be approved by the Director of Admissions and/or the Coordinator of Short-Term and Continuing Education. If continuous enrollment is not maintained, graduation requirements may change.

ACADEMIC AFFAIRS

ATTENDANCE
Class attendance is an essential part of the educational process at Bessemer State Technical College. Each student is expected to attend each class in which he/she is enrolled. Absences will be recorded each day that the class meets, including the first day of class. If a student is unable to attend a class regularly, regardless of the reason or circumstance, he/she should formally withdraw from that class through the Registrar's Office.

ABSENCES AND TARDIES SHOULD BE RARE AND SHOULD OCCUR ONLY UNDER THE MOST COMPELLING CIRCUMSTANCES. Though a student may register for classes during the drop/add period, he/she will be held responsible for all class work or assignments missed. No student will be penalized if administrative schedule changes are made. In the event an instructor is not present when the class is scheduled to convene, each student must remain in the classroom until the instructor arrives or until official word is received.

ABSENCES SHOULD NOT EXCEED THE NUMBER OF DAYS INDICATED BELOW:

- One (1) class per week ...... three (3) absences per semester/term
- Two (2) classes per week ...... five (5) absences per semester/term
- Three (3) classes per week ...... seven (7) absences per semester/term
- Four (4) classes per week ...... nine (9) absences per semester/term

A student who accumulates excessive absences will be dropped from class by the instructor.

EACH STUDENT MUST ATTEND CLASS ON TIME. Three (3) tardies count as an absence. A student is tardy when he/she is more than five (5) minutes late for a scheduled class or leaves a class before class is dismissed by the instructor.

IT IS THE RESPONSIBILITY OF EACH STUDENT TO KEEP UP WITH CLASS ATTENDANCE. A student should verify his/her attendance and tardies record with the instructor.

It is each student's responsibility to withdraw officially from a class by contacting the Registrar's Office. ANY STUDENT WHO DOES NOT ATTEND CLASS DURING THE DROP/ADD PERIOD WILL BE DROPPED FROM THE CLASS ROLL. Termination or withdrawal from class can affect eligibility for federal financial aid. For more information, a student may contact the Office of Student Financial Services.

The decision to reinstate a student dropped due to excessive absences will be based upon extenuating circumstances and an evaluation by the instructor to determine if the student has demonstrated the ability to complete the course requirements for the semester/term. A student must be able to verify extenuating circumstances such as sickness, death in the immediate family, military duty, jury duty, or certain legal obligations. Work-related circumstances usually will not excuse an absence. A student is responsible for any lab, examinations, or class work missed. There are no free cuts.

Attendance requirements in programs that lead to board licensing, such as nursing, may differ from the policy set out above.

CHANGE OF MAJOR
A student who desires to change his/her major course of study must consult with his/her faculty advisor, complete a Change of Major form, and submit the form to the Admissions Office. Approval for a change of major will depend on the recommendation of the Director of Admissions and the availability of training space within the program.

CLASS SCHEDULE CHANGE
Changes in class schedules may be necessary under certain circumstances. To make changes in a schedule, a student should follow the procedure that is listed below:

1. Obtain a Drop/Add form from his/her advisor or the Registrar's Office.
2. Record the class(es) he/she wishes to add or drop on the form.
3. Check with the Office of Student Financial Services in order to determine how this change will affect his/her financial assistance if the class load is being dropped below 12 hours.
4. Contact the instructor whose class he/she is adding or dropping so that the instructor may sign and approve the change.
5. Contact his/her faculty advisor for final approval of the schedule change and the advisor's signature. The Drop/Add form must be submitted to the Registrar's Office for processing.

The last day to change a schedule without penalty is the last day of the drop/add period.
Course Drop
A student who discontinues a course without officially completing withdrawal procedures will receive a grade of "FA" for the course. A student should not simply stop attending classes. To withdraw officially from a course, a student must contact the instructor for that course to complete a withdrawal form. The last day to drop a course without the possibility of negatively affecting a grade point average is the end of the third week after classes have begun.

CLASSIFICATION OF STUDENTS
In order to maintain full-time status, a student must be enrolled for a minimum of 12 credit hours per semester/term. A student who enrolls for less than 12 credit hours per semester/term is considered a part-time student.

A student who plans to register for 21 or more credit hours must secure approval from his/her academic advisor and the Dean of Students.

EVALUATION
Instructors will give tests, quizzes (oral or written), projects, and work assignments. Scheduled final examinations will be administered during the last week of each semester/term. The examination schedule will be published by the Dean of Instruction.

A student who misses tests and examinations is responsible for making arrangements with his/her instructors regarding make-up exams.

GRADING SYSTEM
Courses for which a student has registered could be assigned one of the letter grades as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Definition</th>
<th>Credit Hours</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (90 - 100)</td>
<td>Excellent</td>
<td>4 points</td>
<td></td>
</tr>
<tr>
<td>B (80 - 89)</td>
<td>Good</td>
<td>3 points</td>
<td></td>
</tr>
<tr>
<td>C (70 - 79)</td>
<td>Average</td>
<td>2 points</td>
<td></td>
</tr>
<tr>
<td>D (60 - 69)</td>
<td>Poor</td>
<td>1 point</td>
<td></td>
</tr>
<tr>
<td>F (Below 60)</td>
<td>Failure</td>
<td>0 points</td>
<td></td>
</tr>
<tr>
<td>FA</td>
<td>Failure for lack of attendance as determined by college policy. Credit hours will be averaged into the Grade Point Average.</td>
<td>0 points</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Incomplete. Required work must be made up no later than the first four weeks of the following semester/term, or the &quot;I&quot; becomes an &quot;F&quot;.</td>
<td>0 points</td>
<td></td>
</tr>
</tbody>
</table>

The following grades may be assigned to institutional credit courses such as developmental courses and Training for Business/Industry courses:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Definition</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4 quality points per hour</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3 quality points per hour</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>2 quality points per hour</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>1 quality point per hour</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>0 quality points per hour</td>
<td></td>
</tr>
<tr>
<td>FA</td>
<td>0 quality points per hour</td>
<td></td>
</tr>
<tr>
<td>WF</td>
<td>0 quality points per hour</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>0 quality points per hour</td>
<td></td>
</tr>
</tbody>
</table>

The formula for computing a student's Grade Point Average (GPA) is as follows: Total number of grade points earned divided by total number of term hours attempted equals GPA. (Note: Student Support Services, college developmental, and Training for Business/Industry courses do not affect the Cumulative Grade Point Average. These courses are averaged only for the semester/term GPA.)

As an example:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>3</td>
<td>B (3 points)</td>
<td>9</td>
</tr>
<tr>
<td>Elementary Algebra</td>
<td>3</td>
<td>C (2 points)</td>
<td>6</td>
</tr>
<tr>
<td>Orientation</td>
<td>1</td>
<td>A (4 points)</td>
<td>4</td>
</tr>
<tr>
<td>Beginning Keyboarding Computer Fundamentals</td>
<td>3</td>
<td>B (3 points)</td>
<td>9</td>
</tr>
</tbody>
</table>

Total Credit Hours 13

Total Quality Points 37

Total Credits Attempted 13 = 2.84 GPA

A student must earn a total Grade Point Average (GPA) of 2.00 (C) on all courses to be eligible for graduation.

STANDARDS OF ACADEMIC PROGRESS

1. A student who has attempted 12-21 semester credit hours at the college must maintain a 1.5 Cumulative Grade Point Average.

2. A student who has attempted 22-32 semester credit hours at the college must maintain a 1.75 Cumulative Grade Point Average.

3. A student who has attempted 33 or more semester credit hours at the college must maintain a 2.0 Cumulative Grade Point Average.

Intervention for Student Success
When a student is placed on Academic Warning, Academic Probation, One-Semester/Term Academic Suspension, or One Calendar Year Academic Suspension, college officials may provide intervention for a student by taking steps including, but not limited to, imposing maximum course loads, requiring a study skills course, and/or prescribing other specific courses.

Application of Standards of Progress
1. When the Cumulative GPA is at or above the GPA required for the total number of credit hours attempted at the institution, a student's status is Clear.

2. When a student's Cumulative GPA is below the GPA required for the number of credit hours attempted at the institution, a student is placed on Academic Warning.

3. When the Cumulative GPA of a student who is on Academic Warning remains below the GPA...
required for the total number of credit hours attempted at the institution but the semester/term GPA is 2.0 or above, a student remains on Academic Warning.

When the Cumulative GPA of a student who is on Academic Warning remains below the GPA required for the total number of credit hours attempted at the institution and the semester/term GPA is below 2.0, a student is placed on Academic Probation.

When the Cumulative GPA is at or above the GPA required for the total number of credit hours attempted at the institution, a student's status is Clear.

When the Cumulative GPA of a student who is on Academic Probation remains below the GPA required for the total number of credit hours attempted at the institution and the semester GPA is below 2.0, a student is suspended for one term. The transcript will read: SUSPENDED—ONE SEMESTER.

When the Cumulative GPA is at or above the GPA required for the total number of credit hours attempted at the institution, a student's status is Clear.

A student who is suspended for one semester may appeal. If, after appeal, a student is readmitted without serving the one semester suspension, the transcript will read: SUSPENDED—ONE SEMESTER/READMITTED UPON APPEAL.

A student who is readmitted upon appeal re-enters the institution on Academic Probation.

A student who is on Academic Probation after being suspended for one semester (whether a student served the suspension or has been readmitted upon appeal) without having since achieved Clear academic status and whose Cumulative GPA falls below the level required for the total number of hours attempted at the institution but whose semester GPA is 2.0 or above will remain on Academic Probation until a student achieves the required GPA for the total number of hours attempted.

A student who is on Academic Probation after being suspended for one semester/term (whether a student served the suspension or was readmitted upon appeal) without having since achieved Clear academic status and whose Cumulative GPA remains below the level required for the total number of hours attempted at the institution and whose semester GPA is below 2.0 will be suspended for one calendar year. The transcript will read: SUSPENDED—ONE YEAR.

7. A student returning from a one-term or one-year suspension and, while on academic probation, fails to obtain the required GPA for the number of hours attempted and fails to maintain a semester/term GPA of 2.0, will be placed on a one-year suspension.

8. A student may appeal a one-semester/term or one-year suspension.

9. The permanent student record will reflect the student's status (except when the status is Clear). When appropriate, the record will reflect ACADEMIC PROBATION, ACADEMIC SUSPENSION—ONE TERM, ACADEMIC PROBATION—ONE YEAR, ONE-TERM SUSPENSION—READMITTED ON APPEAL, or ONE-YEAR SUSPENSION—READMITTED ON APPEAL.

Process for Appeal for Readmission
If a student declares no contest of the facts leading to suspension but simply wishes to request consideration for readmission, he/she may submit a request in writing for an 'appeal for readmission' to the Admissions Committee within a designated, published number of days of receipt of the notice of suspension. During the meeting of the Admissions Committee, which shall not be considered a "due process" hearing but rather a petition for readmission, a student shall be given an opportunity to present a rationale and/or a statement of mitigating circumstances in support of immediate readmission. The decision of the Admissions Committee, together with the materials presented by a student, shall be placed in the college's official records. Additionally, a copy of the written decision shall be provided to a student. Equity, reasonableness, and consistency should be the standards by which such decisions are measured.

Definition of Terms
Grade Point Average (GPA)
The Grade Point Average based on all hours attempted during any one semester/term at the institution based on a 4-point scale.

Cumulative Grade Point Average (GPA)
The Grade Point Average based on all hours attempted at the institution based on a 4-point scale.

Clear Academic Status
The status of a student whose Cumulative Grade Point Average (GPA) is at or above the level required by this policy for the number of credit hours attempted at the institution.

Academic Warning
The status of a student whose Cumulative Grade Point Average (GPA) is below the level required by this policy for the total number of credit hours attempted at the institution.

Academic Probation
1. The status of a student who was on Academic Probation the previous semester/term and whose Cumulative GPA falls below the level required by this policy for the total number of credit hours attempted at the institution;

2. The status of a student who was on Academic Warning the previous semester/term and whose Cumulative GPA remained below the level required by this policy for the total number of credit hours attempted at the institution but whose semester GPA for that semester/term was 2.0 or above.

Academic Suspension
1. The status of a student who was on Academic Probation the previous semester/term and whose Cumulative GPA falls below the level required by this policy for the total number of credit hours attempted at the institution;

2. The status of a student who was on Academic Probation the previous semester/term and whose Cumulative GPA fell below the level required by the policy for the total number of credit hours attempted at the institution but whose semester GPA for that semester/term was 2.0 or above.

One-Semester Academic Suspension
The status of a student who was on Academic Probation the previous semester/term but who has never been suspended or who, since suspension, had achieved Clear academic status and whose Cumulative GPA that term was below the level required by this policy for the total number of credit hours attempted at the institution and whose semester GPA for that semester/term was below 2.0.

One-Year Academic Suspension
The status of a student who was on Academic Probation the previous semester/term but who has never been suspended or who, since suspension, had achieved Clear Academic Status and whose Cumulative GPA that semester/term was below the level required by this policy for the total
number of credit hours attempted at the institution and whose semester GPA for that semester/term was below 2.0.

Appeal of Suspension
The process by which an institution shall allow a student suspended for one semester/term or one year (whether a "native" student or a transfer student) to request readmission without having to serve the suspension.

Academic Failure
The college wants every student to be successful in his or her studies. It is important for a student who is not meeting his or her academic goals to take advantage of advising and academic services offered by the college. Should a student begin failing a course, it is his/her responsibility to schedule a conference immediately with his/her instructor to discuss the matter.

STANDARDS OF PROGRESS FOR STUDENTS ENROLLED IN INSTITUTIONAL CREDIT COURSES
Institutional credit courses are those courses that are not creditable toward a formal award and include Training for Business and Training for Industry courses and courses numbered below the 100 level.

The college may assign grades other than those generating quality points to institutional credit courses. The approved grades are Satisfactory (S), Unsatisfactory (U), and In Progress (IP). Special Standards of Progress for students enrolled in these courses are as follows:

1. A student who is enrolled in an institutional credit course and who receives a grade of U or IP one semester/term may not take the course a second semester/term until he/she receives special academic advising. This process may include, but is not limited to, imposing maximum course limits, requiring a study skills course, and/or prescribing other specific courses.

2. After the second semester/term in which a student receives a grade of U or IP in the same course, a student must appeal through the institution's appeal process before a student will be allowed to re-enroll in the course.

Standards of Academic Progress: Transfer Students
The following standards of progress shall apply to each student who has previously attended another regionally accredited postsecondary institution:

1. A transfer student who is admitted on Clear Academic Status, that is satisfactory progress, is subject to the same standards of academic progress as a first-time college student. Grades accrued at another regionally accredited postsecondary institution are not included in GPA calculations.

2. A transfer student who is admitted on Academic Probation retains that status until he/she has attempted at least 12 credit hours at the institution. If, at the conclusion of the semester/term in which he/she has attempted a total of 12 or more semester credit hours at the institution, the Cumulative GPA at the institution is below 1.5, the student will be suspended for one semester/term. The transcript will read SUSPENDED—ONE SEMESTER.

3. If, at the conclusion of the semester/term in which a transfer student admitted on Academic Probation has attempted a total of 12 or more credit hours at the institution, the Cumulative GPA at the institution is 1.5 or above, the student's status is Clear.

ACADEMIC BANKRUPTCY
1. A student may request in writing to the Registrar to declare Academic Bankruptcy under the following conditions:

   a. If fewer than three (3) calendar years have elapsed since the semester/term for which a student wishes to declare bankruptcy, a student may declare Academic Bankruptcy on all coursework taken during the semester/term provided a student has taken at least 60 semester credit hours of coursework at the institution since the bankruptcy term occurred. All coursework taken, even hours completed satisfactorily during the semester/term for which Academic Bankruptcy is declared, will be disregarded in the Cumulative Grade Point Average.

   b. If three (3) or more calendar years have elapsed since the most recent semester/term for which a student wishes to declare bankruptcy, a student may declare Academic Bankruptcy on all coursework taken during 1-3 semester/term(s) provided a student has taken a minimum of 18 semester credit hours of coursework at the institution since the bankruptcy semester/term occurred. All coursework taken, even hours completed satisfactorily during semester/term(s) for which Academic Bankruptcy is declared, will be disregarded in the Cumulative Grade Point Average.

2. When Academic Bankruptcy is declared the term, "ACADEMIC BANKRUPTCY," will be reflected on the transcript for each semester/term affected.

   When Academic Bankruptcy is declared, the transcript will reflect the semester/term of its implementation and the transcript will be stamped "ACADEMIC BANKRUPTCY IMPLEMENTED."

3. A student may declare Academic Bankruptcy only once.

4. Implementation of Academic Bankruptcy at an institution does not guarantee that other transfer institutions will approve such action. This determination will be made by the respective transfer institutions.

ACADEMIC HONORS
Bessemer State Technical College provides selected academic honors to recognize and promote notable student achievements. These academic honors include:

Dean's List
The Dean's List is compiled at the end of each semester/term. Requirements for the Dean's List are (1) a semester Grade Point Average of 3.0 or above but below 4.0 and (2) completion of a minimum course load of 12 semester credit hours of college-level work. Developmental (pre-collegiate) courses carrying grades of A-F will be calculated in each semester/term's GPA; however, developmental courses will not count toward the minimum course load requirement.

President's List
The President's List is compiled at the end of each semester/term. Requirements for the President's List are (1) a semester Grade Point Average of 3.5 or above but below 4.0 and (2) completion of a minimum course load of 12 semester credit hours of college-level work. Developmental (pre-collegiate) courses carrying grades of A-F will be calculated in each semester/term's GPA; however, developmental courses will not count toward the minimum course load requirement.

FALSIFICATION OF RECORDS
Any falsifying of records by a student will disqualify him or her from receiving academic credit or earning a graduation award from Bessemer State Technical College.
GRADUATION REQUIREMENTS

A student successfully completing his/her course requirements will be awarded either an Associate in Applied Technology Degree, Associate in Occupational Technology Degree, diploma, or certificate depending on the courses completed. The last day a student can apply to be a candidate for graduation is the end of the sixth week of the student's last semester/term at BSTC.

A student's advisor must submit a request to the Registrar recommending him/her for either an Associate in Applied Technology Degree, Associate in Occupational Technology Degree, diploma, or certificate.

Graduation exercises are held once a year at the end of spring semester/term.

All fees and bills for services rendered by the college and a $10 graduation fee must be paid to the Cashier's Office before a student is granted an Associate in Applied Technology Degree, Associate in Occupational Technology Degree, diploma, or certificate.

Each Associate in Applied Technology Degree, Associate in Occupational Technology Degree, diploma, or certificate will stipulate the specialty area in which it is earned.

It is the responsibility of each student to consult with his/her major advisor in scheduling classes in order to complete graduation requirements.

Associate in Applied Technology Degree Requirements

A student shall be awarded the Associate in Applied Technology Degree upon satisfactory completion of the requirements of the specific program as specified by the college and the State Board of Education.

A student must:
1. Satisfactorily complete 60 semester hours or more of college credit in approved programs of study, including prescribed general education courses.
2. Earn a 2.0 Cumulative Grade Point Average in all courses attempted at the college. The calculation of the Grade Point Average for graduation shall not include grades earned in institutional credit courses. A course may be counted only once for purposes of meeting graduation requirements.
3. Complete at least 25 percent of the credit hours at the college granting the degree.
4. Meet all requirements for graduation within a calendar year from the last quarter/semester of attendance.
5. Transfer credit hours from a regionally accredited institution with a passing grade in the course(s) creditable toward graduation requirements.
6. Complete and submit an Application for Graduation form to the Registrar's Office prior to application deadline.
7. Fulfill all financial obligations to the college.

Associate in Occupational Technology Degree Requirements

A student shall be awarded the Associate in Occupational Technology Degree upon satisfactory completion of the requirements of the specific program as specified by the college and the State Board of Education.

1. Satisfactorily complete 60 semester hours or more of college credit in approved programs of study, including prescribed general education courses.
2. Earn a 2.0 Cumulative Grade Point Average in all courses attempted at the college. The calculation of the Grade Point Average for graduation shall not include grades earned in institutional credit courses. A course may be counted only once for purposes of meeting graduation requirements.
3. Complete at least 25 percent of the credit hours at the college granting the degree.
4. Meet all requirements for graduation within a calendar year from the last quarter/semester of attendance.
5. Transfer credit hours from a regionally accredited institution with a passing grade in the course(s) creditable toward graduation requirements.
6. Complete and submit an Application for Graduation form to the Registrar's Office prior to application deadline.
7. Fulfill all financial obligations to the college.

A student must:
1. Satisfactorily complete an approved program of study.
2. Earn a 2.0 Cumulative Grade Point Average in all courses attempted at the college. The calculation of the Grade Point Average for graduation shall not include grades earned in institutional credit courses. All grades in repeated courses shall be averaged into the grade point average; however, a course may be counted only once for purposes of meeting graduation requirements.
3. Complete at least one-half of the total semester credit hours or the equivalent quarter hours required in the program at the college granting the award.
4. Meet all requirements for graduation within a calendar year from the last quarter/semester of attendance.
5. Transfer credit hours from a regionally accredited institution or institutions comprising The Alabama College System with a minimum grade of "C" in courses creditable toward graduation.
6. Complete and submit an Application for Graduation form to the Registrar's Office prior to graduation.
7. Fulfill all financial obligations to the college.

GRADUATION WITH HONORS

The college provides academic honors to recognize and promote notable student achievement. These academic honors include: (1) Graduation Honors for Degrees to include Graduation with Honors, Graduation with High Honors, and Graduation with Highest Honors; and (2) Graduation Honors for Other Formal Awards (diplomas and certificates) to include Graduation with Distinction.

Graduation Honors for Degrees

Superior academic achievement by a graduating student shall be recognized by the following designations on his or her transcript:

Graduation with Honors ........................................... 3.50 to 3.69 GPA
Graduation with High Honors .............................. 3.70 to 3.89 GPA
Graduation with Highest Honors .......................... 3.90 to 4.00 GPA

Diploma and Certificate Requirements

A student may be granted a diploma or certificate upon satisfactory completion of the requirements of the program as specified by the college in accordance with policies of the State Board of Education.
STUDENT FINANCIAL SERVICES

TUITION AND FEES
The following tuition and fees are applicable to students. Tuition and fee rates are subject to change.

Tuition: $48 per credit hour

Fees:
- Facility Renewal Fee ............. $4 per credit hour
- Late Registration Fee
  (Assessed on the first day of semester/term) .. $25
- Returned Check Fee ............... $25
- Graduation Fee ....................... $10
- Transcript .......................... $3 (three copies free)
- Student Accident Insurance ........ $8 per semester/term
- Student Nursing
- Malpractice Insurance .......... $15 per year
- Student Dental
- Malpractice Insurance .......... $15 per year
- Student EMT
- Malpractice Insurance .......... $20 per semester/term
- LPT Test Fee 1 ...................... $10 each test
- LPT Test Fee 2 ...................... $10 each test

NOTE: Tuition for an out-of-state and an international student is double that for an in-state student. Fees remain the same.

REFUND POLICY
Definition of Refund
Refunds are amounts paid for tuition, fees, and books that are returned or "refunded" when a student withdraws from classes. Refunds are applicable to tuition and the facility renewal fee. Late registration fees are not refundable. Student insurance premiums are refundable only if the student never attends classes. If a student receives federal financial aid, refunds are returned to the federal aid program, usually the Pell Grant. Any refund amount in excess of the amount due the Pell program is refunded to other federal programs, if applicable, or to the student. Refunds to students are paid by check and are available from the Business Office seven to ten days after the Drop/Add form is completed.

Definition of Withdrawal Date
A student's withdrawal date is the last recorded day of attendance in a class. If all classes are dropped, the latest date of attendance is used in the calculation of the refund.

Partial Withdrawal
A student who does not completely withdraw from the college but drops a class during the regular drop/add period will be refunded the difference in tuition paid and the tuition rate applicable to the reduced number of hours, including fees appropriate to the classes dropped. There is no refund due to a student who partially withdraws after the official drop/add period.

State Refund Policy
In accordance with State Board policy, a student who officially or unofficially withdraws from all classes before the first day of class will be refunded the total tuition and other institutional charges. A student who officially or unofficially withdraws completely on or after the first day of class but prior to the end of the third week of class will be refunded according to the withdrawal date, as follows:

Withdrawal during first week: 75 percent of tuition and other institutional charges
Withdrawal during second week: 50 percent of tuition and other institutional charges
Withdrawal during third week: 25 percent of tuition and other institutional charges
Withdrawal after end of third week: No refund

Administrative Fee
An administrative fee not to exceed 5 percent of tuition and other institutional charges or $100, whichever is smaller, shall be assessed for each withdrawal within the period beginning the first day of class and ending at the end of the third week of class.

Books and Supplies
A student who withdraws and who has purchased returnable books and/or supplies from the college and returns the items in new/unused condition by the end of the third week of the semester/term will be refunded the full purchase price. Books and/or supplies returned in used condition by the end of the third week of the semester/term will be refunded 50 percent of purchase price.

REFUND IN COMPLIANCE WITH FEDERAL REGULATIONS
All colleges shall comply with federal regulations relative to refund of tuition and other institutional charges for first-time, first-term Title IV recipients.
First-time Students at Bessemer State Who Receive Federal Aid
A first-time student who withdraws from all classes is issued either the State Board refund (described above) or a pro-rata refund, whichever is larger.

Pro-rata Refund
The pro-rata refund of tuition and fees is calculated as follows:

<table>
<thead>
<tr>
<th>Withdrawal Date</th>
<th>Percent Refunded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to the beginning of the semester/term</td>
<td>100%</td>
</tr>
<tr>
<td>Up to the 10 percent point</td>
<td>90%</td>
</tr>
<tr>
<td>Up to the 20 percent point</td>
<td>80%</td>
</tr>
<tr>
<td>Up to the 30 percent point</td>
<td>70%</td>
</tr>
<tr>
<td>Up to the 50 percent point</td>
<td>60%</td>
</tr>
<tr>
<td>Between the 50 percent point and the 60 percent point</td>
<td>50%</td>
</tr>
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<td>40%</td>
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* The 10 percent point during fall and spring semesters occurs at 1.5 weeks into each term. The 10 percent point during summer term occurs at 1.2 weeks into the term.

Example
Fall semester begins August 21. A 90 percent refund would be issued to a student who withdraws from all classes or ceases attendance in all classes between August 21 and September 1.

No refunds are issued past the 60 percent point in the enrollment period.

Administrative Fee
An administrative fee of 5 percent or $100 (whichever is less) will be deducted from tuition and fees before each refund is calculated.

Books and Supplies
A student who withdraws and who has purchased returnable books and/or supplies from the college and returns the items in new/unused condition by the end of the third week of the semester/term will be refunded the full purchase price. Books and/or supplies returned in used condition by the end of the third week of the semester/term will be refunded 50 percent of purchase price.

Students at Bessemer State Technical College may receive Federal Financial Aid as defined in the Student Financial Services section. The purpose of this section is to delineate the various steps associated with pursuing Federal Financial Aid.

Refund for Alabama National Guard and Reservists Called to Active Duty
A student who is an active member of the Alabama National Guard or a reservist or who is active duty military who is called to active duty in the time of national crisis shall receive a full tuition refund at the time of withdrawal if such student is unable to complete the semester/term due to active duty orders or assignment to another location.

Addition of Classes
A student who adds credit hours during the drop/add period will be charged additional tuition at the applicable rate.

STUDENT FINANCIAL SERVICES
General Statement
The primary purpose of student financial aid programs at Bessemer State Technical College is to provide financial assistance to a student who, without such aid, would be unable to attend college. The Office of Student Financial Services, which administers financial aid programs, is located in Building A. Office hours are 8 a.m. to 4 p.m., weekdays, and 5 p.m. to 7 p.m., Monday and Tuesday nights.

Student financial need is defined simply as the difference between the cost of education and the amount of money a student and/or his or her family can reasonably be expected to make available from personal income and assets to meet those costs.

Family Contribution
An Expected Family Contribution (EFC) is determined by completing a Free Application for Federal Student Aid (FAFSA). A national formula determines the EFC by taking into consideration the family's size, the number of family members in college, taxed and untaxed income, and assets.

The less a family can contribute, the more financial need a student will have. Financial need may be met with grants, work-study, scholarships, veterans benefits, Job Training Partnership Act (JTPA), or a combination of these types of aid. Other resources such as Vocational Rehabilitation and external scholarships may meet all or part of a student's need for assistance and are considered in the awarding of other types of federal aid.

Financial Aid Application Procedure
The Free Application for Federal Student Aid (FAFSA) is available through the BSTC Office of Student Financial Services, a local high school guidance counselor, or the public library. It should be completed at least six to eight weeks before the beginning of the semester/term in which a student will be entering school. Four to six weeks after mailing the application to the federal processor, a Student Aid Report (SAR) will be sent to the student.

The SAR may be brought to the college's Office of Student Financial Services to determine what, if any, aid a student may receive. An applicant will also complete a Student Data form and may be asked to provide other information (copies of tax returns, verification work sheets, etc.) at that time. For the 98-99 school year, Pell Grant recipients will be those students whose SARs have EFCs of 2800 or below. Those with EFCs above 2800 may be eligible to participate in the Federal Work-Study program.

If help is needed in completing the Free Application for Federal Student Aid, a student may bring the application and the previous year's tax return to the Office of Student Financial Services.

General Eligibility Criteria
The criteria for receiving Federal Financial Aid is as follows:

1. A student must have financial need.
2. A student must have a high school diploma or a GED certificate or pass an independently administered test approved by the U.S. Department of Education.
3. A student must be enrolled as a regular student (i.e. pursuing a degree, diploma, or certificate) in an eligible program of study.
4. A student must be a U.S. Citizen or eligible non-citizen.
5. A student must have a valid Social Security Number.
6. A student must make satisfactory academic progress.
7. A student must sign a statement of educational purpose and a certification statement on refunds and defaults.
8. A student must register with the Selective Service if required.
9. A student must not owe a refund on a federal grant or be in default on a federal educational loan.
TYPES OF FINANCIAL ASSISTANCE

Federal Aid Programs

Federal Pell Grant Program
This major federal grant program ranges in value from $152-$1,140 per semester/term for the fall and spring semesters/terms and from $96-$720 for the summer term. Payments are made by check directly to each student who qualifies approximately halfway through each semester/term. A waiver is available to a student who is not able to pay tuition costs during pre-registration. After enrollment, books and supplies may also be charged on the waiver up to the value of the Pell Grant. This is a voluntary procedure by which direct school expenses are deducted from a student’s semester/term check.

Federal Supplemental Educational Opportunity Grant (FSEOG)
This federal grant program is available to Pell Grant recipients with exceptional financial need. Because funding in this program is very limited, not all students who apply and are otherwise eligible are awarded.

State Student Incentive Grant (SSIG)
This combination federal/state grant is also available only to exceptionally needy Pell Grant recipients. Because funding in this program is very limited, not all students who apply and are otherwise eligible are awarded.

Federal Work-Study Program (FWSPI)
This federal job program provides part-time work opportunities for students who show financial need. Most job placements are on campus, and a student earns minimum wage while working 8-20 hours weekly. Job placement is based on job availability and skills required, as well as a student’s financial need and desire to work.

Stafford Loan Program (formerly GSL)
BSTC no longer participates in this federal loan program.

Other Assistance Programs Provided Through the Office of Student Financial Services

Academic Scholarships
Tuition scholarships are available to outstanding currently enrolled students, high school seniors, and selected VICA tournament winners. Criteria for a currently enrolled student includes completing at least 15 semester credit hours at BSTC with a GPA of 3.5 or better. A letter of recommendation and scholarship application must also be received. Scholarships are renewable each semester/term contingent upon maintaining a 3.0 ('B') Grade Point Average.

Senior Adult Scholarships
Tuition scholarships are available to Alabama residents, aged 60 and above, who register for credit courses at BSTC. These tuition waivers are given on a space-available basis.

Veterans Benefits
Several types of Veterans benefits are available to eligible students. Please see the Veterans Affairs (VA) section for more information.

Job Training Partnership Act (JTPA)
JTPA benefits are available for eligible economically disadvantaged students or displaced workers. A student must receive approval to participate from the State Employment Service Office and be selected as a participant by BSTC before receiving benefits from JTPA. Benefits include tuition, fees, a book allowance, and, in some cases, a stipend. Please see the JTPA Program and Policies section for more information.

Emergency Loans
A very limited amount of institutionally controlled funds are available to students needing help to pay tuition. An applicant must be determined eligible for financial aid. Repayment is due within 90 days of loan receipt.

Student Rights and Responsibilities
A student attending Bessemer State Technical College on financial aid has certain rights and responsibilities pertaining to his/her award. These are listed below:

Student Rights
The student has the right to ask the college:
- What financial assistance is available, including information on all federal, state, and institutional financial aid programs.
- What the deadlines are for submitting applications for each of the financial aid programs available.
- What the cost of attending the college is, and what the refund policy is.
- What criteria it uses to select financial aid recipients.
- How financial need is determined. This process includes how costs for tuition and fees, room and board, travel, books and supplies, personal and miscellaneous expenses, etc., are considered in the budget.
- What resources (such as family contribution, other financial aid, assets, etc.) are considered in the calculation of need.

- How much of the financial need, as determined by the institution, has been met.
- To explain the various programs in the student aid package. If a student believes he/she has been treated unfairly, he/she may request reconsideration of the award which was made to him/her.
- What portion of the financial aid received must be repaid, and what portion is grant aid.
- How the school determines whether a student is making satisfactory progress, and what happens if he/she is not.

Student Responsibilities
It is a student’s responsibility to:
- Review and consider all information about a school’s program before enrolling.
- Pay special attention to the application for student financial aid. Complete it accurately and submit it, on time to the right place. Errors can result in delays in a student’s receipt of financial aid. Intentional misreporting of information on application forms for federal financial aid is a violation of law and is considered a criminal offense, subject to penalties under the Criminal Code of the United States. The Inspector General’s office will be notified in such cases.
- Return all additional documentation, corrections, and/or new information requested by either the Office of Student Financial Services or the agency to which the application is submitted.
- Read and understand all forms that he/she is asked to sign and keep copies of them.
- Accept responsibility for all agreements he/she signs.
- Notify the lender of changes in his/her name, address, or school status for each loan.
- Perform the work that is agreed upon in a satisfactory manner when accepting a Federal Work Study assignment.
- Know and comply with the deadlines for application and reapplication for aid.
- Know and comply with the school’s refund procedure.
- Notify the Registrar’s Office, in writing, whenever there is a change of name or address.
A student applying for financial assistance may be required to submit copies of tax returns, proof of financial independence from parents, household size, number of family members in college, and any other item identified by the Office of Student Financial Services.

**Satisfactory Academic Progress Policy**

A student receiving federal financial aid through the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG), State Grant (SSIG), and/or the Federal Work-Study Program (FWS), must make satisfactory progress toward a degree, diploma, or certificate according to federal regulations to receive and retain eligibility for funds. There are three components to satisfactory academic progress as explained below:

1. A student must maintain a Grade Point Average each semester/term of at least 2.0 (“C”).

2. A student must successfully complete with a grade of “D” or better at least 67 percent of the classes attempted each semester/term.

A student in violation of either of these two components will be placed on probation for one semester/term. During this probationary semester/term, a student will continue to receive financial aid but must improve the GPA to a 2.0, and successfully complete at least 67 percent of the hours attempted. Failure to do so will result in suspension of financial aid. A student wishing to be considered for financial aid after termination must bring his/her academic record into compliance with the above policy while attending school at his/her own expense. When a student is in compliance with the policy again, he/she must request in writing that his/her financial aid be reinstated.

3. A student must also complete program requirements within a certain timeframe.

Bessemer State will allow a student to receive federal financial aid for up to 1.5 times the normal number of semesters/terms required for the degree, diploma, or certificate. This applies to both full-time and part-time students.

**Examples**

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<tr>
<th>Normal Length of Program</th>
<th>Number of Terms Allowed on Financial Aid to Complete Program</th>
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**Other Important Information**

Excessive withdrawals, incompletes, and/or repeated classes may also result in a probationary semester/term or suspension of federal financial aid. A student wishing to appeal the decision to terminate federal financial aid may do so by writing the Director of Student Financial Services explaining the reason(s) a student failed to meet the requirements. Documentation to support the reason(s) is required.

**Veterans Affairs**

Bessemer State Technical College has a Veterans Affairs Assistant located within the Office of Student Financial Services in Building A. The assistant aids a veteran in minimizing the problems of adapting to an educational environment. Services provided include counseling, referral services, general and specific information about all available benefits, and assistance in filing claims for such benefits.

All persons utilizing VA educational assistance while enrolled at BSTC should contact the Veterans Affairs Assistant as soon as admission requirements are completed. All questions concerning regulations governing the use of VA educational assistance should be directed to the Veterans Affairs Assistant.

As soon as the course of study and beginning date have been determined, a student should come by the Office of Student Financial Services with his/her discharge papers (Form DD-214), marriage license, divorce decree (if applicable), and birth certificates of any children. If a student has previously received VA benefits, he/she should also bring the VA file number. At this time, a student will meet with the VA Assistant, and the proper forms and applications for benefits will be completed. If the paperwork is submitted to the VA at least six weeks prior to enrollment, a student may receive advance pay for the first two months of school attendance.

This advance paycheck will be sent to the college; all other checks will be sent to the student’s home address. Except for an advance paycheck, all monthly VA assistance is paid in arrears. Monthly VA checks will be based on attendance in the month most recently completed.

Each semester/term a student will receive an enrollment certification form that must be signed and sent to the regional VA Office immediately. This form generates subsequent checks.

A student going on military leave will be responsible for notifying instructor(s) of his/her orders and will be terminated from all classes. Upon return, a Re-entry form is processed. If a student does not return within the designated time frame, the VA is notified of the termination.

A student receiving VA benefits is required to pre-register for classes. Failure to meet this requirement may result in termination or delay of monthly benefits.

VA benefits at BSTC are based on contact (clock) hours of attendance if the veteran is enrolled in a diploma or certificate program. Twenty-two contact hours per week is full-time and eleven hours is half-time. Benefits are based on credit hours if a veteran is enrolled in an associate degree program. Twelve semester credit hours is full-time, and six semester credit hours is half-time.

A veteran is not entitled to benefits for any period in which credit toward graduation will not be received. This means that if a student terminates training before the end of any semester/term, he/she will be liable for repayment of any benefits received for that semester/term. Any courses taken outside the required course work and repeated courses for which a satisfactory grade has already been received, will not be allowable items covered under VA benefits.
STUDENT DEVELOPMENT SERVICES

The Student Development Services Division is committed to helping each student meet his/her goals. The division assists students with admissions, advisement, registration, orientation, academic support services, student activities, and career planning. For information about services and student activities, contact the Dean of Students.

Regular office hours are 8 a.m. to 4 p.m., Monday through Friday or by appointment. Extended office hours are 4 p.m. to 7 p.m., Monday and Tuesday.

ACADEMIC ADVISEMENT

As the college liaison for each student, the academic advisor is eager to assist each student with his/her academic or career concerns. The advisor can assist with awareness of resources and opportunities that can enhance a student's chance of academic success. Though each student is responsible for his/her academic and personal plans, the advisor shall show a special interest in student success.

Each student is expected to meet at least once each semester/term with his/her advisor to arrange a schedule of classes for the subsequent semester/term. Visits with the academic advisor not only facilitate matching a student's interests, strengths, and goals with career needs, but also provides the advisor an opportunity to become familiar with each student enrolled in the major area.

Because each academic advisor has other college responsibilities, it is important that a student checks for specific office hours when the advisor is available for conferences. "Walk-in" time is appropriate for brief topics, questions, or concerns that are anticipated to take no more than five minutes. For topics that need more time, a student is expected to make an appointment in order to receive sufficient guidance and assistance.

One of the goals of the college is to teach each student to assume responsibility for his/her academic career. In order to accomplish this goal, the following guidelines have been adopted to help a student begin to take charge of his/her academic plan.

The responsible student should:

2. Be familiar with written college policy statements that must be followed in order to complete the degree, diploma, or certificate requirements.
3. Verify that his/her high school and/or college transcripts have arrived in the Registrar's Office and that appropriate written requests have been completed for transfer of credits and/or advanced placement.
4. Be familiar with the current academic calendar (days classes meet, approved holidays, deadlines for add/drop, and final exam dates.)
5. Be familiar with the attendance policy.
6. Consult his/her advisor about his/her degree, diploma, or certificate plans.
7. Be familiar with the requirements of his/her major program and develop a long-range graduation plan. A student should also be aware of any prerequisites that may be required prior to registering for a course. (Reference: ASSET planning sheet that was enclosed with his/her acceptance letter from the Admissions Office.)
8. Pre-register for classes each term in order to insure a place in class. (Registration is not complete unless all tuition and fees are paid.)
9. Monitor the accuracy of his/her grade report each term and report errors to his/her advisor and/or instructor. (An incomplete grade that is not removed within the first four weeks of the following term automatically becomes an "F").
10. Inform the Registrar if a change of name or address occurs. Each student is expected to maintain current and accurate information on file in the Registrar's Office and to respond promptly to all communications from the college. All changes should be submitted to the Registrar.
11. Notify the Counselor if he/she is unable to keep scheduled appointments or if he/she is unable to contact his/her advisor for assistance.

The responsible advisor will:

1. Post specific office hours.
3. Be available to listen to a student's concerns and to discuss options with a student.
4. Provide guidance and referrals as he/she assists a student with choices of a major and career options.
5. Provide information about the requirements for the major program, curriculum options, and graduation.
6. Verify that each student is eligible to enroll and provide guidance in course selections, as they relate to a student's ASSET placement scores and completion of prerequisites.
7. Approve and sign schedules for the upcoming semester/term.
8. Provide interpretation and clarification of college policies.
9. Act as a referral agent to other college support services.
10. Assist with job placement and follow-up.

ACCOMMODATIONS FOR THE DISABLED

In compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, special services and accommodations are given on an individual basis once supporting documentation is provided. It is the responsibility of a student to notify the college of a disability that requires assistance. Requests for accommodations should be made prior to enrollment. All students requesting assistance should contact the Special Needs Coordinator in Building A.

For TDD users in Alabama, the Alabama Relay Center is available by calling 1-800-548-2545 (TT only) or 1-800-548-2547 (voice only). A TDD is available to hearing impaired students in Building A.

ACTIVITIES AND ORGANIZATIONS

The faculty encourages extracurricular activities that develop individual initiative, group leadership, and cooperation. Student organizations are faculty supervised and must be approved by the president.

AWS (American Welding Society)
AWS is a multi-faced, nonprofit organization whose major goal is advancing the science, technology, and application of welding and related joining disciplines. AWS has led the way in supporting welding education and technology development to ensure a strong, competitive, and comfortable way of life for America and its people.
Membership includes a subscription to the *Welding Journal*, the most current welding handbook, discounts on AWS technical publications and educational programs, membership in a local AWS Section, membership certificate, card and insignia, electronic forums, and computer-based research.

**American Dental Assistants Association**
The dental assistant class elects officers each September. The president serves as the class representative to the Executive Board of the Birmingham Dental Assistants Society. Students attend the annual meeting of the Alabama Dental Assistants Association and participate in demonstration, essay, and poster contests sponsored by the society.

**Phi Beta Lambda**
Phi Beta Lambda is the business-related club for students in business majors. State and national competitive events are held each year. Members sponsor activities relating to career information, establishing occupational goals, meetings with business personnel, preparing for transition from school to work, practicing efficient money management, and assuming community responsibility.

**PSI (Professional Secretaries International)**
PSI is a worldwide association committed to the mission of being the acknowledged, recognized leader of office professionals. The primary goal is to enhance the individual and collective image, competence, and influence of secretaries throughout the world. Membership offers opportunities for professional development at the local and international levels, research, and scholarship.

**SME (Society of Manufacturing Engineers)**
SME is an international organization whose purpose is to serve the professional enrichment needs of varied practitioners that make up the manufacturing community.

Member activities include access to SME's database of more than 15,000 papers, articles, and periodicals that relate to the varied manufacturing disciplines; an opportunity to network through conferences and seminars; recognition through certification; employment and resume database assistance; and the development of personal relationships through participation in the Birmingham Area Senior Chapter activities. The Senior Chapter is composed of all levels of the technical community from business owner to technical/transfer personnel. A roster of club members is maintained by each club or organization advisor.

**Student Activities Team**
The Student Activities Team consists of students, faculty, and staff who facilitate campus activities programming and encourage student participation in these extracurricular activities. Student activities programming includes Technology Day, Graduating Student Receptions, Spring Fest, Summer Chill, and Health Awareness. These activities are organized to promote leadership development and encourage individual initiative and cooperation among students. Students in all major programs are invited to get involved in campus activities programming by becoming a member of the Student Activities Team.

**VICA (Vocational Industrial Clubs of America)**
The VICA Club, Postsecondary Division, is open for membership to all students enrolled in vocational and technical courses at the college. The club motto is "Preparing for Leadership in the World of Work." The Skill Olympics Contests are held each spring with local winners competing in the state finals in April. National and international competitions are held in the summer.

Those club and organization members who attend regular or called meetings or other faculty/staff supervised activities should be granted excused absences by their instructors. These absences should not be counted as regular absences. Gradebooks are coded SA (student activities). Students involved should be given the opportunity of making up any assignments missed during their attendance at authorized student meetings and activities. It is a student's responsibility to contact the instructor(s) and to request to make up assignments missed.

**GUIDELINES FOR ACTIVITIES AND CLUB EVENTS**
The name of Bessemer State Technical College may be used by campus organizations for any event on or off campus only when:

1. The event has been approved by the President. Requests in writing explaining details must be submitted to the President ten college workdays prior to the event.
2. The event has approval of the faculty sponsors, who must have full knowledge of the event.

Sponsors must be present for the duration of all student-sponsored events.

**CAREER PLANNING AND JOB PLACEMENT**
It is the philosophy of Bessemer State Technical College to provide skill training that will lead to productive employment. Included in this process is the development of a student's personal traits and habits that are important for job success and awareness of the job market realities.

The Job Placement Office endeavors to maintain an up-to-date file of part-time and full-time jobs for students. Job listings are compiled from businesses and organizations in the Metro Birmingham area.

An attempt is made to refer students to positions that will benefit them financially as well as educationally. Specific job referrals may be obtained upon request.

Other services available include: resume service, job search assistance, civil service announcements for federal, state and county listings, career resource library, including periodicals and other college guides, career and employment literature, job fairs, on-campus interviews and job search workshops.

Students or former students in need of assistance should contact the Job Placement Office, Building A.

**COUNSELING AND GUIDANCE OF STUDENTS**
The guidance program is committed to the establishment of an environment where a student is provided the opportunity to become a responsible, self-directed learner, and to maximize his/her potential as he/she prepares for the world of work. A student is provided information and support in the achievement of realistic career and educational goals in agreement with his/her expressed interests and abilities.

Though the classroom instructor or advisor may be able to address immediate needs and concerns, a student may see a counselor in the Office of Student Development Services for more in-depth counseling or advisement. The counselor may also serve as a resource for off-campus referral.

Counseling is available in the Student Development Services Office and Admissions in Building A.

**INTERVENTION SERVICES**
The college provides intervention services for prospective students and currently enrolled students. These services include individualized counseling for prospective students, monitoring of students' progress to ensure early identification of those having problems, individualized assistance with academic and personal adjustment issues, and
group activities to address study/test-taking strategies and to provide appropriate intervention. For additional information, applicants to the college and students should contact the Intervention Specialist, Building A.

**JTPA PROGRAM AND POLICIES**

Bessemer State Technical College provides a JTPA Coordinator within the Office of Student Development Services in Building A. Services provided to a JTPA student include counseling, advising, referral services, information about JTPA and other financial benefits, and assistance in documenting eligibility and attendance.

A JTPA recipient is required to verify class attendance every two weeks. Timesheets are available every other Tuesday to document attendance for the previous and current weeks. Attendance must be verified regardless of whether or not a student receives the hourly stipend.

A JTPA recipient must pre-register each semester/term for classes. Documentation of eligibility for payment of tuition, fees, and book allowances is forwarded to the College Bookstore at the beginning of the pre-registration period so that charges may be made. A JTPA student must be full-time, must enroll in predominantly day classes, and must maintain uninterrupted enrollment for the duration of contracted services.

A JTPA participant whose benefits are terminated due to academic suspension is not eligible for reinstatement into the JTPA program at BSTC, even though he/she may be permitted to resume classes and other federal financial aid may be reinstated. Academic standards for JTPA participation are the same as standards for receipt and retention of federal financial aid. (See the Satisfactory Academic Progress Policy in the STUDENT FINANCIAL SERVICES section.)

Any exception to JTPA policies and procedures must be approved in advance by the JTPA Coordinator.

**Counseling/support services, free tuition assistance, and personal development/life management skills services are provided to assist participants with acquiring occupational technical training in order to secure gainful employment. These projects help to guarantee the equality of educational opportunities for individuals (as defined by Public Law 101-392) to gain entry into an educational program at Bessemer State Technical College. The Mirror program office is located in the Millsap Industrial Training Center.**

**ORIENTATION**

The Orientation program is designed to provide information that will aid a new student in his/her transition to college and stimulate an excitement for learning. A student is introduced to college policies, procedures, requirements, and services. Each new student must attend an Orientation session during his/her first semester/term of enrollment. A schedule of sessions is published during pre-registration each semester/term.

**STUDENT AMBASSADORS**

Student Ambassadors are outstanding students selected to act as official BSTC hosts or hostesses at various functions throughout the year. Examples of these functions include graduation exercises, campus tours, counselor dinners, job fairs, and other social functions.

Crimson blazers and nametags are provided to each Ambassador while serving at the request of faculty or administration in any public relations endeavor. In addition, a $100 stipend is awarded to each Student Ambassador. The stipend is renewable each semester/term contingent upon grades and continued service as an Ambassador.

Being selected as a Student Ambassador is one of the highest honors a student at Bessemer State Technical College can receive. Criteria for selection as a BSTC Student Ambassador follow:

**Student Ambassador Criteria**

1. Student must have a 3.5 Grade Point Average or better.
2. Student must complete and submit an Ambassador application.
3. Student must be recommended by an instructor at Bessemer State.
4. Student must have an interview with the Selection Committee if requested.

For more information about Student Ambassadors, contact the Assistant to the Dean of Students in Building A.

**STUDENT SUPPORT SERVICES PROGRAM**

The college's Student Support Services (SSS) program is a federally funded TRIO project that offers supportive services to low-income, first-generation college, and disabled students. Services include basic instruction in communication skills (SSS 082), basic math (SSS 080), and basic algebra (SSS 081); assistance with study, test-taking, and survival skills; tutoring in various subjects; and advisement/counseling.

The goal of the program is to increase the retention and graduation rates of eligible students by providing services that they need to remain in college and successfully complete their courses. The program depends on referrals from the Admissions Office and faculty/staff in identifying eligible students and complying with federal requirements regarding the number of participants and outcomes.

Faculty and staff are encouraged to refer academically advanced or transfer students who have maintained a high academic average to apply for peer tutor positions. Successful tutor applicants can earn an hourly wage while tutoring program participants.

Contact the SSS Program Director for additional information or assistance. The SSS Office is located in Building A. Office hours are 8 a.m. to 4:30 p.m., Monday through Friday, or by appointment.
STUDENT INFORMATION

ACCIDENT/INCIDENT PROCEDURE
It is the policy of Bessemer State Technical College to provide immediate medical attention to students in the event of an accident/incident occurring on campus. All accidents/incidents should be immediately reported to the Safety Officer or other security personnel who will inform the Dean of Finance, Dean of Students, and Dean of Instruction.

BOOKSTORE
The college Bookstore, located in Building A, is open Monday through Thursday from 7:30 a.m. to 2 p.m., and 5 p.m. to 7:30 p.m. On Friday, the Bookstore is open from 7:30 a.m. to 2 p.m. The Bookstore's hours of operation are extended during pre-registration and the first week of each semester/term; during this period, it is open from 7:30 a.m. to 7:30 p.m.

The bookstore provides the following services:
- Free Parking Registration Decals
- Combination Lockers
- Textbook Refunds (receipt required)
  New books must be in the same condition as when purchased. Used books must be in resalable condition. Textbooks must be returned within fifteen (15) calendar days from the first day of classes or two (2) calendar days if purchased thereafter. Please note: Textbooks purchased the last week of classes or during examination periods are ineligible for refunds.
- Merchandise Refund (receipt required)
  Merchandise in new condition must be returned within ten (10) calendar days. The following are non-returnable: study guides, examination booklets, special orders, sale merchandise, and opened packages.

CAMPUS SECURITY
The college shall provide a safe environment for students, faculty, staff and other campus visitors. A person who is not a student, officer, or employee of the college, who is not authorized by employment or by status as a student of the college to be on campus or at any other facility owned, operated, or controlled by the governing board of the college, or who does not have legitimate business on the campus or facility, or by any other authorization, license or invitation to enter or remain at the facility, or who is committing any act tending to interfere with the normal, orderly, peaceful, or efficient conduct or activities of such facility, may be directed by an official of the college to leave the campus or facility. If the person fails to do so, trespassing charges may be made by the college through the appropriate local law enforcement agency or court. A student must have a valid student ID in his/her possession when on campus.

The college maintains a staff of uniformed security officers 24 hours a day for everyone's protection. Selected areas on campus are under video surveillance as well. A student should report any suspicious activity to the college telephone operator or a security officer. Security officers are radio dispatched.

A student is requested to promptly report any safety hazard or security concern to the Safety Officer or other security personnel.

Protection of Valuables
The college cannot be responsible for personal property. All valuable articles should be locked in a car trunk or a locker. Serial numbered items should have numbers recorded and kept in a separate location. A student is encouraged to keep a purse, handbag, and the like in his/her possession at all times.

CHANGE OF NAME OR ADDRESS
A student who changes his/her residence or mailing address is expected immediately to notify the Registrar's Office and the Office of Student Services, if he/she is receiving student aid, of this change. Any communication from the college that is mailed to the name and address on record or that is posted on the college bulletin boards is considered to have been delivered, and becomes the responsibility of a student.

DRESS CODE
The following dress code has been formulated by a committee with the objective of creating and maintaining an atmosphere conducive to learning.

The policies are consistent with efforts to improve the health, physical appearance, safety, and welfare of BSTC students.

1. A student should always be well groomed and dressed appropriately for classes. Being well groomed refers to cleanliness of the body, hair, and clothing.
2. A student should not wear any sign, symbol, or other mode of dress that would antagonize other students, disrupt the atmosphere of learning, or attract undue attention to the wearer.
3. A student must wear shoes at all times on campus.
4. A student may wear a hat in classrooms, laboratories, and shops only in accordance with sound safety practices.
5. A student wearing long hair in shop training is required to follow sound health and safety rules of controlling the hair from hanging down in the face and being exposed to moving equipment.
6. All shop instructors are charged with the responsibility of requiring their students to wear clothes in keeping with good sound safety rules of the Federal Occupational Safety and Health Act.

In many programs, a student may be encouraged to purchase clothing applicable to the trade or occupation related to his/her training. In some programs, protective eye glasses and protective footwear are required.

Clothing should be appropriate and should be neat, clean, nontoxic, and decent. For health reasons, footwear is necessary. Hair should be neat, clean, and well groomed at all times. Prohibited are the nude look, see-through blouses, and revealing fashions without appropriate concealing undergarments.

EMERGENCY MESSAGES
It is impossible to attempt to deliver telephone messages to a student except those of an emergency nature. College personnel will attempt to deliver only emergency messages such as illness in the family, death, an accident, and the like to a student.

EMERGENCY PROCEDURES
Evacuation Plan
The purpose of the evacuation plan is to provide a system of alerting and moving students as well as employees to a safe area during a fire, tornado, or any situation that may pose a threat of bodily harm.

Fire Evacuation Procedures
Should a fire occur in any department the following action must be taken immediately:

1. Attempt to extinguish the fire with a fire extinguisher if the volume of the fire warrants this action.
2. Report the fire to the college operator who will call (a) the Bessemer Fire Department, (b) the Business Officer, (c) campus Security Officers, and (d) the President's Office or the Dean of Instruction.

3. Begin evacuation of the immediate area. Evacuation routes are posted in each department. The instructor(s) is/are responsible for evacuating the classroom, turning off all equipment and lights, and closing all doors and windows before leaving the classroom, labs, or shops, when feasible.

4. Each student involved in the evacuation is to assemble at least 50 yards away from the building with his/her classroom group. The instructor(s) will then call roll and report any missing students to the administrator on the scene. Each student must remain clear of the fire lanes.

It is the policy of the college to evacuate only the building(s) that contain the fire and adjacent building(s) if necessary. When the fire department arrives, the fireman in command will order the evacuation of additional buildings should it become necessary.

**Buildings A and B:** The multi-level buildings A and B are equipped with a bell system that is used to signal evacuation. A continuous burst of bells in short rings is the signal. The signal to return to the building is a continuous ringing of the bells.

**The Millsap Industrial Training Center and the Ethel Hall Building:** These buildings are equipped with zoned fire alarm systems.

**Other BSTC Buildings:** All remaining buildings on campus are singe story. A verbal command will be used to signal the evacuation of these buildings.

**Tornado Evacuation Procedure**

The Emergency Management sirens will be the primary signal for a severe weather warning. The President's Office, campus Security Office, and Business Office are equipped with radios that are activated by Civil Defense when dangerous weather conditions develop. Should it be necessary to evacuate some areas of the campus, a verbal command will be issued, and students should move to the following shelter areas:

1. North Campus to the basement of the Millsap Industrial Training Center.
2. Second and third floors of Building A to interior classrooms and/or hallway on the first floor of the building.
4. Upper floor of Building B to the bottom floor hallway of Building B.

Students should remain in these areas until notified by administration to return to classes.

**Student Incident Procedure**

Bessemer State Technical College faculty and staff must provide immediate attention to a student in the event of an incident, injury, or severe illness occurring on campus.

All student accidents, injuries, and severe illnesses must be reported as soon as possible to the instructor and Safety Officer or other security personnel. Immediate notification provides the opportunity for an on-the-scene investigation, insures prompt preventive action, and also provides the individuals with assistance in matters of medical attention and insurance.

All incidents and injuries require the instructor/responsible person to complete the BSTC Accident/Incident Report Form. To proceed with the correction of any safety hazards or deficiencies, the instructor or responsible person must complete the form quickly and accurately.

The BSTC Accident/Incident Report Form must be completed when any student is injured. It will be used by the Dean of Finance and Dean of Students to investigate the injury. It is important that all questions be answered in as much detail as possible.

In the event an injured individual refuses medical attention and transport, the attending staff member will complete and have the injured individual sign the Refusal of Medical Services and/or Transport form.

Every student is expected to comply with all emergency procedures.

**FOOD SERVICES**

For each student's convenience, a food services area is located in Building A. These facilities are available to the faculty, staff, and students. Two meals a day are served, Monday through Friday (breakfast and lunch). Prices and hours of operation are subject to change without prior notice.

All students are expected to keep the food services area in a neat and presentable condition. Students should assume the responsibility of clearing the tables of all cups, papers, dishes, trays, and the like, and depositing them in the receptacles provided.

Tables may not be moved or rearranged by students. Food and drinks are not to be taken from the food services area. Food or beverages are not allowed in academic classrooms or labs.

**INCLEMENT WEATHER**

**Policy Statement**

The safety and well-being of students and employees are primary considerations during inclement weather. The college has an established procedure to be followed during adverse weather conditions. However, weather, road conditions, and power outages tend to vary within the college service area. Accordingly, the final decision to travel during adverse weather conditions when the college remains open must be made by each individual.

**Authorization to Close the College**

The President of the college is the only person authorized to close the college under any circumstances. During his absence, this authority is transmitted to the Dean of Instruction or designee. The Director of Short-Term and Continuing Education has the responsibility for dismissing evening classes early after receiving approval from the President or Dean of Instruction. Should it be necessary to close classes during the day, night classes will also be canceled.

**Instructional Days Missed Due to College Closing**

The college attempts to design the Annual Calendar with professional development days at the end of the spring semester/term to be used to make-up instructional (class) days lost when the college is closed due to inclement weather. Because a specific number of instructional (class) days are required each semester/term, accounting for class days lost due to inclement weather may be documented. In the event that class days are lost due to inclement weather, it will be necessary for the college calendar to be revised to account for those days. Students will be notified of changes to the calendar and expected to attend classes as scheduled.

**Notification Procedure**

As travel advisories are issued, a decision to implement the inclement weather plan will be made. The plan includes notification of all major radio and television stations in the area. WBRC-TV, Channel 6, should be viewed because it has an organized school-closing report system that the college utilizes. If a student is uncertain of the status of the college (open or closed), he/she should call the college for current information.
IDENTIFICATION CARDS
Each student is required to obtain and carry a Bessemer State Technical College Identification (ID) Card at all times. Valid ID cards are used for checking out books from the library and for other occasions requiring identification. The following regulations apply to ID cards:

1. Photo ID cards are issued at the beginning of each semester/term (days and times will be posted). When an ID card is requested by an administrator, a faculty member or security officer for proper identification, a student must present his/her card. Failure to present an ID card may result in disciplinary action or arrest for trespassing. Student ID cards are made for personal use only. A student violating the ID card privileges is subject to disciplinary action.

2. Loss or theft of the card should be reported to the counselor immediately.

3. The replacement card fee is $5 and is payable to the cashier in the college Bookstore. A duplicate ID card can be obtained from the counselor upon presentation of the replacement fee receipt.

4. A student may be required to show his or her ID card to instructors upon first attending a class.

5. A Photo ID card is valid only if a student is currently enrolled.

LEARNING RESOURCE CENTER
The Learning Resource Center is located in Building A. A student can use the center to improve proficiency in any subject for which software is available. The center houses 15 multi-media workstations; Internet access is available.

In addition to computers, software, and reference materials, the center provides a quiet place for a student to study. A coin-operated copy machine is also available for student use.

LOCKERS
Each student may request a locker from personnel in the college Bookstore. A student is encouraged to keep books and personal possessions in his/her locker; the college cannot be responsible for personal property. At the end of the summer semester/term or upon leaving the college, each student is responsible for clearing out his/her locker.

LOST AND FOUND
The college's central Lost and Found Service is located in the Bookstore. Articles found and left with Lost and Found will be inventoried, dated, and held for a period of 90 calendar days during which time they may be claimed upon identification. After 90 calendar days, the college is not responsible for articles turned into the Lost and Found Service.

MINOR CHILDREN ON CAMPUS
From time to time, activities that minor children may be invited to attend are scheduled at BSTC. However, on all other occasions, minor children are neither permitted to be on campus nor to attend classes with their parents.

MOTOR VEHICLE INFORMATION
A student who operates a motor vehicle on campus must register this vehicle in the college Bookstore and obey all rules and signs pertaining to motor vehicle operation. At the time the vehicle is registered, a free parking permit will be issued. The parking permit must be displayed appropriately on all vehicles. Only current permits should be displayed. Parking permits expire at the end of summer semester/term.

The campus roadways and parking lots are designed to facilitate traffic safety and convenient parking. Each student must adhere to speed limit, one way, employee/reserved parking, loading zone, and no parking signs.

A student who violates traffic and parking regulations will be issued a citation. The following will apply:

1. A student to whom the vehicle is registered will be responsible for all citations issued to his/her vehicle.

2. Payment of fines will be due within three days. Delinquent fines will be doubled and added to a student's financial account with the college. A student will not be permitted to re-enroll until fines are paid.

3. A citation will be issued for failure to display the registration permit. A $3 fine for each violation will be charged.

4. A student parking in loading zones or faculty/reserved parking spaces will be charged a fine of $3.

5. A student charged with speeding or reckless driving will be charged a fine of $15.

6. An individual may appeal his/her parking or traffic fee assessment and have the appeal heard by the Dean of Finance.

RESPONSIBILITIES AND PRIVILEGES
Each student must assume complete responsibility for compliance with the instructions and regulations set forth in the 1998-99 Catalog, for selecting the courses which will permit him/her to achieve his/her educational objectives, and for satisfying prerequisites for any course which he/she plans to take. Faculty advisors and counselors are available to assist a student in planning his/her program.

The college likewise assumes no responsibility for misinterpretation by a student of policies and procedures presented in the 1998-99 Catalog or other official documents. Any questions or doubt concerning catalog information should be referred to the Dean of Instruction or Dean of Students.

TELEPHONES
Pay phones are provided for the use of students. The college phones are not to be used by a student except in case of an emergency.

VISITORS
All visitors to Bessemer State Technical College, regardless of the nature of their visit, must report to the Receptionist's Office, located in Building A and secure a visitor's pass. The visitor's pass must be in the possession of the individual at all times during the visit. Unauthorized visitors will not be permitted on campus.
POLICIES

CHANNELS OF COMMUNICATION

Each student has the right to express an opinion, make suggestions, and submit grievances. Channels of communication are always open to a student with legitimate problems. For the simplest, most direct, and best action, a student should use the channels in the order presented in this catalog. Otherwise, a student may forfeit his/her right to seek resolution of his/her complaint.

If a student will first take his/her complaint to the person or group of persons who have the authority to deal with such complaints, much misunderstanding and ill feeling can be eliminated. The channels of communication are as follows:

1. Instructor
2. Division Chairperson
3. Counselor
4. Dean
5. President

For additional information, contact the Dean of Students.

Official Communications
A request that a student report to an administrative or faculty office may be made by letter or telephone. Failure to comply with such a request may result in disciplinary action.

Communications to the entire student body are considered properly delivered when they are placed on official campus bulletin boards, displayed on the video information centers, and/or published in the college's President's Bulletin. Each student is responsible for checking the bulletin boards and video information centers regularly and giving proper action to such communications.

DRUG- AND ALCOHOL-FREE CAMPUS

As required by Section 22 of the Drug Free Schools and Communities Act of 1989 (Public Law 101-226) and in recognition of this institution's responsibility to serve as a beneficial influence on its students, its employees, and the community at large, Bessemer State Technical College is designated as a drug- and alcohol-free campus and will comply with all the provisions of Public Law 101-226.

- The college expects its students and employees to be aware that abuse of alcohol and illegal drugs has serious negative consequences to the health of the abuser including, but not limited to, cardiovascular disease, liver failure, and death.
- The college expects its students and employees to be aware that they may seek information about alcohol and drug abuse and may seek aid in the form of referrals to appropriate treatment programs and support groups by contacting the college's counselor.
- The college reserves the right to require students and employees who violate the statutory laws or policies of the college concerning alcohol and drug abuse to take part at their own expense in an appropriate counseling or treatment program as a condition of continued enrollment or employment at the college.
- Nothing in this policy may be construed in such a way as to deny any other constitutional or civil protection, nor should anything in this policy be construed in such a way as to conflict with statutory law.

EQUAL OPPORTUNITY STATEMENT
It is the official policy of the State Board of Education, Alabama Department of Postsecondary Education, and Bessemer State Technical College that no person on the grounds of race, color, national origin, religion, age, disability, marital status or gender be excluded from participation in, be denied the benefits of or be subject to discrimination under any program, activity, or employment practices and other educational services.


FEDERAL STATUTES RELATING TO NONDISCRIMINATION
2. Title IX of the Education Amendments of 1972, as amended (20 U.S.C., subsections 1681-1683, 1686-1688), prohibits discrimination on the basis of sex. Section 106.8 provides protection against acts of sexual harassment.
5. The Americans with Disabilities Act of 1990 (ADA) provides that no otherwise qualified person shall be discriminated against in the provision of an educational service or benefit on the basis of disability. Bessemer State Technical College endeavors to provide reasonable accommodations to qualified students with a disability.

For more information, contact the Dean of Students, Building A, (205) 428-6391, ext. 396.

HARASSMENT
Bessemer State Technical College prohibits harassment of employees or students. Any form of harassment related to employees' and students' race, color, gender, religion, national origin, age, or disability is a violation of this policy and will be treated as a disciplinary matter. For these purposes, the term "harassment" includes, but is not necessarily limited to:

- Slurs, jokes, or other verbal, graphic, or physical conduct relating to an individual's race, color, national origin, religion, age, disability, marital status or gender be excluded from participation in, be denied the benefits of or be subject to discrimination under any program, activity, or employer practices and other educational services.

Violations of this policy by an employee of the college shall subject that employee to disciplinary action, up to and including discharge. Violation of this policy by a student of the college shall subject that student to disciplinary action under the institution's disciplinary code, up to and including expulsion.

Harassment of employees in connection with their work by non-employees other than students may also be a violation of this policy. Any employee who becomes aware of harassment of an employee by a non-employee should report such harassment to his or her supervisor and to the Dean of Instruction. Any person who believes he or she has been subjected to harassment should report the occurrence of the alleged incident to the Dean of Instruction.

For additional information, inquire in the Student Development Services Office.
LIFE THREATENING ILLNESSES

Bessemer State Technical College (BSTC) recognizes that students, faculty, and staff with life threatening illnesses (LTI), including but not limited to cancer, heart disease, diabetes, and HIV/AIDS, may wish to engage in as many of their normal pursuits as their condition allows, including work. As long as students, faculty, or staff are able to meet the same performance standards as those persons without LTI, and medical documentation indicates that their conditions are not a threat to others, administrators should be sensitive to their conditions and ensure that they are treated consistently with other students, faculty, and staff members. It is the policy of Bessemer State Technical College to provide safe environment for all students, faculty, and staff. Policy guidelines are as follows:

1. BSTC will not undertake programs of mandatory testing of either employees or students for the presence of indicators of LTI. For health status testing and/or counseling, students, faculty, and staff should be aware of appropriate community health agencies.

2. The existence of conditions related to LTI in an applicant for BSTC admission or employment will not be considered in the initial admission or employment decisions.

3. BSTC students with LTI conditions, whether or not symptomatic, will be allowed regular classroom attendance in an unrestricted manner, as long as they are able to attend classes.

4. BSTC faculty and staff who have LTI-related conditions, whether or not symptomatic, will be allowed to continue their work in an unrestricted manner, so long as they are able to perform the duties of their jobs, in compliance with BSTC employment policies and federal guidelines.

5. The access of BSTC students or employees with LTI or LTI-related conditions to BSTC public areas will not be restricted, in compliance with BSTC and Federal guidelines.

6. There will be an ongoing program to educate students, faculty, and staff in regard to LTI.

7. Information regarding a patient diagnosed as having an LTI or LTI-related conditions will be maintained in the strictest confidence. Only people within the college with a legitimate need to know should be informed of the identity of students, faculty, or staff who have LTI or LTI-related conditions; this number should be kept to an absolute minimum. Individuals should be aware that medical information cannot be released to anyone outside the college without the specific written consent of the patient, except required by law.

Any breach of the above guidelines will be handled as follows:

a. Breaches of these guidelines involving students, staff, or faculty should be reported to the office of the Dean of Instruction.

b. Complaints regarding such breaches should be made in writing within seven (7) days of their occurrence.

RELEASE OF STUDENT RECORDS

Protection of Privacy

In compliance with the provisions of the federal law, including the Buckley-Pell Amendment, the college may release directory information on students. Such information includes student name, dates of attendance, participation in officially recognized activities, certificates, diplomas, degrees, any other awards received, hometown, and names of parents and/or spouse. Typically, the college releases such information when it distributes news releases that list honor rolls, names of graduates, etc. Any student who does not wish to be included in the release of this type directory information listed in this paragraph should make that desire known in writing to the Dean of Students.

While allowable under the law, the college DOES NOT release students' addresses and telephone numbers, since release of such information may result in solicitations. Grades and/or other details of a student's academic record are not released without the expressed/written consent of the student.

The only exceptions to the previously described policies are in the case of legal action involving a student. Any questions regarding college policies on the release of directory information should be referred to the Dean of Students.

Family Educational Rights and Privacy Act of 1974

Bessemer State Technical College complies with the provisions of the Family Educational Rights and Privacy Act of 1974. Students have the right to review their educational record. Parent(s) or guardian(s) may have access to student records for income tax purposes if a student proves to the college Registrar that he/she is in a dependent status. A written request must be submitted to the college prior to the review. An appointment will be arranged at a mutually agreeable time.

A written request or signed release must be submitted for the college to release any information to other schools or prospective employers. Necessary information in connection with a student's application form, or receipt of financial aid may be legally released without obtaining prior permission from the student. A copy of the "Buckley-Pell Amendment" is available for review in the Student Development Services Office and the Registrar's Office.

SAFETY POLICY

Safety Goggles

Alabama Law: SS16-1-7

Eye protective devices for pupils and teachers participating in certain courses.

1. Vocational or industrial arts, shops, or laboratories involving experience with:
   a. Hot molten metals;
   b. Milling, sawing, turning, shaping, cutting or stamping of any solid materials;
   c. Heat treatment, tempering or kiln firing of any metal or other materials;
   d. Gas or electric arc welding;
   e. Repair or servicing of any vehicle;
   f. Caustic or explosive materials.

2. Chemical or combined chemical-physical laboratories involving caustic or explosive chemicals or hot liquids or solids.

BSTC Policy

It shall be the policy of Bessemer State Technical College that all persons, instructors as well as students, wear protective eye wear while participating in laboratory/shop experiences as described in Alabama Law SS16-1-7.

STUDENT CONDUCT

Bessemer State Technical College recognizes that enrolled students are both citizens and members of the academic community. Upon enrolling in the college, all students assume an obligation to conduct themselves in a manner compatible with the college's function as an educational institution. It is expected that students are enrolled for serious educational pursuits and that they will conduct themselves so as to assume the responsibilities of citizenship in the academic community.
Student Code of Conduct

The following Student Code of Conduct is relative to conduct on college property and at all college-sponsored activities held off campus. Categories of misconduct that may subject a student to discipline are as follows:

Collegiate Documents and Policies
1. Furnishing false or misleading information and/or forging, altering, or misusing college documents, records, or identification cards.

2. Disclosing records, files, or data in violation of the Privacy Act of 1974 and/or attempting to use college computers, computer facilities, or data without proper authorization. Deliberate installation of "viruses" on college computers is included in this provision.

3. Disclosing or otherwise misusing college computer access codes.

4. Writing, issuing, or attempting to negotiate a check on an account that has insufficient funds. Violations of this provision will result in a student's being automatically withdrawn from the college unless the check, plus applicable service charges, is immediately paid.

College Sponsored Activities
1. Engaging in or sponsoring as an individual student or group of students any college activity on or off the campus that represents a clear and present danger to the normal educational process of the college.

2. Gambling in any form on campus or at any approved college activity.

3. Violating college policies, procedures or regulations concerning registration of student organizations, the use of college facilities, or the time, place, and manner of public expression.

4. Soliciting and/or selling on campus unless approved by the President.

5. Entering or occupying college buildings or property without proper authorization or bringing a guest or visitor to the college or to any approved college activity who fails to abide by the rules and regulations of the college. A student is responsible for obtaining a visitor's pass from the business office for any guest or visitor he/she may bring on campus.

College and Personal Property
1. Defacing, damaging, or maliciously destroying any college, faculty, or student property or the attempt to do such destruction. Violators may be required to make appropriate financial restitution.

2. Stealing property of the college or other individuals for personal use.

3. Selling stolen property of the college or other individuals to a member of the college community or a visitor to the campus.

4. Eating or drinking in unauthorized areas, especially in classrooms, shops, and laboratories.

College Instruction
1. Conducting an activity on the part of any individual or group that causes disruption or interference with the teaching-learning environment or the regular operation of the college, including:
   a. Occupying any building or campus areas for the purpose of disruption or interference.
   b. Preventing or attempting to prevent the entrance or exit of students, faculty, administration, staff, or authorized visitors to and from the campus or buildings.
   c. Failing to obey directions of faculty, administrators, or security officers in situations relating to the regular operation of the college.

2. Displaying any inflammatory or incendiary signs, posters or banners, or the distribution of literature, or the circulation of petitions or publications proposing any actions to disrupt the educational process or teaching-learning environment.

3. Failing to comply with a request to report to a faculty or staff member for a conference.

4. Failing to follow department rules, directives of instructors, or failure to carry out assignments.

5. Leaving scheduled classes or training sessions without permission of the instructor.

6. Cheating on tests, individual projects, and/or individual assignments.

Firearms, Drugs, and Alcohol
1. Possessing, exhibiting, or using firearms of any kind, explosives (including all types of fireworks), live ammunition, noxious bombs, chemicals, or weapons already designated as illegal by city, county, state, or federal law. Duly authorized peace officers, who will be wearing or carrying guns, are required to display their official badges at all times while on campus.

2. Possessing, transporting, selling, and/or using of any illegal or hallucinatory substances and/or drug paraphernalia while on campus and/or involved in any college activities.

3. Possessing, transporting, distributing, or consuming or being under the influence of alcoholic beverages while on campus or involved in approved college activities.

Harassment
1. Harassing of a student or students, faculty, staff, administration, or the college as an institution by a student or students, by a non-student or non-students, including threats in any way expressed or implied against persons or property.

2. Assaulting physically or abusing any person on campus or at an approved college activity to the extent that such abuse would endanger or threaten the general health or welfare of the person abused or assaulted.

3. Conducting or expressing oneself in a loud, indecent, or profane manner on campus, on college-controlled property, or at approved college activities.

Definitions of Disciplinary Actions
A student or group of students deemed to be in violation of a Student Code of Conduct is subject to the imposition of the following restrictions and/or actions:

1. WARNING: Used for minor infractions of college regulations and consists of a restatement of the regulation violated with an official warning concerning future behavior. The restriction notifies a student that:
   a. Any further violation of college regulations will subject him/her to further disciplinary action.
   b. He/she must maintain exemplary conduct during the period of restriction.
   c. The restriction is generally for an indefinite period of time, but not less than one academic semester/term.
   d. Termination of the restriction is generally based upon a student's cooperative attitude, academic progress, and positive contributions of service to the college.

2. Probation: Used for minor to moderate infractions of college regulations and consists of a restatement of the regulation violated with an official warning concerning future behavior. The restriction notifies a student that:
   a. Any further violation of college regulations will subject him/her to further disciplinary action.
   b. He/she must maintain exemplary conduct during the period of restriction.
   c. The restriction may be for a definite period of time, but not less than one academic semester.
   d. Termination of the restriction is generally based upon a student's cooperative attitude, academic progress, and positive contributions of service to the college.

3. Suspension: Used for major infractions of college regulations and consists of a restatement of the regulation violated with an official warning concerning future behavior. The restriction notifies a student that:
   a. Any further violation of college regulations will subject him/her to further disciplinary action.
   b. He/she must maintain exemplary conduct during the period of restriction.
   c. The restriction is generally based upon a student's cooperative attitude, academic progress, and positive contributions of service to the college.
2. **PROBATION**: A strong restriction designed to encourage and require a student to cease and desist from violating college regulations. A student under this restriction is notified in writing. A student on Disciplinary Probation is warned that:

   a. Any further violations on his/her part while under probation will lead to an extension of his/her restriction, Disciplinary Suspension, or Disciplinary Dismissal.
   b. He/she may not hold any office, elective or appointive, in any student organization.
   c. The probation restriction is generally not less than one academic semester/term.

3. **IMMEDIATE TEMPORARY SUSPENSION**: Immediate, temporary suspension is imposed in a situation when a student's presence poses a continuing danger to persons or property or an ongoing threat of disrupting the academic process of the teaching-learning environment.

4. **SUSPENSION**: The removal of a student from roles of Bessemer State Technical College for a stated period of time, usually not less than one semester/term. At the end of the designated period, a student must make formal application for re-admission.

5. **DISMISSAL**: The strongest disciplinary restriction. A penalty this severe generally indicates that a student may not return to the college unless he/she is granted special dispensation from the President of the college. Disciplinary dismissal would apply to a student who is guilty of chronic violations or a major breach of conduct so that rehabilitation possibilities appear to be remote.

**DUE PROCESS RIGHTS OF STUDENTS**

The college recognizes the right of both substantive and procedural due process in any matter involving a student misconduct violation. A student is entitled to a notice, a hearing, and an explanation before receiving a suspension or expulsion from the college.

**Penalty Without Hearing**

In the event a student wishes to waive the right to a formal hearing or makes voluntary written confession of the allegation and waives the right to a hearing, the violation may be administratively disposed of if:

1. It is in the best interest of the college and the student concerned, and

   2. The student concerned consents in writing to administrative disposition.

At a conference with the student in connection with the allegation, he/she shall be advised of his/her rights.

If a student accepts administrative disposition, he/she shall sign a statement that he/she understands the formal charges, his/her rights to a hearing, or to waive the same, the penalty imposed, and his/her waiver of the right to appeal.

In administrative disposition, the penalties imposed shall not differ from those penalties stated in "Disciplinary Actions."

Once a student has been informed of his/her rights and the penalty that could be imposed should a violation be found and has knowingly and voluntarily accepted in writing the authority of the administration to impose the penalty, a student shall have waived the right to request a formal hearing.

**Formal Hearing**

In the event a student wishes a formal hearing:

1. Notice of the charges and their implications will be given orally or in writing prior to the hearing.

2. The list of witnesses and their expected testimony will be given to the accused student prior to the hearing or at the hearing itself.

Because the college is an academic institution and not a court of law, an informal hearing will be conducted by an administrator or committee designated by the President of the college. The chief hearing officer is not bound by the common laws of evidence or civil procedure. Therefore, heresy may be used during the hearing, and either a committee or a hearing officer may conduct the hearing.

At the hearing, a student has the right to present his/her defense against the charges and to produce other oral testimony or written affidavits of witnesses in his/her behalf. A student may be represented by counsel. If so, the college expects the courtesy of notification. The counsel will be allowed only to advise a student and not to actively participate in the hearing. The college is not required to provide the opportunity for cross-examination but may do so at the discretion of the chief hearing officer.

The President of the college will notify a student of the results of the hearing and the implications of the decision. The decision of the President will be final.

**STUDENT GRIEVANCE PROCEDURE**

**Policy**

Bessemer State Technical College will make every effort to resolve any problem that develops among students, instructor and student, and college personnel. The organizational structure of the college is designed to facilitate immediate resolution of problems once they are identified; therefore, the college does not condone intimidation nor physical acts of one person against another.

**Procedure**

1. **Step 1**: Individuals shall bring all complaints to the attention of their immediate supervisor. The process for resolving a complaint by a student should originate with the instructor or faculty advisor. Any complaint lodged by an instructor against a student should be transmitted to the Dean of Instruction via a student referral form with the exception of absenteeism, which should be directed to the college counselor.

2. **Step 2**: If the problem is not resolved at the initial level of attention, the Dean of Instruction will intervene, conduct an investigation, and attempt to offer a solution that is mutually accepted by the parties involved. The Dean of Instruction is authorized by the President to invoke administrative action such as a warning, probation, or immediate temporary suspension, which may be applied in the judgment of the Dean of Instruction when there is impending danger of bodily harm or a threat to the welfare of students of the college.

3. **Step 3**: When immediate temporary suspension is the course of action, the Dean of Instruction recommends to the President that a grievance committee be assembled to address the complaint and to determine any appropriate disciplinary action.

**Grievance Committee**

1. The grievance committee has the dual function of safeguarding the rights of students through due process and maintaining an environment that is safe and conducive to learning for all members of the campus community.

2. The grievance committee shall consist of four faculty members and a chairperson, who shall be a member of the administration.

3. The four faculty members shall be appointed to the grievance committee by the President of the college. A chairperson selected by the President shall preside over the hearings. The chairperson casts a vote only when necessary to break a tie. Any grievance committee member who has any personal interest, special interest, or special information concerning a
case will be disqualified. A replacement shall be appointed by the President to fill the vacancy.

The grievance committee shall maintain, with assistance of the administrator, an adequate record of the history and disposition of each case. The record shall include a summary of the evidence upon which the grievance committee based its decision. Whenever possible, a transcript of the proceedings shall be taken.

Procedure for Conducting the Hearing

1. Any student whose case is referred to the grievance committee shall receive written notice at least two calendar days before his/her case is to be heard. The notice shall inform a student of the date and time of his/her hearing. On request and for good cause, the grievance committee may allow an extension of time.

2. The hearing shall be conducted in such a manner as to do justice to all parties involved and shall not be unduly restricted by rules or procedure or evidence.

3. The hearing will be private and confidential except by consent of both parties. On behalf of the college, the charge(s) and evidence will be presented by the person(s) making the charge(s).

4. An individual charged with misconduct has the right to be represented by a faculty member, student, parent, or legal counsel. However, he/she must notify the chairman of the grievance committee if he/she wishes to be represented by anyone other than himself/herself. Either party may request the privilege to present witnesses. The burden of proof rests upon the person bringing charge(s).

5. A student or his/her representative shall have the right to cross examine any witness against him/her. If, for lack of sufficient reason as judged by the chairman of the grievance committee, an accused individual fails to appear at the time of the hearing, the chairman reserves the right to conduct the hearing without the presence of the accused.

6. Members of the grievance committee shall vote on all decisions. A simple majority vote shall be required on all decisions.

7. The chairman of the grievance committee will make known the decision of the grievance committee to the President of the college and the accused within two working days after the hearing.

Procedure for Appeal

1. The accused student may appeal the decision of the grievance committee by so stating in a letter to the President of the college and the chairman of the grievance committee within two workdays after the decision.

2. A student must be able to demonstrate to the President the following:
   a. Certain relevant evidence was not reviewed.
   b. New evidence is available.

3. The appeal proceedings will be conducted by a review board appointed by the President. The board shall consist of a chairperson, a member of the grievance committee, and one other person, not necessarily an employee of the college.

4. An appeal shall be limited to reviewing the full report of the grievance committee or the hearing of new evidence relevant to the case and not available at the time of the hearing before the grievance committee. In the case of new evidence, the appeal board may order a new hearing before the grievance committee.

5. Within five days of the receipt of the appeal, the chairperson of the review board will set a time for the hearing and notify all parties involved.

6. The review board will send notice of its decision to the student, the chairperson of the grievance committee, and the President of the college within two workdays after the hearing appeal.

7. Once a student has applied for and has been granted a hearing by the review board, he/she must abide by the recommendations of the review board.

Final Approval

Final approval of the action of either the grievance committee or the review board will rest with the President of the college.

STUDENT RIGHT-TO-KNOW ACT AND CAMPUS SECURITY ACT

The student Right-To-Know and Campus Security Act of 1990 requires Bessemer State Technical College to disclose information about student outcomes, campus security, and crime statistics. Copies of this publication are available in the Admissions Office, Business Office, and Office of Student Development Services.

TOBACCO-FREE CAMPUS

Bessemer State Technical College prohibits the use of tobacco (in any form) in all buildings on campus, outside the front of Building A, and in all areas containing flammable materials.
AWARD REQUIREMENTS

ASSOCIATE IN APPLIED TECHNOLOGY DEGREE (AAT)
The General Education Core for Associate in Applied Technology Degree

Area I:
Written Composition I and II
3-6 Credit Hours

Area II:
Humanities and Fine Arts
3-6 Credit Hours
- Disciplines include: Speech and Humanities
  Requirements prescribe: Minimum of 9 hours in Area I and Area II which could include 6 hours in Written Composition I and II; or 3 hours in Written Composition I and 3 hours in Technical Writing; or 3 hours in Area I with 3 hours of Speech in Area II, plus 3 additional hours in Area II.

Area III:
Natural Sciences and Mathematics
9 Credit Hours
- In addition to Mathematics, disciplines include Data Processing/Word Processing and Physics.
  Requirements prescribe: Distributed in Mathematics or Science or Computer Science (Data Processing). Minimum of 3 hours in Mathematics is required. One Computer Science (Data Processing) course (2 are preferred) or demonstrated computer literacy skills, or the integration of computer proficiencies within a required discipline-specific course(s). Appropriate 100 level courses (or higher) denoted in The Alabama College System Course Directory may be substituted.

Area IV:
History, Social, and Behavioral Science
3-6 Credit Hours
- Disciplines include: Economics and Psychology.
  Minimum General Education Requirements 18-24 Credit Hours

Area V:
Maximum General Education Core, Technical Concentration, and Electives
58-52 Credit Hours
- Courses appropriate to the degree requirements, occupational or technical specialty requirements, core courses, and electives.

Primary Technical Specialty/Secondary Technical Specialty
58-52 Credit Hours
- Courses appropriate to the degree requirements, primary occupational or technical specialty requirements, core courses, secondary occupational or technical specialty requirements, and electives.

Primary Technical Specialty (Major): A minimum of 28 credit hours in a single content area.
Secondary Technical Specialty (Minor): A minimum of 12 credit hours in another related technical area.

Maximum Program
Semester Credit Hours 76 Credit Hours
Semester Credit Hour Range by Award 60-76 Credit Hours

DIPLOMA OR LONG CERTIFICATE
The General Education Core for the Diploma or Long Certificate

Area I:
Written Composition I and II
3-6 Credit Hours

Area II:
Humanities and Fine Arts
3-6 Credit Hours
- Speech is required in the diploma program unless provisions for addressing Oral Communication Competencies represent an integral module in a required discipline-specific course.

Area III:
Natural Sciences and Mathematics
6 Credit Hours
- In addition to Mathematics, disciplines include Data Processing/Word Processing and Physics.
  Requirements prescribe: Distributed in Mathematics or Science or Computer Science (Data Processing). One Computer Science (Data Processing) course (2 are preferred) or demonstrated computer literacy skills, or the integration of computer proficiencies within a required discipline-specific course(s).

Area IV:
History, Social, and Behavioral Science
3-6 Credit Hours
- Disciplines include: Economics and Psychology.
  Minimum General Education Requirements 12-18 Credit Hours

General Studies Curricula 60 Credit Hours

Area V:
Maximum General Education Core, Technical Concentration, and Electives
48-42 Credit Hours
- Courses appropriate to the degree requirements, occupational or technical specialty requirements, core courses, and electives.

Maximum Program
Semester Credit Hours 60 Credit Hours
Semester Credit Hour Range by Award 30-60 Credit Hours

SHORT CERTIFICATE
Area I:
Technical Concentration ≤ 26 Credit Hours
**PROGRAMS OF STUDY AND COURSE DESCRIPTIONS**

**GENERAL INFORMATION**

This section of the catalog lists the programs of study and course descriptions offered at Bessemer State Technical College. Each student with the aid of his/her advisor will plan a specific schedule for each term of enrollment.

The theory and laboratory hours listed in the curricula are based on the number of hours the theory classes and laboratory sessions meet each week. Those hours are computed to determine credit hours for each course. A student's term and cumulative grade point averages are determined by the grade earned for each course on a 4.0 system.

Required general education courses vary according to award and major course of study.

Bessemer State Technical College identifies each course offered by catalog numbers that are composed of a three-letter prefix and three numerals. The prefix is an abbreviation of the program title. Course descriptions for each program are listed in numerical order.

The college may substitute courses when necessary with the approval of the Dean of Instruction. The college reserves the right to revise program requirements, and/or withdraw any course for which there is insufficient student demand.

**ABBREVIATIONS**

**PROGRAM / ABBREVIATION / AVAILABLE AWARDS**

<table>
<thead>
<tr>
<th>Accounting Technology</th>
<th>ACT</th>
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<tbody>
<tr>
<td>ATT Degree, Short Certificate</td>
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<tr>
<td>AOT Degree, Short Certificate</td>
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<tr>
<td>ACR</td>
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<tr>
<td>Automotive Mechanics</td>
<td>AUM</td>
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<tr>
<td>Automotive Service Technology</td>
<td>AOT Degree, Short Certificate</td>
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<tr>
<td>Ford ASSET</td>
<td>ASE</td>
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<tr>
<td>General Motors ASEP</td>
<td>ASE</td>
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<tr>
<td>Toyota T-TEN</td>
<td>ASE</td>
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<tr>
<td>Building Construction Technology</td>
<td>BU</td>
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<tr>
<td>Building Maintenance</td>
<td>BL</td>
</tr>
<tr>
<td>Commercial Art/Photography</td>
<td>CAT</td>
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<tr>
<td>Computer Science</td>
<td>DPT</td>
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<tr>
<td>Data Entry/Clerical</td>
<td>CLR</td>
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<tr>
<td>Dental Assisting</td>
<td>DAT</td>
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<tr>
<td>Diesel Mechanics</td>
<td>DEM</td>
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<tr>
<td>Drafting and Design Technology</td>
<td>DDT</td>
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<tr>
<td>Electronics</td>
<td>ILT</td>
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<tr>
<td>Electrical</td>
<td>ILT</td>
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<tr>
<td>Emergency Medical Technician</td>
<td>EMT</td>
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<td>Graphics and Prepress Communications</td>
<td>GPC</td>
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<tr>
<td>Horticulture, Ornamental</td>
<td>OHT</td>
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<td>Industrial Maintenance Technician</td>
<td>INT</td>
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<tr>
<td>Licensed Practical Nursing</td>
<td>LPN</td>
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<tr>
<td>Machine Tool Technology</td>
<td>MTT</td>
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<tr>
<td>Mathematics</td>
<td>MAH</td>
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<tr>
<td>Physics</td>
<td>PHC</td>
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<tr>
<td>Psychology</td>
<td>PSH</td>
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<tr>
<td>Speech</td>
<td>SPC</td>
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<tr>
<td>Welding</td>
<td>WDT</td>
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**ACCOUNTING TECHNOLOGY (ACT)**

The Accounting Technology program is designed to teach, through a sequence of experiences, those skills necessary for a student to develop cognitive knowledge of the accounting process and to be able to apply this knowledge in a practical manner. Fundamental accounting principles and procedures, cost accounting, income tax procedures, payroll accounting, not-for-profit accounting, and the use of microcomputers in accounting are presented in detail.

**ACCOUNTING TECHNOLOGY ASSOCIATE IN APPLIED TECHNOLOGY DEGREE**

<table>
<thead>
<tr>
<th>Course No./Title</th>
<th>Theory/Lab/Credit Hours</th>
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<tbody>
<tr>
<td>ACT 104</td>
<td>3 0 3</td>
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<tr>
<td>ACT 141</td>
<td>3 0 3</td>
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<tr>
<td>ACT 142</td>
<td>3 0 3</td>
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<td>ACT 146</td>
<td>3 0 3</td>
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<td>ACT 148</td>
<td>3 0 3</td>
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<tr>
<td>ACT 153</td>
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<tr>
<td>ACT 115</td>
<td>3 0 3</td>
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<td>ACT 247</td>
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<td>ACT 249</td>
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<td>ACT 251</td>
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<td>ACT 254</td>
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<td>ACT 256</td>
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<tr>
<td>ACT 257</td>
<td>3 0 3</td>
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<tr>
<td>ACT 260</td>
<td>1 0 1</td>
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<td>ACT 261</td>
<td>2 0 2</td>
</tr>
<tr>
<td>ACT 262</td>
<td>3 0 3</td>
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</tbody>
</table>

**Select 3 hours from the following:**

<table>
<thead>
<tr>
<th>Associate Degree Programs*</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT Accounting Technology</td>
</tr>
<tr>
<td>REM Retail Merchandising</td>
</tr>
<tr>
<td>SET Office Administration</td>
</tr>
<tr>
<td>General Education Requirements:</td>
</tr>
<tr>
<td>COM 101 English Composition I</td>
</tr>
<tr>
<td>COM 102 English Composition II</td>
</tr>
<tr>
<td>SPC 106 Fundamentals of Oral Communication</td>
</tr>
<tr>
<td>MAH 116 Mathematical Applications or MAH 246 Mathematics of Finance</td>
</tr>
<tr>
<td>Natural Science/Math/Computer</td>
</tr>
<tr>
<td>Natural Science/Math/Computer</td>
</tr>
<tr>
<td>EGN 231 Principles of Macroeconomics</td>
</tr>
</tbody>
</table>

Total Credit Hours: **67**

* Must be approved in advance by a student's faculty advisor.
This course provides a basic theory of accounting. The course acquaints a student with American accounting, including the accounting cycle, and financial statement preparation and analysis. Upon course completion, a student should be able to apply basic accounting principles and practices used by service and merchandising enterprises. CORE

**ACT 145 ADVANCED ACCOUNTING PRINCIPLES**

**3 Credit Hours**

This course is a continuation of ACT 141. In addition to a study of financial accounting, this course emphasizes managerial accounting, with coverage of corporations, statement analysis, introductory cost accounting, and use of accounting information for planning, control and decision making. Upon course completion, a student should be able to use software programs for financial accounting applications. CORE

**ACT 146 MICROCOMPUTER ACCOUNTING**

**3 Credit Hours**

PREREQUISITE: ACT 141 or instructor approval. This course utilizes the microcomputer in the study of financial accounting principles and practices. Emphasis is placed on the use of software programs for financial accounting applications. Upon course completion, a student should be able to use software programs for financial accounting applications. CORE

**ACT 148 MANAGERIAL ACCOUNTING**

**3 Credit Hours**

PREREQUISITE: ACT 142 or instructor approval. This course introduces a student to management concepts and techniques of industrial accounting procedures. Emphasis is on cost behavior, contribution approach to decision-making, budgeting, overhead analysis, cost-volume-profit analysis, and cost accounting systems. Upon course completion, a student should be able to apply management concepts and techniques of industrial accounting procedures. CORE

**ACT 153 INDIVIDUAL INCOME TAX**

**3 Credit Hours**

PREREQUISITE: ACT 142 or instructor approval. This course focuses on the fundamentals of the federal income tax with primary emphasis on those affecting the individual. Emphasis is on gross income determination, adjustments to income, business expenses, itemized deductions, exemption, capital gains/losses, depreciation, and tax credits. Upon course completion, a student should be able to apply the fundamentals of the federal income tax laws affecting the individual. CORE

**ACT 193 ACCOUNTING CO-OP**

**1 Credit Hour**

PREREQUISITE: Instructor approval. This course provides work experience with a college-approved employer in an area related to a student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon course completion, a student should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**ACT 194 ACCOUNTING CO-OP**

**1 Credit Hour**

PREREQUISITE: Instructor approval. This course provides work experience with a college-approved employer in an area related to a student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon course completion, a student should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**ACT 195 ACCOUNTING CO-OP**

**1 Credit Hour**

PREREQUISITE: Instructor approval. This course provides work experience with a college-approved employer in an area related to a student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon course completion, a student should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**ACT 247 ADVANCED ACCOUNTING APPLICATIONS ON THE MICROCOMPUTER**

**3 Credit Hours**

PREREQUISITE: ACT 146 or instructor approval. In this course, a student uses the microcomputer in managerial accounting. Emphasis is on a variety of software programs for managerial accounting applications. Upon course completion, a student should be able to use various managerial accounting software programs.

**ACT 249 PAYROLL ACCOUNTING**

**3 Credit Hours**

PREREQUISITE: ACT 145 or ACT 141 or instructor approval. This course focuses on federal, state and local laws affecting payrolls. Emphasis is on payroll accounting procedures and practices, and on
payroll tax reports. Upon course completion, a student should be able to apply knowledge of federal, state and local laws affecting payrolls.

ACT 251
INTERMEDIATE ACCOUNTING
3 Credit Hours
PREREQUISITE: ACT 142 or instructor approval.
This course provides an overview of accounting and its theoretical foundation, with a review and in-depth study of the accounting process and the conceptual framework of accounting financial statements. Emphasis is placed on principles underlying the accounting and reporting process, preparation of financial statements, theory and measurement of current tangible and intangible assets. Upon course completion, a student should be able to apply accounting principles and practices.

ACT 252
ACCOUNTING CASE STUDIES
3 Credit Hours
PREREQUISITE: ACT 141 and ACT 142 or instructor approval.
This course includes a practical application of accounting knowledge through a series of case studies. The case study method of learning places emphasis on the preparation for and classroom discussion described in the case. Upon course completion, a student should be able to apply accounting knowledge in a variety of situations.

ACT 254
BUSINESS INCOME TAX
3 Credit Hours
PREREQUISITE: ACT 153 or instructor approval.
This course focuses on federal income tax laws concerning business entities. Emphasis is on income tax investment of partnerships, corporation, LLPs and LLCs. Upon course completion, a student should be able to apply federal income tax laws concerning business entities.

ACT 256
COST ACCOUNTING
3 Credit Hours
PREREQUISITE: ACT 142 or instructor approval.
This course familiarizes a student with cost accounting principles and techniques. Emphasis is on procedures to provide data for job order and continuous process types of industries, determination of unit costs, and preparation of cost reports. Upon course completion, a student should be able to apply cost accounting principles and techniques.

ACT 257
GOVERNMENTAL AND NOT-FOR-PROFIT ACCOUNTING
3 Credit Hours
PREREQUISITE: ACT 242 or instructor approval.
This course is an introduction to the principles, concepts and practices of accounting for governmental and not-for-profit organizations. Emphasis is on fund accounting and its utilization in governmental agencies, colleges and universities, hospitals, and other not-for-profit organizations. Upon course completion, a student should be able to apply the principles, concepts, and practices of governmental and not-for-profit accounting.

ACT 260
DIRECTED STUDIES
1 Credit Hour
PREREQUISITE: Instructor approval.
This course is an independent study under faculty supervision. Emphasis is placed on subject relevancy and student interest and need.

ACT 261
DIRECTED STUDIES
2 Credit Hours
PREREQUISITE: Instructor approval.
This course is an independent study under faculty supervision. Emphasis is placed on subject relevancy and student interest and need.

ACT 262
DIRECTED STUDIES
3 Credit Hours
PREREQUISITE: Instructor approval.
This course is an independent study under faculty supervision. Emphasis is placed on subject relevancy and student interest and need.

ACT 270
SPECIAL TOPICS
1-3 Credit Hours
PREREQUISITE: Instructor approval.
This course allows for specialized, in-depth study. Emphasis is placed on individualized instruction.

ACT 271
SPECIAL TOPICS
1-3 Credit Hours
PREREQUISITE: Instructor approval.
This course allows for specialized, in-depth study. Emphasis is placed on individualized instruction.

AIR CONDITIONING/REFRIGERATION (ACR)

The Air Conditioning/Refrigeration program is designed to provide the learner with the necessary knowledge and skills to enter the world of work. The instructional process begins with the fundamentals of refrigeration and electricity. Other course material focuses on system operational sequences, diagnosis, service, repair, and installation. Information, assignments and job sheets are provided to guide a student through all phases of the program. A student usually completes the diploma program in four semesters/terms.

AIR CONDITIONING/REFRIGERATION DIPLOMA

Course No./Title Theory/Lab/Credit Hours
ACR 111 Refrigeration Principles 1 4 3
ACR 112 HVAC Service Procedures 1 4 3
ACR 113 Refrigeration Piping Practices 1 4 3
ACR 115 Heating Systems I 2 2 3
ACR 116 Heating Systems II 2 2 3
ACR 117 Heat Pumps I 2 2 3
ACR 118 Heat Pumps II 2 2 3
ACR 121 Principles of Electricity for HVAC 1 4 3
ACR 122 HVAC Electrical Circuits 1 4 3
ACR 123 HVAC Electrical Components 1 4 3
ACR 132 Residential Air Conditioning 1 4 3
ACR 134 Ice Machines 1 4 3
ACR 147 Refrigeration Transition and Recovery 3 0 3
ACR 203 Commercial Refrigeration 1 4 3
ACR 205 System Sizing/Air Distribution 1 4 3
ACR 206 System Troubleshooting 1 4 3

General Education Requirements:
COM 131 Applied Writing I 3 0 3
DPT 196 Commercial Software Application 2 2 3
MAH 116 Mathematical Applications 3 0 3
SPC 116 Introduction to Interpersonal Communication 3 0 3

Total Credit Hours: 60
Optional Related Course:
ACR 181 Review for Contractors Exam: Special Topics 3 0 3

All courses in this program are creditable toward an Associate in Occupational Technology Degree (AOT).

AIR CONDITIONING / REFRIGERATION SHORT CERTIFICATE

Course No./Title Theory/Lab/Credit Hours
ACR 111 Refrigeration Principles 1 4 3
ACR 113 Refrigeration Piping Practices 1 4 3
ACR 115 Heating Systems I 2 2 3
ACR 117 Heat Pumps I 2 2 3
ACR 112 Principles of Electricity for HVAC 3 Credit Hours
PREREQUISITE: ACR 111 and ACR 121 or instructor approval.
This course introduces the basic principles of electrical theory and circuitry as it pertains to HVAC systems. Emphasis is placed on safety, definitions, symbols, laws, circuits, and electrical test instruments. Upon course completion, a student should understand and be able to apply the basic principles of HVAC circuits and circuit components. CORE

ACR 115 HEATING SYSTEMS I 3 Credit Hours
PREREQUISITE: ACR 111 and ACR 121 or instructor approval.
This course covers the fundamentals of gas and electrical furnaces. Emphasis is placed on components, operational sequences, industry codes, general service procedures, system diagnosis, repair, and basic installation procedures. Upon course completion, a student should understand service for gas and electric furnaces.

ACR 116 HEATING SYSTEMS II 3 Credit Hours
PREREQUISITE: ACR 115 or instructor approval.
This course is a continuation of Heating Systems I. Upon course completion, a student should be able to install and service gas and electric furnaces.

ACR 117 HEAT PUMPS I 3 Credit Hours
PREREQUISITE: ACR 111 and ACR 121 or instructor approval.
This course covers the basic theory and application of heat pump systems. Topics include reverse cycle refrigeration, four-way valve operation, industry codes, system components and troubleshooting. Upon course completion, a student should be able to service heat pumps.

ACR 118 HEAT PUMPS II 3 Credit Hours
PREREQUISITE: ACR 117
This course is a continuation of Heat Pumps I. Upon completion, a student should be able to install and service heat pumps.

ACR 121 PRINCIPLES OF ELECTRICITY FOR HVAC 3 Credit Hours
PREREQUISITE: None
This course is designed to provide a student with the basic knowledge of electrical theory and circuitry as it pertains to air conditioning and refrigeration. This course emphasizes safety, definitions, symbols, laws, circuits, and electrical test instruments. Upon course completion, a student should understand and be able to apply the basic principles of HVAC circuit components. CORE

ACR 122 HVAC ELECTRICAL CIRCUITS 3 Credit Hours
PREREQUISITE: ACR 111 and ACR 121 or instructor approval.
This course introduces a student to electrical circuits and diagrams. Emphasis is placed on the operations of motors, relays, contactors, starters, and other HVAC controls. Upon course completion, a student should be able to understand motor theory and control functions in HVAC equipment. CORE

ACR 123 HVAC ELECTRICAL COMPONENTS 3 Credit Hours
PREREQUISITE: ACR 111 and ACR 121 or instructor approval.
This course introduces a student to electrical components and controls. Emphasis is placed on the use of refrigerant recovery/recycle units, industry codes, refrigerant cuts, and correct methods of charging and recovering refrigerants. Upon course completion, a student should be able to properly recover/recycle refrigerants and demonstrate safe, correct service procedures which comply with the no-venting laws. CORE

ACR 124 ICE MACHINES 3 Credit Hours
PREREQUISITE: ACR 111 and ACR 121 or instructor approval.
This course introduces a student to commercial ice machines. Emphasis is placed on components, electrical and mechanical operation sequences, control adjustment procedures, preventive maintenance, repairs, and installation procedures. Upon course completion, a student should be able to install, service and repair commercial ice machines.

ACR 147 REFRIGERATION TRANSITION AND RECOVERY 3 Credit Hours
PREREQUISITE: ACR 111 and ACR 121 or instructor approval.
This course is EPA-approved and covers material relating to the requirements necessary for Type I, II, III and universal certification. The EPA certification exam is administered at the end of the course. Upon course completion, a student should be able to pass the EPA refrigerant certification exam.
AUTOMOTIVE MECHANICS (AUM)

The Automotive Mechanics program teaches a student to diagnose mechanical problems and to make necessary repairs to all components of the automobile. The program is designed to teach a student to immediately apply his/her newly gained knowledge in shop experiences. A student usually completes the diploma program in four semesters/terms.

AUTOMOTIVE MECHANICS DIPLOMA

Course No./Title Theory/Lab/Credit Hours
AUM 101 Fundamentals of Automotive Technology 1 5 3
AUM 111 Automotive Electrical Systems 1 5 3
AUM 121 Braking Systems 1 5 3
AUM 122 Steering, Suspension and Alignment 1 5 3
AUM 123 Engine Principles 1 5 3
AUM 131 Powertrain Fundamentals 1 5 3
AUM 132 Automotive Heating and Air Conditioning 1 5 3
AUM 211 Automotive Electronics 1 5 3
AUM 212 Fuel Systems 1 5 3
AUM 214 Ignition Systems 1 5 3
AUM 221 Engine Repair 1 5 3
AUM 222 Manual Transmission/Transaxle 1 5 3
AUM 223 Engine Management Systems 1 5 3
AUM 231 Automatic Transmission/Transaxle 1 5 3
AUM 240 Engine Performance 1 5 3

General Education Requirements:
COM 131 Applied Writing I 3 0 3
OPT 196 Commercial Software Application 2 2 3
MAH 116 Mathematical Applications 3 0 3
SPC 116 Introduction to Interpersonal Communication 3 0 3

Total Credit Hours: 57

All courses in this program are creditable toward an Associate in Occupational Technology Degree (AOT).

AUTOMOTIVE MECHANICS SHORT CERTIFICATE

Course No./Title Theory/Lab/Credit Hours
AUM 101 Fundamentals of Automotive Technology 1 5 3
AUM 111 Automotive Electrical Systems 1 5 3
AUM 123 Engine Principles 1 5 3
AUM 131 Powertrain Fundamentals 1 5 3
AUM 211 Automotive Electronics 1 5 3
AUM 212 Fuel Systems 1 5 3
AUM 214 Ignition Systems 1 5 3
AUM 221 Engine Repair 1 5 3

Total Credit Hours: 24

The Automotive Mechanics certificate does not require general education courses. All courses in this award are creditable toward an Associate in Occupational Technology Degree (AOT).
completion, a student should be able to perform basic repairs on a variety of engines. CORE

AUM 131
POWERTRAIN FUNDAMENTALS
3 Credit Hours
PREREQUISITE: None
This course provides a study of the automotive power flow from the transmission to the drive wheels. Topics include drive lines, gear ratios, differentials, drive axles, troubleshooting and diagnostics. Upon course completion, a student should be able to troubleshoot, diagnose and repair automatic and manual power trains. CORE

AUM 132
AUTOMOTIVE HEATING AND AIR CONDITIONING
PREREQUISITE: AUM 111 or instructor approval.
This course covers nomenclature, theory of operation, repairs and service procedures, electrical control circuits for the compressor, blower and coolant fan. Emphasis is placed on proper use of service manuals and safety. Upon course completion, a student should be able to diagnose and repair heating and air conditioning systems.

AUM 211
AUTOMOTIVE ELECTRONICS
3 Credit Hours
PREREQUISITE: AUM 111 or instructor approval.
This course builds on the principles of laws of electricity. Emphasis is placed on series, parallel and series-parallel circuits. Upon course completion, a student should be able to calculate, build and measure circuits. CORE

AUM 212
FUEL SYSTEMS
3 Credit Hours
PREREQUISITE: AUM 111 or instructor approval.
This course focuses on fuel delivery systems operation, and diagnosis and repair of fuel system components. Emphasis is placed on servicing the fuel injection system. Upon course completion, a student should be able to perform advanced engine tune-ups. CORE

AUM 214
IGNITION SYSTEMS
3 Credit Hours
PREREQUISITE: AUM 111 or instructor approval.
This course provides a study of the principles of operation, diagnosis and repair of the ignition's ignition system components. Topics include primary and secondary circuit operations, and diagnosis and repair of conventional electronic and distributor-less ignition systems. Upon course completion, a student should be prepared to diagnose and repair ignition system problems. CORE

AUM 221
ENGINE REPAIR
3 Credit Hours
PREREQUISITE: AUM 123 or instructor approval.
This course provides understanding of the troubleshooting and repair procedures for the gasoline engine. Topics include engine disassembly, identification of components, inspection and measuring of parts, repair and reassembly, use of service manuals, and safety. Upon course completion, a student should be able to repair or rebuild an automotive engine. CORE

AUM 222
MANUAL TRANSMISSION/TRANSAXLE
3 Credit Hours
PREREQUISITE: AUM 131 or instructor approval.
This course includes a study of manual transmission/transaxle components, gear ratios and power flow. Topics include manual and hydraulic clutches and their service and repair. Upon course completion, a student should be able to remove, repair and replace manual transmission/transaxle components.

AUM 223
ENGINE MANAGEMENT SYSTEMS
3 Credit Hours
PREREQUISITES: AUM 111, 112, and AUM 211 or instructor approval.
This course is designed to provide a working knowledge of the principles of operation, diagnosis and repair of computerized engine control systems. It includes a study of microprocessors, sensors, actuators, and emission control devices and their interaction. All diagnostics and repair procedures must be accomplished in accordance with manufacturer's specification.

AUM 231
AUTOMATIC TRANSMISSION/TRANSAXLE
3 Credit Hours
PREREQUISITE: AUM 131 or instructor approval.
This course is designed to provide a working knowledge of the construction and operation of automatic transmissions/transaxles. Topics include the study of torque converters, gear and clutch assemblies, hydraulic and mechanical power flow, and electronic controls. Upon course completion, a student should be able to remove, install and perform basic repairs on automatic transmissions/transaxles.
AUTOMOTIVE SERVICE TECHNOLOGY (ASE) FORD, GM, AND TOYOTA

The General Motors Automotive Service Education Program (ASEP), the Toyota Technical Education Network (T-TEN) Program, and the Ford Motor Company Automotive Student Service Educational Training Program (ASSET), are two-year automotive programs designed to upgrade the technical competence and professional level of the incoming dealership technician. The curriculum is designed by Ford, GM, and Toyota and Bessemer State Technical College and leads to an Associate in Applied Technology Degree. The program involves attending on-campus classroom and laboratory sessions and on-the-job work experience through a sponsoring dealership. Content of the courses differs in product-specific application as it relates to Ford, GM, and Toyota models.

FORD ASSET PROGRAM
ASSOCIATE IN APPLIED TECHNOLOGY DEGREE

| Course No./Title | Theory/Lab/Credit Hours | 30 3
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<tr>
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<tbody>
<tr>
<td>ASE 101 Fundamentals of Automotive Technology</td>
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<tr>
<td>ASE 111 Automotive Electrical Systems 1 4 3</td>
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<td>ASE 112 Starting, Charging Systems and Accessories 1 4 3</td>
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<td>ASE 121 Braking Systems 1 4 3</td>
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<td>ASE 122 Steering, Suspension and Alignment 1 4 3</td>
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<td>ASE 123 Engine Principles 1 4 3</td>
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<td>ASE 131 Powertrain Fundamentals 1 4 3</td>
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<td>ASE 132 Automotive Heating and Air Conditioning 1 4 3</td>
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<td>ASE 221 Engine Repair 1 4 3</td>
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<td>ASE 222 Manual Transmission/Transaxle 1 4 3</td>
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<td>ASE 231 Automatic Transmission/Transaxle 1 4 3</td>
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<tr>
<td>ASE 270 Dealership Work Experience 0 10 2</td>
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General Education Requirements:
- HMN 100 Humanities Forum 3 0 3
- MAH 100 Intermediate College Algebra 3 0 3
- MAH 116 Mathematical Applications or 3 0 3
- MAH 100 Intermediate College Algebra and
- ASE 122 Steering, Suspension and Alignment 1 4 3
- ASE 123 Engine Principles 1 4 3
- ASE 131 Powertrain Fundamentals 1 4 3
- ASE 132 Automotive Heating and Air Conditioning 1 4 3
- ASE 150 Dealership Work Experience 0 10 2
- ASE 160 Dealership Work Experience 0 10 2
- ASE 211 Automotive Electronics 1 4 3
- ASE 212 Fuel Systems 1 4 3
- ASE 214 Ignition Systems 1 4 3
- ASE 221 Engine Repair 1 4 3
- ASE 222 Manual Transmission/Transaxle 1 4 3
- ASE 223 Engine Management Systems 1 4 3
- ASE 231 Automatic Transmission/Transaxle 1 4 3
- ASE 250 Dealership Work Experience 0 10 2
- ASE 260 Dealership Work Experience 0 10 2
- ASE 270 Dealership Work Experience 0 10 2

Total Credit Hours: 76

TOYOTA T-TEN
ASSOCIATE IN APPLIED TECHNOLOGY DEGREE

<table>
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<tr>
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<tr>
<td>ASE 101 Fundamentals of Automotive Technology</td>
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<tr>
<td>ASE 111 Automotive Electrical Systems</td>
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<td>ASE 112 Starting, Charging Systems and Accessories</td>
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<tr>
<td>ASE 121 Braking Systems</td>
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General Education Requirements:
- HMN 100 Humanities Forum 3 0 3
- MAH 100 Intermediate College Algebra 3 0 3
- MAH 116 Mathematical Applications 3 0 3
- MAH 100 Intermediate College Algebra 3 0 3

Course Descriptions

ASE 101 FUNDAMENTALS OF AUTOMOTIVE TECHNOLOGY
3 Credit Hours
PREREQUISITE: None
This course provides a study of safety rules and procedures based on OSHA standards. Topics include the use of shop tools and equipment, measuring devices, preventive maintenance, light-duty service procedures and the use of shop manuals. Upon course completion, a student should be able to use basic tools and equipment safely and in observance of OSHA standards. CORE

ASE 111 AUTOMOTIVE ELECTRICAL SYSTEMS
3 Credit Hours
PREREQUISITE: None
This course provides a study of the principles of electricity, magnetism and Ohm's law. Emphasis is placed on batteries, starting, charging and lighting circuits. Upon course completion, a student should be able to identify and repair minor electrical problems on the automobile. CORE
ASE 112
STARTING, CHARGING SYSTEMS AND ACCESSORIES
3 Credit Hours
PREREQUISITE: None
This course is designed to provide the basic knowledge of troubleshooting, maintenance and repair of automotive electrical accessories. It includes the use of special tools when servicing batteries, starting systems, charging and lighting systems. All troubleshooting and maintenance procedures must be in accordance with manufacturer's specifications. CORE

ASE 121
BRAKING SYSTEMS
3 Credit Hours
PREREQUISITE: ASE 111 or instructor approval.
This course provides a detailed study of types of hydraulic brake systems (disc and drum) and their service requirements. Topics include braking fundamentals, master cylinders, power assist units, parking brake, lines and valves and anti-lock systems. Upon course completion, a student should be able to repair brake systems. CORE

ASE 122
STEERING, SUSPENSION AND ALIGNMENT
3 Credit Hours
PREREQUISITE: None
This course is designed to give a working knowledge of the design, operation, diagnosis and repair of conventional and strut-type suspension systems. Topics include alignment procedures, wheel balancing, conventional and rack and pinion steering systems. Upon course completion, a student should be able to make repairs and adjustments to suspension systems. CORE

ASE 123
ENGINE PRINCIPLES
3 Credit Hours
PREREQUISITE: None
This course provides a study of engine construction, operation and service, identification of engine components, systems and subsystems. Topics include the operation, service and repair of the lubricating and cooling systems. Upon course completion, a student should be able to perform basic repairs on a variety of engines. CORE

ASE 131
POWERTRAIN FUNDAMENTALS
3 Credit Hours
PREREQUISITE: None
This course provides a study of the automotive power flow from the transmission to the drive wheels. Topics include drive lines, gear ratios, differentials, drive axles, troubleshooting and diagnostics. Upon course completion, a student should be able to troubleshoot, diagnose and repair automotive and manual power trains. CORE

ASE 132
AUTOMOTIVE HEATING AND AIR CONDITIONING
3 Credit Hours
PREREQUISITE: ASE 111 or instructor approval.
This course covers nomenclature, theory of operation, repairs and service procedures, electrical control circuits for the compressor, blower and coolant fan. Emphasis is placed on proper use of service manuals and safety. Upon course completion, a student should be able to diagnose and repair heating and air conditioning systems.

ASE 150
DEALERSHIP WORK EXPERIENCE
2 Credit Hours
PREREQUISITE: Instructor approval.
At the end of each on-campus period, each student returns to the sponsoring dealership to complete this segment of the program working full-time under the supervision of the dealership student work coordinator. He/she is expected to complete work assignments in the dealership that will reinforce and parallel the course work just completed at the college. Although indicated as 10 contact hours, each student generally works on a full-time basis (40 hours per week) at the dealership. An evaluation of each student's in-dealership work performance is completed by the dealership supervisor.

ASE 160
DEALERSHIP WORK EXPERIENCE
2 Credit Hours
PREREQUISITE: Instructor approval.
At the end of each on-campus period, each student returns to the sponsoring dealership to complete this segment of the program working full-time under the supervision of the dealership student work coordinator. He/she is expected to complete work assignments in the dealership that will reinforce and parallel the course work just completed at the college. Although indicated as 10 contact hours, each student generally works on a full-time basis (40 hours per week) at the dealership. An evaluation of each student's in-dealership work performance is completed by the dealership supervisor.

ASE 212
FUEL SYSTEMS
3 Credit Hours
PREREQUISITE: ASE 111 or instructor approval.
This course focuses on fuel delivery systems operation and diagnosis and repair of fuel system components. Emphasis is placed on servicing the fuel injection system. Upon course completion, a student should be able to perform advanced engine tune-ups. CORE

ASE 214
IGNITION SYSTEMS
3 Credit Hours
PREREQUISITE: ASE 111 or instructor approval.
This course provides a study of the principles of operation, diagnosis and repair of the ignitions ignition system components. Topics include primary and secondary circuit operations, and diagnosis and repair of conventional electronic and distributor-less ignition systems. Upon course completion, a student should be prepared to diagnose and repair ignition system problems. CORE

ASE 221
ENGINE REPAIR
3 Credit Hours
PREREQUISITE: ASE 123 or instructor approval.
This course provides understanding of the troubleshooting and repair procedures for the gasoline engine. Topics include engine disassembly, identification of components, inspection and measuring of parts, repair and reassembly, use of service manuals, and safety. Upon course completion, a student should be able to repair or rebuild an automotive engine.

ASE 222
MANUAL TRANSMISSION/TRANSAXLE
3 Credit Hours
PREREQUISITE: ASE 131 or instructor approval.
This course includes a study of manual transmission/transaxle components, gear ratios and power flow. Topics include manual and hydraulic clutches and their service and repair. Upon course completion, a student should be able to remove, repair and replace manual transmission/transaxle components.

ASE 223
ENGINE MANAGEMENT SYSTEMS
3 Credit Hours
PREREQUISITE: ASE 111, ASE 112 and ASE 211 or instructor approval.
This course is designed to provide a working knowledge of the principles of operation, diagnosis and repair of computerized engine control systems. This includes a study of microprocessors, sensors, actuators, and emission control devices and their...
interaction. All diagnostics and repair procedures must be accomplished in accordance with manufacturer's specifications. CORE

ASE 231
AUTOMATIC TRANSMISSION/TRANSAXLE
3 Credit Hours
PREREQUISITE: ASE 131 or instructor approval.
This course is designed to provide a working knowledge of the construction and operation of automatic transmissions/transaxles. Topics include the study of torque converters, gear and clutch assemblies, hydraulic and mechanical power flow, and electronic controls. Upon course completion, a student should be able to remove, install and perform basic repairs on automatic transmissions/transaxles.

ASE 270
DEALERSHIP WORK EXPERIENCE
2 Credit Hours
PREREQUISITE: Instructor approval.
At the end of each on-campus period, each student returns to the sponsoring dealership to complete this segment of the program working full-time under the supervision of the dealership student work coordinator. He/she is expected to complete work assignments in the dealership that will reinforce and parallel the course work just completed at the college. Although indicated as 10 contact hours, each student generally works on a full-time basis (40 hours per week) at the dealership. An evaluation of each student's in-dealership work performance is completed by the dealership supervisor.

ASE 250
DEALERSHIP WORK EXPERIENCE
2 Credit Hours
PREREQUISITE: Instructor approval.
At the end of each on-campus period, each student returns to the sponsoring dealership to complete this segment of the program working full-time under the supervision of the dealership student work coordinator. He/she is expected to complete work assignments in the dealership that will reinforce and parallel the course work just completed at the college. Although indicated as 10 contact hours, each student generally works on a full-time basis (40 hours per week) at the dealership. An evaluation of each student's in-dealership work performance is completed by the dealership supervisor.

ASE 260
DEALERSHIP WORK EXPERIENCE
2 Credit Hours
PREREQUISITE: Instructor approval.
At the end of each on-campus period, each student returns to the sponsoring dealership to complete this segment of the program working full-time under the supervision of the dealership student work coordinator. He/she is expected to complete work assignments in the dealership that will reinforce and parallel the course work just completed at the college. Although indicated as 10 contact hours, each student generally works on a full-time basis (40 hours per week) at the dealership. An evaluation of each student's in-dealership work performance is completed by the dealership supervisor.

BUILDING CONSTRUCTION TECHNOLOGY (BUC)
Bessemer State Technical College offers this program for people interested in pursuing a career in construction. A student who successfully completes the program receives an Associate in Applied Technology Degree or a certificate.

The curriculum is designed to prepare graduates for entry-level employment as carpenters and to provide the knowledge necessary to advance after appropriate field experience to first-line supervisors, estimators, expeditors, assistant project managers, project managers, appraisers or inspectors.

A student usually completes the associate degree program in five semesters/terms.

BUILDING CONSTRUCTION ASSOCIATE IN
APPLIED TECHNOLOGY DEGREE
Course No./Title Theory/Lab/Credit Hours
BUC 110 Basic Construction Tools and Materials 2 2 3
BUC 111 Basic Construction Layout 2 2 3
BUC 112 Construction Measurements and Calculations 2 2 3
BUC 113 Basic Construction Blueprint 3 0 3
BUC 115 Roof and Ceiling Framing 2 2 3
BUC 121 Foundations, Floors and Walls 2 2 3
BUC 122 Intermediate Construction Blueprint 3 0 3
BUC 131 Interior and Exterior Finishes 2 3 3
BUC 132 Advanced Construction Blueprint 3 0 3
BUC 135 Planning, Codes and Scheduling 3 0 3
BUC 141 On-Grade Concrete Applications 2 2 3
BUC 142 Planning/Estimating I 2 2 3
BUC 143 Above-Grade Concrete Applications 2 2 3
BUC 211 Structural Metals and Sheetrock 2 2 3
BUC 212 Basic Construction Drafting 2 2 3
BUC 213 Intermediate Construction Drafting 2 2 3
Select 6 hours from the following:
BUC 152 Metal Framing 1 2 2
BUC 162 Basic Construction Metal Working 1 2 2
BUC 220 Special Problems In Building Construction 2 2 3
BUC 236 Cooperative Work Experience 0 5 1
BUC 238 Cooperative Work Experience 0 5 1
BUC 240 Cooperative Work Experience 0 5 1
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<tr>
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<td>INT 233</td>
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<td>MAH 246</td>
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**General Education Requirements:**
- COM 101: English Composition I 3 0 3
- COM 102: English Composition II 3 0 3
- DPT 104: Computer Fundamentals 2 3 3
- MAH 116: Mathematical Applications 3 0 3
- MAH 246: Mathematics of Finance 3 0 3
- PSH 270: Business and Industrial Psychology 3 0 3
- SPC 106: Fundamentals of Oral Communication 3 0 3

**Total Credit Hours:** 75

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**BUILDING CONSTRUCTION SHORT CERTIFICATE**

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<tr>
<th>Course No./Title</th>
<th>Theory/Lab/Credit Hours</th>
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<tr>
<td>BUC 110</td>
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<td>BUC 111</td>
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<td>BUC 112</td>
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<td>BUC 113</td>
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<tr>
<td>BUC 122</td>
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Select 11 hours from the following:
- BUC 115: Roof and Ceiling Framing 2 3 3
- BUC 121: Foundations, Floors and Walls 2 3 3
- BUC 131: Interior and Exterior Finishes 2 3 3
- BUC 141: On-Grade Concrete Framing 2 3 3
- BUC 143: Above-Grade Concrete Framing 2 3 3
- BUC 236: Cooperative Work Experience 0 5 1
- BUC 238: Cooperative Work Experience 0 5 1
- INT 233: Industrial Maintenance Metal Welding and Cutting Techniques 1 4 3

Total Credit Hours: 26

The Building Construction Technology certificate does not require general education courses.

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**COURSE DESCRIPTIONS**

**BUC 110**

**BASIC CONSTRUCTION TOOLS AND MATERIALS**

3 Credit Hours

PREREQUISITE: None

This course emphasizes the tools and materials used in the construction industry. Topics include safety, hand tools, hand held power tools and construction materials. Upon course completion, a student should be able to work safely within the industry and operate various hand tools and power equipment. CORE

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**BUC 111**

**BASIC CONSTRUCTION LAYOUT**

3 Credit Hours

PREREQUISITE: BUC 110 or instructor approval.

This course provides a student basic building layout skills. Topics include the builder's level, transit and basic site layout techniques. Upon course completion, a student should be able to solve differential leveling problems, set up and operate the builder's level and transit, build batter boards and perform basic construction layout procedures. CORE

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**BUC 122**

**INTERMEDIATE CONSTRUCTION BLUEPRINT**

3 Credit Hours

PREREQUISITE: BUC 113 or instructor approval.

This course emphasizes advanced residential and basic commercial blueprints. Topics include construction materials and specifications for light-frame construction and various commercial applications. Upon course completion, a student should be able to read, with an advanced level of understanding, sets of residential blueprints and possess basic knowledge relative to multiple commercial applications.

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**BUC 131**

**INTERIOR AND EXTERIOR FINISHES**

3 Credit Hours

PREREQUISITE: BUC 110 or instructor approval.

This course is designed to provide a student an in-depth understanding of interior framing for finishes and finish applications. Topics include interior and exterior wall coverings, comices, gable-end framing, interior and exterior finishes for comices, doors, and hardware installation. Upon course completion, a student should be able to frame comices and apply interior and exterior finishes to walls and overhangs and doors.

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**BUC 132**

**ADVANCED CONSTRUCTION BLUEPRINT**

3 Credit Hours

PREREQUISITE: BUC 122 or instructor approval.

This course prepares a student to read advanced sets of commercial blueprints. Topics include various types of construction such as town houses, heavy timber, structural steel and reinforced concrete. Upon course completion, a student should be able to read and interpret advanced commercial blueprints for all major crafts.

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**BUC 133**

**PLANNING, CODES AND SCHEDULING**

3 Credit Hours

PREREQUISITE: None

This course focuses on building codes, real estate, and project scheduling. Topics include real estate, project planning, specifications, company structure and organization, building codes and related legal aspects. Upon course completion, a student should be able to identify the components of the construction process, locate information in building code books, plan construction projects and understand the implications of various real estate issues.
BUC 141
ON-GRADE CONCRETE APPLICATIONS
3 Credit Hours
PREREQUISITE: BUC 110 or instructor approval.
This course emphasizes techniques and principles required to design on-grade concrete forms. Topics include concrete curbs, edge forms, footing forms, concrete wall forms, concrete piers and columns, and templates with anchor bolts and dowels. Upon course completion, a student should be able to perform on-grade concrete slab forming, wall forming, curb forming and set templates with anchor bolts.

BUC 142
PLANNING/ESTIMATING I
3 Credit Hours
PREREQUISITE: BUC 112 or instructor approval.
This course covers the procedures involved in planning and estimating a residential structure. Topics include labor and equipment with emphasis placed on quantity take-off of materials necessary to construct a residential structure. Upon course completion, a student should be able to accurately complete a take-off of materials and equipment needs and plan the labor to construct a residential structure.

BUC 143
ABOVE-GRADE CONCRETE APPLICATIONS
3 Credit Hours
PREREQUISITE: BUC 110 or instructor approval.
This course emphasizes techniques and principles required to build above grade forms and to provide practice in constructing above-grade form systems. Topics include beam forms, slab forms, flying-form tables, crane-set wall panels, and gang-form system for walls and stair forms. Upon course completion, a student should be able to build above-grade concrete form systems, flying-form tables for slabs and build gang-form systems for walls and stairs.

BUC 152
METAL FRAMING
2 Credit Hours
PREREQUISITE: BUC 110 or instructor approval.
This course covers residential metal framing. Topics include steel framing systems for floors, walls and roofs. Upon course completion, a student should be able to install metal framing components for residential construction.

BUC 162
BASIC CONSTRUCTION METALWORKING
2 Credit Hours
PREREQUISITE: BUC 110 or instructor approval.
This course introduces oxyacetylene cutting and basic electric arc welding. Topics include oxyacetylene cutting, electric arc welding, electrode identification and welding symbols. Upon course completion, a student should be able to set up and cut metal with the oxyacetylene torch and perform basic electric arc welding.

BUC 211
STRUCTURAL METALS AND SHEETROCK
3 Credit Hours
PREREQUISITE: BUC 110 or instructor approval.
This course focuses on structural steel and metals used in construction. Topics include structural metals reinforcing, metal stud construction, dry wall and ceiling systems. Upon course completion, a student should be able to install structural steel, concrete reinforcing, metal studs, and sheetrock and should be able to perform basic sheetrock finishing applications.

BUC 212
BASIC CONSTRUCTION DRAFTING
3 Credit Hours
PREREQUISITE: Instructor approval.
This course presents introductory drafting techniques and procedures including lettering, line work, instrument use, and geometric construction principles. Topics include multi-view orthographic projection, sectioning, and dimensioning concepts. Upon course completion, a student should be able to perform basic construction sketching and drafting functions to include a drafting project relevant to the student's area of specialization.

BUC 213
INTERMEDIATE CONSTRUCTION DRAFTING
3 Credit Hours
PREREQUISITE: BUC 111 or instructor approval.
This course introduces basic planning and detailing for residential and light commercial construction. Topics include structural member selection, drafting expressions and special detailing. Upon course completion, a student should be able to produce a set of working drawings for a small residence.

BUC 220
SPECIAL PROBLEMS IN BUILDING CONSTRUCTION
3 Credit Hours
PREREQUISITE: BUC 110 or instructor approval.
This course is designed to allow students to investigate issues and new techniques in the construction industry. Emphasis is on new technology and procedures. Upon course completion, a student should be able to apply new technologies and procedures.

BUC 236
COOPERATIVE WORK EXPERIENCE
1 Credit Hour
PREREQUISITE: Instructor approval.
This course provides work experience with a college-approved employer in an area related to a student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon course completion, a student should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

BUC 238
COOPERATIVE WORK EXPERIENCE
1 Credit Hour
PREREQUISITE: Instructor approval.
This course provides work experience with a college-approved employer in an area related to a student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon course completion, a student should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

BUC 240
COOPERATIVE WORK EXPERIENCE
1 Credit Hour
PREREQUISITE: Instructor approval.
This course provides work experience with a college-approved employer in an area related to a student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon course completion, a student should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.
BUILDING MAINTENANCE (BLM)

Building Maintenance includes theory, laboratory experiences and live-work projects relative to the repair, alteration and modernization of existing structures. Students completing the program will qualify to enter the maintenance field in several job areas: industrial, commercial, institutional and multifamily. Students usually complete the program in two semesters/terms. This program of study does not require a high school diploma or GED.

BUILDING MAINTENANCE SHORT CERTIFICATE

Course No./Title  
Theory/Lab/Credit Hours  
BLM 110 Principles of Electricity for HVAC  
1 4 3  
BLM 114 HVAC Service Procedures  
1 4 3  
BLM 116 Heating System Maintenance  
1 4 3  
BLM 118 Basic Plumbing, Repair, Maintenance, and Installation  
1 4 3  
BLM 122 Introduction to Electricity  
1 4 3  
BLM 126 Construction Basics  
1 4 3  
BLM 128 Interior Maintenance  
1 4 3  
BLM 130 Exterior Maintenance  
1 4 3  
Total Credit Hours: 24  
Recommended Related Courses:  
BLM 112 Refrigeration Principles  
1 4 3  
BLM 118 Basic Plumbing, Repair, Maintenance and Installation  
1 4 3  
BLM 120 Introduction to Blueprint Reading  
1 4 3  
BLM 124 Basic Electrical Wiring  
1 4 3  
BLM 141 Pipes and Fittings  
1 4 3  
BLM 142 Pressure and Non-pressure Plumbing Systems  
1 4 3  

The Building Maintenance certificate does not require general education courses. All courses in this program are creditable toward a minor in the Associate in Occupational Technology Degree.

COURSE DESCRIPTIONS

BLM 110  
PRINCIPLES OF ELECTRICITY FOR HVAC  
3 Credit Hours  
PREREQUISITE: None  
This course is designed to provide a student with the basic knowledge of electrical theory and circuitry as it pertains to air conditioning and refrigeration. This course emphasizes safety, definitions, symbols, laws, circuits, and electrical test instruments. Upon course completion, a student should understand and be able to apply the basic principles of heating, ventilation, air conditioning, and refrigeration circuits and circuit components. CORE

BLM 112  
REFRIGERATION PRINCIPLES  
3 Credit Hours  
PREREQUISITE: None  
This course emphasizes the fundamental principles of air conditioning and refrigeration. Instruction is provided in the theory and principles of refrigeration, heat transfer, refrigeration system components, the mechanical cycle of operation, and refrigeration characteristics. Upon course completion, a student should understand the functions of major system components, terminology, heat transfer, safety and the use and care of tools and equipment.

BLM 114  
HVAC SERVICE PROCEDURES  
3 Credit Hours  
PREREQUISITE: None  
This course covers system performance checks and refrigerant cycle diagnosis. Emphasis is placed on the use of refrigerant recovery/recycle units, industry codes, refrigerant oils and correct methods of charging and recovering refrigerants. Upon course completion, a student should be able to properly recover/recycle refrigerants and demonstrate safe, correct service procedures which comply with the no-venting laws. CORE

BLM 116  
HEATING SYSTEM MAINTENANCE  
3 Credit Hours  
PREREQUISITE: BLM 110 and BLM 112 or instructor approval.  
This course focuses on seasonal preventive maintenance and diagnosis of heating system malfunctions. Emphasis is on heating system operation and maintenance. Upon course completion, a student should be able to troubleshoot heating systems and perform basic service and repair procedures. CORE

BLM 118  
BASIC PLUMBING, REPAIR, MAINTENANCE, AND INSTALLATION  
3 Credit Hours  
PREREQUISITE: None  
This introductory course enables students to read and follow schematics/diagrams/rough-in sheets to install or repair plumbing fixtures, to troubleshoot and make repairs. Topics include removing, replacing and repairing plumbing fixtures, new installations and troubleshooting. Upon course completion, a student should be able to make basic plumbing repairs and install plumbing fixtures. CORE

BLM 120  
INTRODUCTION TO BLUEPRINT READING  
3 Credit Hours  
PREREQUISITE: None  
This course introduces a student to the basic concepts of blueprint reading applicable to building maintenance. Topics include scales, symbols, site plans, and notations. Upon course completion, a student should be able to identify drawings, scale various drawings, and identify different types of lines, symbols and notations.

BLM 122  
INTRODUCTION TO ELECTRICITY  
3 Credit Hours  
PREREQUISITE: None  
This course introduces the fundamental concepts of electricity and test equipment applicable to building maintenance. Topics include basic DC and AC principles (voltage, resistance, current, impedance); components (resistors, inductors, and capacitors); power; and operation of test equipment. Upon course completion, a student should be able to construct and analyze simple DC and AC circuits using electrical test equipment. CORE

BLM 124  
BASIC ELECTRICAL WIRING  
3 Credit Hours  
PREREQUISITE: BLM 122 or instructor approval.  
This course introduces the care/usage of tools and materials used in electrical installations and the requirements of the National Electrical Code. Topics include NEC, electrical safety and electrical blueprint reading; planning, layout, and installation of electrical distribution equipment; lighting; overcurrent protection; conductors; branch circuits; and conduits. Upon course completion, a student should be able to properly install conduits, wiring and electrical distribution equipment associated with basic electrical installations.

BLM 126  
CONSTRUCTION BASICS  
3 Credit Hours  
PREREQUISITE: None  
This course introduces a student to basic practices in construction. Topics include construction tools, materials, equipment and safety. Upon course completion, a student should be able to identify construction tools, materials, equipment and safety procedures.

BLM 128  
INTERIOR MAINTENANCE  
3 Credit Hours  
PREREQUISITE: BLM 126 or instructor approval.  
This course is designed to provide a student with the basic skills and knowledge necessary to
maintain the interior of commercial facilities. Emphasis is placed on maintaining floors, walls, and mechanical operations. Upon course completion, a student should be able to repair and maintain commercial structure interiors.

BLM 130
EXTERIOR MAINTENANCE
3 Credit Hours
PREREQUISITE: BLM 126 or instructor approval.
This course is designed to provide a student with the basic skills and knowledge necessary to maintain the exterior of commercial buildings. Emphasis is placed on exterior walls, lighting, and auxiliary facilities such as pools and parking lots. Upon course completion, a student should be able to repair and maintain the exterior of commercial facilities.

BLM 141
PIPES AND FITTINGS
3 Credit Hours
PREREQUISITE: BLM 118 or instructor approval.
This course focuses on joining and installing pipe and fittings. Topics include methods of joining pipe and fittings, sanitary drainage, vent piping, and methods of securing piping. Upon course completion, a student should be able to install pipes and fittings, identify and properly care for tools and use various types of pipe securing and drainage devices.

BLM 142
PRESSURE AND NON-PRESSURE PLUMBING SYSTEMS
3 Credit Hours
PREREQUISITE: BLM 141 or instructor approval.
This course covers pressure and non-pressure systems including piping for potable water, drainage, waste, vent, gas, air, and water. Topics include types of plumbing systems and system design and size. Upon course completion, a student should be able to install, test, service and repair liquid and gas supply systems including plumbing fixtures and related appliances. CORE

COMMERCIAL ART (CAT)
The Commercial Art program at Bessemer State Technical College enhances and maximizes artistic skills for persons who desire to work in this career field. Sources of employment are advertising agencies, advertising departments, art studios, mass media (newspapers and TV), printers and publishers and as freelance commercial artists. Specialty certificate programs in Advertising and Design and Commercial Photography are offered in the evening program.

COMMERCIAL ART DIPLOMA
Course No./Title Theory/Lab/Credit Hours
CAT 111 Introduction to Computers in Commercial Art 1 4 3
CAT 112 Color Theory and Design 1 4 3
CAT 118 Design Drawing 1 4 3
CAT 120 Computer Graphics 1 4 3
CAT 122 Technical Processes 1 4 3
CAT 123 Computer Drawing 1 4 3
CAT 128 Electronic Page Layout and Assembly 1 4 3
CAT 130 Principles of Design 1 4 3
CAT 132 Basic Advertising Design 1 4 3
CAT 142 Intermediate Advertising Design 1 4 3
CAT 150 Advanced Advertising Design 1 4 3
CAT 170 Web Site Development 1 4 3
CAT 182 3D Graphics and Animation 1 4 3
Select 2 courses from the following:
CAT 113 Technical Drawing 1 4 3
CAT 126 Typsetting Fundamentals 1 4 3
CAT 140 Photography 1 4 3
CAT 152 Digital Photography 1 4 3
CAT 156 Advertising Photography Studio 1 4 3
CAT 180 Current Topics in Commercial Art 1 4 3
General Education Requirements:
COM 131 Applied Writing 3 0 3
DPT 196 Commercial Software Application 2 2 3
MAH116 Mathematical Applications 3 0 3
SPC 116 Introduction to Interpersonal Communication 3 0 3
Total Credit Hours: 57
All courses in this program are creditable toward an Associate in Occupational Technology Degree (AOT).

COMMERCIAL ART/PHOTOGRAPHY SHORT CERTIFICATE
Course No./Title Theory/Lab/Credit Hours
CAT 111 Introduction to Computers in Commercial Art 1 4 3
CAT 120 Computer Graphics 1 4 3
CAT 140 Photography 1 4 3
CAT 154 Basic Photography Studio 1 4 3
CAT 156 Advertising Photography Studio 1 4 3
CAT 157 Photo Marketing 1 4 3
Select 2 courses from the following:
CAT 152 Digital Photography 1 4 3
CAT 153 Black and White Photography 1 4 3
CAT 159 Photography Studio Fashion 1 4 3
CAT 159 Photojournalism 1 4 3
CAT 162 Basic Photo Airbrush 1 4 3
CAT 164 Advanced Photo Airbrush 1 4 3
Total Credit Hours: 24
The Commercial Art certificate does not require general education courses. All courses in this award are creditable toward an Associate in Occupational Technology Degree (AOT).

COURSE DESCRIPTIONS
CAT 111
INTRODUCTION TO COMPUTERS IN COMMERCIAL ART
3 Credit Hours
PREREQUISITE: None
This course provides a student with a basic knowledge of computer operations, software applications and the role and impact of computers in graphic design and communications. Emphasis is placed on computer terms, hardware components, drawing, image editing and page layout software applications. Upon course completion, a student should be able to perform basic computer operations and file management and will be able to demonstrate an understanding of page layout software applications. CORE

CAT 112
COLOR THEORY AND DESIGN
3 Credit Hours
PREREQUISITE: None
This course provides an introduction to color psychology, theory and interpretation. Emphasis is placed on color values and mixing, the color wheel and charts, color theory and the color Pantone System. Upon course completion, a student should be able to understand light and color techniques used in advertising, color photography, RGB and CMYK and the use of color for simulating printing ink.

CAT 113
TECHNICAL DRAWING
3 Credit Hours
PREREQUISITE: None
This course introduces a student to basic drawing techniques and procedures for producing two- and three-dimensional drawings. Topics include the use of drawing instruments, geometric shapes, orthographic projection, pictorial representation and
This course introduces a student to digital imaging techniques used by industry. Emphasis is placed on the technical application of the camera, and digital photographic lighting methods. Upon course completion, a student should be able to determine the need for digital photography versus reproduction, qualify advertising photography, and understand both concepts.

CAT 153
BLACK AND WHITE PHOTOGRAPHY
3 Credit Hours
PREREQUISITE: CAT 140 or instructor approval. This course introduces a student to advanced printing methods and techniques. Topics include printing with filters, high contrast and fine art photographic paper. Upon course completion, a student should be able to recognize the different tools associated with the software, create, edit, and manipulate text, alter elements using the transformation tools, create charts and graphs, and design custom process colors.

CAT 126
TYPESETTING FUNDAMENTALS
3 Credit Hours
PREREQUISITE: CAT 111 or instructor approval. This course provides the study of type and text production. Emphasis is placed on development of the typography form – from historic pictography representation to modern type styles and high-resolution electronic image setting. Upon course completion, a student should be able to demonstrate basic keyboarding skills for computer typesetting systems and applications, text-type specifications, measurement, and text proofing.

CAT 122
TECHNICAL PROCESSES
3 Credit Hours
PREREQUISITE: None
This course introduces a student to the basic concepts and skills of image and page production and assembly necessary to produce camera-ready mechanicals. Emphasis is placed on equipment, materials, and techniques used to produce comprehensive and mechanical, basic graphic arts camera operations, standard darkroom procedures, basic scanner operation, and digital image creation. Upon course completion, a student should be able to recognize the quality of film and halftone representations as they are produced in traditional press production as well as electronic prepress applications. CORE

CAT 123
COMPUTER DRAWING
3 Credit Hours
PREREQUISITE: CAT 111 or instructor approval. This course provides a student with a technical background in computer graphics. Emphasis is placed on the different draw, modification, and editing tools associated with industry-standard software. Upon course completion, a student should be able to recognize the technical application of the camera, and digital photographic lighting methods. Upon course completion, a student should be able to determine the need for digital photography versus reproduction, qualify advertising photography, and understand both concepts.

CAT 152
DIGITAL PHOTOGRAPHY
3 Credit Hours
PREREQUISITE: None
This course introduces a student to digital imaging techniques used by industry. Emphasis is placed on the technical application of the camera, and digital photographic lighting methods. Upon course completion, a student should be able to determine the need for digital photography versus reproduction, qualify advertising photography, and understand both concepts.

CAT 140
PHOTOGRAPHY
3 Credit Hours
PREREQUISITE: None
This course is an introduction to black and white 35mm photography. Emphasis is placed on good photographic composition, as well as both the aesthetic and technical aspects of photography. Each student should learn the operations of a single reflex camera, technical camera applications, film processing and darkroom printing.

CAT 142
INTERMEDIATE ADVERTISING DESIGN
3 Credit Hours
PREREQUISITE: CAT 132 or instructor approval. This course includes advance design concepts and assignments. Emphasis is placed on various design elements which include artistic rendering, photo illustrations, typography and computer layout as applied to advertising campaigns. Upon course completion, a student should be able to combine graphic skills to produce professional artwork. CORE

CAT 150
ADVANCED ADVERTISING DESIGN
3 Credit Hours
PREREQUISITE: CAT 142 or instructor approval. This course is designed to allow students the opportunity to create, design, and produce a corporate image project and portfolio. Emphasis is placed on the development of the repetitive grid, using photos as clip art, scanned images and a page layout software program. Upon course completion, a student should be able to use prior training in the manual and computer design course to complete this task.

CAT 132
BASIC ADVERTISING DESIGN
3 Credit Hours
PREREQUISITE: None
This course deals with design assignments related to the commercial art field and introduces a student to graphic design techniques and camera-ready art. Emphasis is placed on creating and producing advertising design pieces. Each student should learn the importance of creative thinking for design communications and how to produce advertising design from concept to the printed pieces. CORE
CAT 154
BASIC PHOTOGRAPHY STUDIO
3 Credit Hours
PREREQUISITE: CAT 140 or instructor approval.
This course provides an introduction to 35 mm and 2 1/4" x 2 1/4" cameras, portrait posing, and studio lighting techniques. Emphasis is placed on the use of EFS and spot meters, soft boxes, honeycomb grids and color gels. Upon course completion, a student should be able to create dramatic portraiture, and design, style and shoot magazine "mock-up" advertising.

CAT 155
PHOTOGRAPHY STUDIO FASHION
3 Credit Hours
PREREQUISITE: CAT 140 and CAT 154 or instructor approval.
This course provides an introduction to advanced electronic flash systems, medium format single reflex cameras and "Master Lighting." Emphasis is placed on photography, black and white darkroom, writing caption lines, story outlines and a photo essay. Upon course completion, a student should be able to capture the most revealing moment, anticipate a newsreader's interest and should be a trained observer of current events.

CAT 156
ADVERTISING PHOTOGRAPHY STUDIO
3 Credit Hours
PREREQUISITE: CAT 140 or instructor approval.
This course provides an introduction to tabletop advertising photography and lighting techniques. Topics include food photography, abstract still life and product advertising. Upon course completion, a student should be able to demonstrate skills with the 4 x 5 camera, Polaroid proofing and the 35mm and medium format camera angles for tabletop photography. Required: 35mm camera
Optional: 6 x 6cm or 4 x 5cm camera

CAT 157
PHOTO MARKETING
3 Credit Hours
PREREQUISITE: CAT 140 or instructor approval.
This course provides an introduction to freelance, stock photography and independent marketing techniques. Emphasis is placed on field photography, writing queries and studio office organizational skills. Upon course completion, a student should be able to shoot environmental and advertising photography, create a stock computer database, understand tax tips and apply required policies and booking techniques.

CAT 158
PHOTOJOURNALISM
3 Credit Hours
PREREQUISITE: CAT 140 or instructor approval.
In this course, a student produces visual communications through photographic images. Emphasis is placed on photography, black and white darkroom, writing caption lines, story outlines and a photo essay. Upon course completion, a student should be able to capture the most revealing moment, anticipate a newsreader's interest and should be a trained observer of current events.

CAT 159
ADVANCED PHOTO AIRBRUSH
3 Credit Hours
PREREQUISITE: CAT 140 and CAT 162 or instructor approval.
This course is an introduction to manual photo retouching and restoration. Emphasis is placed on photographic airbrush "block-out", spot toning, grease pencil and ink retouching. Upon course completion, a student should be able to photocopy, reprint and hand-tint restored images.

CAT 160
CURRENT TOPICS IN COMMERCIAL ART
3 Credit Hours
PREREQUISITE: None
This course provides an overview of current trends in the commercial art industry. Emphasis is placed on perspective drawing, watercolor and medical illustration, typography design and font management, comic art and computer animation, digital graphics and advanced computer graphics. Upon course completion, a student should be able to demonstrate skills in graphic illustration and the newest technology for the industry.

CAT 162
BASIC PHOTO AIRBRUSH
3 Credit Hours
PREREQUISITE: None
This course is an introduction to manual photo retouching and restoration. Emphasis is placed on photographic airbrush "block-out", spot toning, grease pencil and ink retouching. Upon course completion, a student should be able to photocopy, reprint and hand-tint restored images.

CAT 164
ADVANCED PHOTO AIRBRUSH
3 Credit Hours
PREREQUISITE: CAT 140 and CAT 162 or instructor approval.
This course is a study of photo retouching and manipulation and advanced airbrush techniques. Emphasis is placed on color "block-out," dye spotting techniques, and dry painting methods. Upon course completion, a student should be able to manipulate photographs for advertising purposes and use special effects for fine art photography.

CAT 170
WEB SITE DEVELOPMENT
3 Credit Hours
PREREQUISITE: CAT 111 or instructor approval.
This course provides an understanding of the Internet and design principles of web sites. Topics include software necessary for the creation and maintenance of a web site. Upon course completion, a student should be able to design, implement and maintain a web site.
COMPUTER SCIENCE (DPT)

The Associate in Applied Technology Degree is an 18-month program designed to prepare graduates for gainful employment in the field of business computer science. Major topics include program logic, application development using batch and on-line structured techniques, and the use of personal computers. Extensive laboratory training with an equivalent system used by many businesses and industries in the area is a plus feature for the technical graduate entering the computer science field.

Program languages studied are C, RPG II, COBOL (interactive and batch) and Visual Basic. Personal computer courses using popular spreadsheet and database packages are part of this program. Courses in Algebra and English complete the curriculum.

<table>
<thead>
<tr>
<th>Course No./Title</th>
<th>Theory/Lab/Credit Hours</th>
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<tbody>
<tr>
<td>DPT 111 COBOL Programming</td>
<td>2 2 3</td>
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<td>DPT 113 Networking Technologies</td>
<td>3 0 3</td>
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<tr>
<td>DPT 119 Introduction to Computers</td>
<td>3 0 3</td>
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<tr>
<td>DPT 120 Introduction to Windows</td>
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<td>DPT 121 Network Administration</td>
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<td>DPT 150 Micro Operating Systems</td>
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<td>DPT 152 C++ Programming</td>
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<td>DPT 157 Network Basics</td>
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<tr>
<td>DPT 196 Commercial Software</td>
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<tr>
<td>DPT 211 Advanced COBOL Programming</td>
<td>2 2 3</td>
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<tr>
<td>DPT 224 Enterprise Network Design</td>
<td>3 0 3</td>
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<td>DPT 230 Database</td>
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<tr>
<td>DPT 245 Spreadsheets</td>
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<tr>
<td>DPT 258 Visual BASIC</td>
<td>2 2 3</td>
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<tr>
<td>DPT 268 Elective</td>
<td>3 0 3</td>
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<tr>
<td>General Education Requirements:</td>
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<tr>
<td>COM 101 English Composition I</td>
<td>3 0 3</td>
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<tr>
<td>COM 102 English Composition II</td>
<td>3 0 3</td>
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<tr>
<td>MAH 100 Intermediate College Algebra</td>
<td>3 0 3</td>
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<tr>
<td>MAH 116 Mathematical Applications</td>
<td>3 0 3</td>
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<tr>
<td>PSC 120 Introduction to Physics</td>
<td>3 2 4</td>
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<tr>
<td>PSH 270 Business and Industrial Psychology</td>
<td>3 0 3</td>
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<tr>
<td>SPC 106 Fundamentals of Oral Communication</td>
<td>3 0 3</td>
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</tbody>
</table>

Total Credit Hours: 24

The Computer Science certificate does not require general education courses.

**COURSE DESCRIPTION**

**DPT 093 COMPUTER LABORATORY**

3 Credit Hours

PREREQUISITE: None

This is a repeatable course in which students are to demonstrate mastery of designated topics by the completion of laboratory assignments. This laboratory course is designed to accompany data processing theory courses. Upon course completion, a student should have successfully completed laboratory assignments for the accompanying theory class. NDC

**DPT 104 COMPUTER FUNDAMENTALS**

3 Credit Hours

PREREQUISITE: None

This introductory course for non-computer majors includes computer keyboarding, operating systems and application software. Each student will complete laboratory assignments to ensure keyboard and applications mastery.

**DPT 111 COBOL PROGRAMMING**

3 Credit Hours

PREREQUISITE: DPT 110 or permission of instructor.

This course introduces a student to COBOL, the Common Business Oriented Language. Students are introduced to COBOL program structure, program divisions, input/output statements, arithmetic expressions, conditional expressions, debugging techniques, multilevel control breaks, and table processing. Outside laboratory time is required to produce programs for evaluation and to ensure mastery of COBOL. CORE

**DPT 113 NETWORKING TECHNOLOGIES**

3 Credit Hours

PREREQUISITE: None

This course covers protocols such as IPX, TCP/IP, SNA, and the like in the framework of the OSI and DOD protocol models. The course should include coverage of internetworking equipment. Upon course completion, a student should have the appropriate theoretical background to analyze internetworking scenarios and to recognize different potential solutions and their respective strengths and weaknesses.

**DPT 119 INTRODUCTION TO COMPUTERS**

3 Credit Hours

PREREQUISITE: None

This course is an introduction to computers and their impact on society. The course covers the development of computers, their impact on society, as well as future implications of development of computer and related communication technologies and also introduces programming and computer operating systems. A student who completes this course should have basic knowledge of computer technology. CORE

**DPT 120 INTRODUCTION TO WINDOWS**

3 Credit Hours

PREREQUISITE: None

This is an introduction to the basics of Microsoft Windows and graphical environments. Normal business uses of a microcomputer and Windows are covered in this course. This course requires that each student demonstrates mastery of Windows and graphical environments at the required level.

**DPT 121 NETWORK ADMINISTRATION**

3 Credit Hours

PREREQUISITE: None

This course is designed to introduce basic network administration. The basics of network administration, installing and maintaining network software on a server, installation of applications on the server and how networks are made ready for users are covered. Upon course completion, a student should demonstrate the ability to administer a computer network.

**DPT 150 MICRO OPERATING SYSTEMS**

3 Credit Hours

PREREQUISITE: None

This course introduces the fundamental concepts of basic microcomputer operation. Topics include tree structures, files, and disk utilities. Upon course completion, a student should demonstrate a mastery of microcomputer operation. CORE

**DPT 152 C++ PROGRAMMING**

3 Credit Hours

PREREQUISITE: MAH 090, DPT 110 or permission of instructor.

This course introduces the C++ programming language. The syntax of C++, decision structures, input/output operations, math and logical operations, control structures, function declarations, parameter passing, and structured techniques are covered. This course requires outside laboratory time, and each student is expected to demonstrate a mastery of the C++ language. CORE
DPT 153  KEYBOARDING
3 Credit Hours
PREREQUISITE: None
This is an introductory course for learning the keyboard. Students learn to use a keyboard properly, accurately, and with ease.

DPT 157  NETWORK BASICS
3 Credit Hours
PREREQUISITE: None
This is an introduction to hardware and software topics for networks. Topics include personal computer networking topologies, equipment, and the most popular networking software. This course requires outside laboratory time and each student is expected to demonstrate a mastery of networks.

DPT 191  CO-OP
3 Credit Hours
PREREQUISITE: None
This course is part of a series of cooperative education classes in which a student is assigned duties on a part-time basis in a position directly related to the academic major. Emphasis is given to the development and acquisition of practical skills in the data processing environment, with those skills to be defined at the beginning of the semester by the school and cooperative business or agency. Each student should apply skills in a work setting.

DPT 192  CO-OP
3 Credit Hours
PREREQUISITE: DPT 191 or permission of instructor.
This course is part of a series of cooperative education classes in which a student is assigned duties on a part-time basis in a position directly related to the academic major. Emphasis is given to the development and acquisition of practical skills in the data processing environment, with those skills to be defined at the beginning of the semester by the school and cooperative business or agency. Each student should apply skills in a work setting.

DPT 198  COMMERCIAL SOFTWARE APPLICATION
3 Credit Hours
PREREQUISITE: None
This is a "hands-on" introduction to software packages, languages and utility programs currently in use. Each offering focuses on one software package, with credit being received for each different package. Upon course completion, a student should demonstrate competency in selected skills for the software used in the course.

DPT 211  ADVANCED COBOL PROGRAMMING
3 Credit Hours
PREREQUISITE: DPT 111 or permission of instructor.
This course is a continuation of DPT 111—COBOL Programming. Topics include sorts, sequential, index processing and sub-program use. This course requires outside laboratory time and each student is required to demonstrate a mastery of COBOL at the advanced level.

DPT 224  ENTERPRISE NETWORK DESIGN
3 Credit Hours
PREREQUISITE: DPT 121 or permission of instructor.
This course covers the design and implementation of large networks. The course will include coverage of topics such as design team members, partitioning and replication of distributed database and time synchronization issues. Upon completion, each student should be able to use the project approach to gather information, design and implement an enterprise-wide network.

DPT 230  DATABASE
3 Credit Hours
PREREQUISITE: Permission of instructor.
This course introduces database systems. The course will utilize a database allowing a student to create and update files, generate reports and create application complete with formatted entry and output. This course requires outside laboratory time and each student is required to demonstrate a mastery of database functions and concepts.

DPT 231  ADVANCED DATABASE
3 Credit Hours
PREREQUISITE: DPT 230 or permission of instructor.
This course is a continuation of DPT 230—Database. The course expands database concepts in creating, maintaining, retrieving and reporting and covers in-depth database programming capabilities. This course requires outside laboratory time and each student is required to demonstrate a mastery of advanced database functions and concepts.

DPT 245  SPREADSHEETS
3 Credit Hours
PREREQUISITE: Permission of instructor.
This course is an introduction to spreadsheet concepts. Students learn basic editing, manipulation techniques using formulas, built-in functions, graphs and database capabilities. This course requires outside laboratory time and each student is required to demonstrate a mastery of spreadsheets.

DPT 258  VISUAL BASIC
3 Credit Hours
PREREQUISITE: DPT 158 or permission of instructor.
This course is an introduction to the programming language Visual BASIC. Emphasis is on object oriented languages and the basic fundamentals of BASIC programming in a graphical environment. This course requires outside laboratory time each student is required to demonstrate a mastery of BASIC.

DPT 260  SPECIAL TOPICS
1-3 Credit Hours
PREREQUISITE: Permission of instructor.
This course allows for specialized, in-depth study. Emphasis is placed on individualized instruction.

DPT 261  SPECIAL TOPICS
1-3 Credit Hours
PREREQUISITE: Permission of instructor.
This course allows for specialized, in-depth study. Emphasis is placed on individualized instruction.

DPT 291  CO-OP
1-3 Credit Hours
PREREQUISITE: DPT 291 or permission of instructor.
This course is part of a series of cooperative education classes in which a student is assigned duties on a part-time basis in a position directly related to the academic major. Emphasis is given to the development and acquisition of practical skills in the data processing environment, with those skills to be defined at the beginning of the semester/term by the school and cooperative business or agency. Upon course completion, a student should demonstrate the ability to apply knowledge and skills to the work environment.

DPT 292  CO-OP
1-3 Credit Hours
PREREQUISITE: DPT 291 or permission of instructor.
This course is part of a series of cooperative education classes in which a student is assigned duties on a part-time basis in a position directly related to the academic major. Emphasis is given to the development and acquisition of practical skills in the data processing environment, with those skills to be defined at the beginning of the semester/term by the school and cooperative business or agency. Upon course completion, a student should demonstrate the ability to apply knowledge and skills to the work environment.
DPT 293
CO-OP
1-3 Credit Hours
PREREQUISITE: DPT 292 or permission of instructor.
This course is part of a series of cooperative education classes in which a student is assigned duties on a part-time basis in a position directly related to the academic major. Emphasis is given to the development and acquisition of practical skills in the data processing environment, with those skills to be defined at the beginning of the semester/term by the school and cooperative business or agency. Upon course completion, a student should be able to demonstrate the ability to apply knowledge and skills to the work environment.

DPT 299
DIRECTED STUDIES IN DATA PROCESSING
1-3 Credit Hours
PREREQUISITE: Permission of instructor.
This course allows directed studies under the direction of an instructor. The topics and assignments are defined prior to or at the beginning of the course.

DATA ENTRY/CLERICAL (CLR)
The Data Entry/Clerical program can be completed in two semesters/terms. The program is designed to prepare students for employment in the data entry area. The program offers hands-on training on several popular software packages.

DATA ENTRY/CLERICAL SHORT CERTIFICATE
Course No./Title     Theory/Lab/Credit Hours
CLR 100 Basic Keyboarding 2 4 3
CLR 104 Advanced Keyboarding 2 4 3
CLR 116 Microcomputer Applications 2 4 3
CLR 227 Information Processing Concepts 2 4 3
CLR 243 Spreadsheet Applications 2 4 3
CLR 244 Database Concept 2 4 3
CLR 245 Data Entry 2 4 3
CLR 247 Special Projects 2 4 3
Total Credit Hours: 24
Data Entry/Clerical courses will not apply toward an AAT or AOT degree. The Data Entry/Clerical certificate does not require general education courses and it does not require a high school diploma or GED.

COURSE DESCRIPTIONS
CLR 100
BASIC KEYBOARDING
3 Credit Hours
PREREQUISITE: None
This course is designed to develop touch keyboarding skills for efficient use of the typewriter or microcomputer. Emphasis is on speed and accuracy in keying alphabetic, symbolic, and numeric information. Upon completion, a student should be able to demonstrate proper techniques while keying on a typewriter or microcomputer keyboard. CORE NDC

CLR 104
ADVANCED KEYBOARDING
3 Credit Hours
PREREQUISITE: CLR 100 or permission of instructor.
This course is designed to assist the student in continuing to develop speed and accuracy using the touch method of keyboarding. Emphasis is on the production of business documents using decision-making skills. Upon course completion, a student should be able to demonstrate proficiency and an acceptable rate of speed and accuracy in the production of business documents. CORE NDC

CLR 116
MICROCOMPUTER APPLICATIONS
3 Credit Hours
PREREQUISITE: CLR 100 or permission of instructor.
This course is designed to introduce the most common software applications for microcomputers. Emphasis is on major commercial software used for business applications. Upon course completion, a student should be able to demonstrate the ability to use applicable software. NDC

CLR 227
INFORMATION PROCESSING CONCEPTS
3 Credit Hours
PREREQUISITE: CLR 100 or permission of instructor.
This course introduces the basic concepts and applications of information systems. Emphasis is on the components and capabilities of systems used to produce, communicate and manage information. Upon course completion, a student should be able to use office information systems. NDC

CLR 243
SPREADSHEET APPLICATIONS
3 Credit Hours
PREREQUISITE: Permission of instructor.
This course provides a student with the skills needed in performing spreadsheet tasks. Emphasis is on spreadsheet terminology and design, common formulas, proper file and disk management procedures. Upon course completion, a student should be able to design, format, and graph effective spreadsheets. NDC

CLR 244
DATABASE CONCEPTS
3 Credit Hours
PREREQUISITE: Permission of instructor.
This course focuses on database management. Emphasis is on the use of database software for business applications. Upon course completion, a student should be able to create and manipulate data files and format output as documents and reports. NDC

CLR 245
DATA ENTRY
3 Credit Hours
PREREQUISITE: CLR 100 or permission of instructor.
This course focuses on the use of computerized equipment and software in performing data-entry tasks. Emphasis is on the basic features of data-entry software, terminology, and proper file and disk management procedures. Upon course completion, the student should be able to perform data-entry applications. NDC
DENTAL ASSISTING (DAT)

Dental Assisting is a one-year program comprised of three semesters/terms. The program provides a student with the educational background and the clinical experience necessary to become proficient in the delivery of dental health care. In addition to learning clinical procedures, each student is taught business and dental laboratory procedures required in the practice of dentistry.

The first semester of study provides each student with the necessary background knowledge in dental science prior to patient treatment along with pre-clinical and lab instruction required for patient treatment. During the second semester of study, each student will apply the knowledge and techniques he/she has acquired while working with dental students at the University of Alabama School of Dentistry at UAB. Through practical application, each student should learn four-handed chairside techniques, methods of sterilization and disinfection, operation and maintenance of dental equipment, dental instruments, and dental materials, and the manipulation of dental materials used in clinical dentistry. Each student is also provided with the necessary background knowledge in dental radiography. During the summer term, a student will participate in clinical rotations through the specialty clinics at the University of Alabama School of Dentistry and in private dental offices.

The Dental Assisting program is accredited by the Commission on Dental Accreditation of the American Dental Association, the Council on Occupational Education and the State Board of Dental Examiners. Graduates are eligible to write the certification examination administered by the Dental Assisting National Board.

DENTAL ASSISTING DIPLOMA

Course No./Title      Theory/Lab/Credit Hours
DAT 100 Introduction to Dental Assisting       2 0 2
DAT 101 Pre-Clinical Procedures                2 3 3
DAT 102 Dental Materials                       2 3 3
DAT 103 Anatomy and Physiology for Dental Assisting 2 2 3
DAT 104 Basic Sciences for Dental Assisting     2 0 2
DAT 112 Dental Radiology                       2 3 3
DAT 113 Dental Health Education                2 0 2
DAT 115 Clinical Practicum I                   0 15 5
DAT 121 Dental Office Procedures                4 0 4
DAT 122 Clinical Practice II                    0 12 4
DAT 123 Dental Assisting Seminar                4 0 4
DAT 124 Clinically Applied Infection Control and OSHA Standards 0 3 1
DAT 140 Directed Studies in Dental Assisting    2 0 2

General Education Requirements:
COM 131 Applied Writing                         3 0 3
MAH 116 Mathematical Applications              3 0 3
PSH 270 Business and Industry Psychology        3 0 3
SPC 116 Introduction to Interpersonal Communication 3 0 3
Total Credit Hours: 50
All courses in this award are creditable toward an Associate in Occupational Technology Degree (AOT).

COURSE DESCRIPTIONS

DAT 100 INTRODUCTION TO DENTAL ASSISTING
2 Credit Hours
PREREQUISITE: Admission to DAT program and permission of instructor.
This course is designed to provide an introduction to dentistry and the history of dentistry, dental equipment, dental auxiliaries, psychology application to dentistry, personal and certification requirements, and work ethics and communication skills. Emphasis is placed on the Alabama Dental Practice Act and OSHA Standards. Upon course completion, a student should be able to discuss basic aspects of dentistry. CORE

DAT 101 PRE-CLINICAL PROCEDURES
3 Credit Hours
PREREQUISITE: Admission to DAT program and permission of instructor.
This course is designed to introduce chairside assisting including concepts of four-handed dentistry, sterilization techniques, dental instruments, anesthesia, operative dentistry, and dental specialties. Emphasis will be placed on preparation of a student for clinical dental assisting. Upon course completion, a student should be able to perform dental assisting skills in a clinical setting.

DAT 102 DENTAL MATERIALS
3 Credit Hours
PREREQUISITE: Admission to DAT program and permission of instructor.
This course is designed to study the characteristics, manipulation, and application of dental materials ordinarily used in the dental office. Each student will be given intra- and extra-oral technical tasks to perform. Upon course completion, a student should be able to take and pour alginate impressions, trim study models, construct custom trays and temporary crowns, prepare and place restorative material, and manipulate cements and impression materials.
This course is designed to study basic microbiology, completion, a student should be able to apply basic and identify the basic structure and function of the human body, specifically the head, neck, and dentition. CORE

DAT 104
BASIC SCIENCES FOR DENTAL ASSISTING
2 Credit Hours
PREREQUISITE: Admission to the DAT program or permission of instructor.
This course is designed to study basic microbiology, pathology, pharmacology, and medical emergencies. Emphasis is placed on the correlation of these sciences to the practice of dentistry. Upon course completion, a student should be able to discuss and identify the basic structure and function of the human body, specifically the head, neck, and dentition. CORE

DAT 112
DENTAL RADIOLGOY
3 Credit Hours
PREREQUISITE: Admission to the DAT program or permission of instructor.
This course is designed to cover the essential knowledge of radiographic technique for the practice of dentistry. Each student should be taught to produce diagnostically acceptable intra- and extra-oral radiographs with emphasis being placed on x-ray properties, generation of x-rays, film processing, infection control, quality assurance, intra-oral radiographic technique and image characteristics. Upon course completion, a student should be able to expose, process, and mount radiographs for diagnostic purposes under the direct supervision of a licensed dentist. CORE

DAT 113
DENTAL HEALTH EDUCATION
2 Credit Hours
PREREQUISITE: Admission to DAT program and permission of instructor.
This course is designed to introduce a student to the basic principles of nutrition, preventive dentistry, and dental health education. Emphasis will be placed on philosophy of preventive dentistry including oral hygiene, patient motivation and management, and methods of oral health education. Upon course completion, a student should be able to apply the basic principles of nutrition and preventive dentistry. CORE

DAT 115
CLINICAL PRACTICUM I
5 Credit Hours
PREREQUISITE: Admission to DAT program and permission of instructor.
This course is designed to provide a student the opportunity for practical work experience in clinical settings. Emphasis is placed on the basic skills of dental assisting. Upon course completion, a student should be able to demonstrate basic skills in the area of chairside assisting.

DAT 121
DENTAL OFFICE PROCEDURES
4 Credit Hours
PREREQUISITE: Admission to DAT program and permission of instructor.
This course is designed to address basic dental office procedures including appointment and recall systems, financial records, accounting procedures, insurance claims, filing systems, purchasing and inventory of supplies and equipment, and the utilization of computers to perform business office procedures. Emphasis is placed on the duties of a dental receptionist. Upon course completion, a student should be able to demonstrate efficiency in practice management.

DAT 122
CLINICAL PRACTICE II
4 Credit Hours
PREREQUISITE: Admission to DAT program and permission of instructor.
This course is designed to address basic dental assisting skills in chairside dental assisting procedures, radiology, receptionist duties, teamwork, and communication skills. Emphasis will be placed on clinical procedures. Upon course completion, a student should be able to demonstrate proficiency in the area of chairside assisting. CORE

DAT 123
DENTAL ASSISTING SEMINAR
4 Credit Hours
PREREQUISITE: Admission to DAT program and permission of instructor.
This course is designed to discuss and evaluate each student's clinical experiences plus his or her resume and the interview process. Emphasis will be placed on new technology in dental practices as related to dental assisting and the certification exam review. Upon course completion, a student should be able to complete the Dental Assisting National Board Examination successfully to become a Certified Dental Assistant. CORE

DAT 124
CLINICALLY APPLIED INFECTION CONTROL AND OSHA STANDARDS
1 Credit Hour
PREREQUISITE: DAT 111 or permission of instructor.
This course is designed for the integration of previously acquired knowledge of OSHA Standards and Infection Control in a clinical setting. Emphasis will be placed on clinical application of Infection Control and Compliance of OSHA Standards as it relates to dental chairside assisting. Upon course completion, a student should be able to demonstrate skills in the area of Infection Control and OSHA Guidelines. CORE

DAT 140
DIRECTED STUDIES IN DENTAL ASSISTING
2 Credit Hours
PREREQUISITE: Permission of instructor.
This course is designed to study specific areas of dentistry as chosen by each student and faculty member. Emphasis will be placed on the research and critique of a specific dental topic. Upon course completion, a student should be able to deliver a written and oral presentation on the chosen topic.
DIESEL MECHANICS (DEM)

The Diesel Mechanics program is designed to train mechanics who have the knowledge and basic skills necessary to repair on-the-road equipment. Each student receives the theory of the diesel engine and various components and immediately applies this knowledge in laboratory assignments with truck and other diesel- and gasoline-powered equipment used for the transportation of freight and people. Instruction includes the disassembly, repair, and assembly of engines (gasoline and diesel), final drives, clutches, hydraulic and pneumatic systems and other components. A student usually completes the diploma program in four semesters/terms.

DIESEL MECHANICS DIPLOMA

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<thead>
<tr>
<th>Course No./Title</th>
<th>Theory/Lab/Credit Hours</th>
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<tr>
<td>DEM104 Basic Engines</td>
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<td>DEM111 Safety, Tools and Management</td>
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<td>DEM117 Diesel and Gas Tune-up</td>
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<td>DEM119 Bearings and Lubricants</td>
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<tr>
<td>DEM121 Equipment Safety/Mechanical Fundamentals</td>
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<td>DEM122 Heavy Vehicle Brakes</td>
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<td>DEM123 Pneumatics and Hydraulics</td>
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<td>DEM124 Electronic Engine Systems</td>
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<td>DEM125 Heavy Vehicle Drive Trains</td>
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<td>DEM126 Advanced Engine Analysis</td>
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<td>DEM127 Fuel Systems</td>
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<td>DEM135 Heavy Vehicle Steering and Suspension</td>
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<td>DEM136 Electrical Systems</td>
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<tr>
<td>DEM137 Heating and A/C Systems</td>
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<td>General Education Requirements:</td>
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<tr>
<td>COM131 Applied Writing</td>
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<td>DPT196 Commercial Software Application</td>
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<td>MAH116 Mathematical Applications</td>
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</table>
| SPC116 Introduction to Interpersonal Communication | 3 0 3 |]
| Total Credit Hours:                   | 54                      |

Optional Related Courses:

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<td>DEM192 Co-op Elective</td>
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<td>DEM193 Practicum</td>
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All courses in this program are creditable toward an Associate in Occupational Technology Degree (AOT).

DIESEL MECHANICS SHORT CERTIFICATE

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<tr>
<td>DEM137 Heating and A/C Systems</td>
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</table>

Total Credit Hours: 24

COURSE DESCRIPTIONS

DEM104 BASIC ENGINES

3 Credit Hours

PREREQUISITE: None

This course introduces the principles of electronically controlled diesel engines. Emphasis is placed on testing and adjusting diesel engines in accordance with manufacturers' specifications. Upon course completion, a student should be able to diagnose, test, and calibrate electronically controlled diesel engines.

DEM121 EQUIPMENT SAFETY/MECHANICAL FUNDAMENTALS

3 Credit Hours

PREREQUISITE: None

This course provides instruction in the fundamentals of vehicle operation and safety when basic service work is to be performed in the shop. Topics include service manuals, mechanical fundamentals, preventive maintenance, and component adjustment. Upon course completion, a student should be able to demonstrate knowledge of the fundamentals of vehicle operation and safety in the shop.

DEM122 HEAVY VEHICLE BRAKES

3 Credit Hours

PREREQUISITE: None

This course covers the theory and repair of braking systems used in medium- and heavy-duty vehicles. Topics include air, hydraulics, and ABS system diagnosis and repair. Upon course completion, a student should be able to troubleshoot, adjust, and repair braking systems on medium- and heavy-duty vehicles. (CORE)

DEM123 PNEUMATICS AND HYDRAULICS

3 Credit Hours

PREREQUISITE: None

This course provides instruction in the identification and repair of components found in hydraulic systems. Topics include schematics, circuits, and symbols used in fluid power transmission and the troubleshooting of components in these systems. Upon course completion, a student should be able to diagnose, adjust, and repair hydraulic system components.

DEM124 ELECTRONIC ENGINE SYSTEMS

3 Credit Hours

PREREQUISITE: None

This course introduces the operating principles of mechanical medium- and heavy-duty truck transmissions. Topics include multiple counter
This course provides the principles of electricity, shafts, power take-offs, slider idler clutches, friction clutches, mechanical transmission power components, and hydraulics. Upon course completion, a student should be able to diagnose, inspect, and repair mechanical transmissions.

DEM 126
ADVANCED ENGINE ANALYSIS
3 Credit Hours
PREREQUISITE: None
This course provides instruction in the disassembly, inspection, and rebuilding of diesel and heavy-duty gas engines. Emphasis is placed on the manufacturers' standards and factory recommended service tools and equipment. Upon course completion, a student should be able to disassemble, inspect, and rebuild engines according to the manufacturers' specifications. CORE

DEM 127
FUEL SYSTEMS
3 Credit Hours
PREREQUISITE: None
This course covers the theory and principles of fuel systems and governors. Emphasis is placed on test equipment, component functions, and theory. Upon course completion, a student should be able to diagnose, service, and repair fuel systems and governors.

DEM 135
HEAVY VEHICLE STEERING AND SUSPENSION
3 Credit Hours
PREREQUISITE: None
This course introduces the theory and principles of medium- and heavy-duty steering and suspension systems. Topics include wheel and tire problems, frame members, fifth wheel, bearings, and coupling systems. Upon course completion, a student should be able to troubleshoot, adjust, and repair suspension and steering components on medium-duty vehicles. CORE

DEM 136
ELECTRICAL SYSTEMS
3 Credit Hours
PREREQUISITE: None
This course provides the principles of electricity, magnetism and Ohm's Law. Emphasis is placed on batteries, starting, charging and lighting circuits, which include series, parallel, and series-parallel circuits. Upon course completion, a student should be able to identify and repair minor electrical problems.

DEM 137
HEATING AND AC SYSTEMS
3 Credit Hours
PREREQUISITE: None
This course covers nomenclature, theory of operation, repair and service procedures, electrical control circuits for the compressor, blower, and cooling fan. Emphasis is placed on proper use of service manuals and safety. Upon course completion, a student should be able to diagnose and repair heating and air conditioning systems.

DEM 190
SELECTED TOPICS
3 Credit Hours
PREREQUISITE: Instructor approval.
This course covers selected topics in the diesel mechanics field. Emphasis is placed on topics that keep each student informed about the latest changes in diesel technology.

DEM 191
SPECIAL PROJECTS IN DIESEL MECHANICS
2-3 Credit Hours
PREREQUISITE: Instructor approval.
This course provides information on current trends in diesel mechanics as they relate to employment responsibilities. Topics may vary by term and reflect relevant training needs by the industry.

DEM 192
CO-OP ELECTIVE
1-3 Credit Hours
PREREQUISITE: Permission of instructor.
This course allows a student to work parallel in a job closely to his/her major while attending college. The grade is based on the employer's evaluation of the student's productivity, an evaluation work report submitted by the student, and the student's learning contract.

DEM 193
PRACTICUM
3 Credit Hours
PREREQUISITE: None
This course provides work experience in selected areas to enhance a student's manipulative skills.

DRAFTING AND DESIGN TECHNOLOGY (DDT)

The skilled drafting and design technician is an essential link between the engineer and the shop where the final product is manufactured. As a member of a technical team, the drafting technician will do detail and layout drafting, design, and development. He or she may advance to a position in checking, estimating, advanced design, or supervision. The Associate in Applied Technology Degree program is designed to qualify a graduate for performance of these duties and for advancement on the job when associated with the appropriate experience. A student usually completes the associate degree program in five semesters/terms.

DRAFTING AND DESIGN TECHNOLOGY
ASSOCIATE IN APPLIED TECHNOLOGY

Course No./Title Theory/Lab/Credit Hours
DDT 103 Introduction to Computer Aided Drafting 1 4 3
DDT 111 Fundamentals of Drafting and Design Technology 1 4 3
DDT 112 Introductory Technical Drawing 1 4 3
DDT 117 Manufacturing Processes 1 4 3
DDT 118 Basic Electrical Drafting 1 4 3
DDT 119 Advanced Electronic Drafting 1 4 3
DDT 121 Intermediate Technical Drawing 1 4 3
DDT 122 Advanced Technical Drawing 1 4 3
DDT 123 Intermediate CAD 2 4 4
DDT 131 Machine Drafting Basics 1 4 3
DDT 211 Intermediate Machine Drafting 1 4 3
DDT 225 Structural Steel Drafting 1 4 3
DDT 231 Advanced CAD 3 2 4
DDT 232 CAD Customization 1 4 3
DDT 233 Solids Modeling 2 4 4
DDT 234 3D Graphics and Animation 1 4 3
DDT 238 Piping/Welding: Special Topics in CAD 1 4 3

General Education Requirements:
COM 101 English Composition I 3 0 3
COM 102 English Composition II 3 0 3
MAH 100 Intermediate College Algebra 3 0 3
MAH 104 Plane Trigonometry 3 0 3
PSC 201 General Physics I – Trig Based 3 2 4
PSH 270 Business and Industrial Psychology 3 0 3
SPC 106 Fundamentals of Oral Communication 3 0 3

Total Credit Hours: 76

Optional Related Courses:
DDT 235 Specialized CAD 2 4 4
DDT 236 Design Project 1 4 3
DDT 237 Current Topics in CAD 1 4 3
DDT 239 Independent Studies 0 4 2
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**General Education Requirements:**

- English Composition I: 3 0 3
- Intermediate College Algebra: 3 0 3
- Plane Trigonometry: 3 0 3
- Fundamentals of Oral Communication: 3 0 3

**Total Credit Hours:** 57

### COURSE DESCRIPTIONS

**DDT 103**

**INTRODUCTION TO COMPUTER AIDED DRAFTING**

3 Credit Hours

**PREREQUISITE:** None

This course provides an introduction to basic Computer Aided Design and Drafting (CAD) functions and techniques, using hands-on applications. Topics include terminology, hardware, basic DOS and Windows functions, file manipulation, and basic CAD software applications in producing softcopy and hardcopy. Upon course completion, a student should be able to identify and select CAD hardware, employ basic DOS and Windows functions, handle basic text and drawing files, and produce acceptable hard copy on a CAD system. **CORE**

**DDT 111**

**FUNDAMENTALS OF DRAFTING AND DESIGN TECHNOLOGY**

3 Credit Hours

**PREREQUISITE:** None

This course serves as an introduction to the field of drafting and design and provides a foundation for the entire curriculum. Topics include safety, lettering, tools and equipment, geometric constructions, and orthographic sketching. Upon course completion, a student should develop and use safe work habits, identify and properly use common drafting tools and equipment, construct geometric figures, and sketch basic orthographic views of objects. **CORE**

**DDT 112**

**INTRODUCTORY TECHNICAL DRAWING**

3 Credit Hours

**PREREQUISITE:** None

This course covers drafting reproduction and orthographic projection and sectioning. Emphasis will be placed on the theory as well as the mechanics of orthographic projection and shape description, the relationship of orthographic planes and views, the views and their space dimensions, the application of the various types of sections, and drafting reproduction. Upon course completion, a student should have an understanding of orthographic projection and be able to identify orthographic planes, produce orthographic views of objects, apply the various sectioning techniques and methods, and reproduce drawings. **CORE**

**DDT 117**

**MANUFACTURING PROCESSES**

3 Credit Hours

**PREREQUISITE:** None

This course in materials and processes includes the principles and methodology of material selection, application, and manufacturing processes. Emphasis is directed to solids to include material characteristics, castings, forging, and die assemblies. Upon course completion, a student should be able to discuss and understand the significance of materials properties, structure, basic manufacturing processes, and express and interpret material specifications.

**DDT 118**

**BASIC ELECTRICAL DRAFTING**

3 Credit Hours

**PREREQUISITE:** DDT 103, 111, DDT 112 or instructor approval.

This course covers the universal language of electrical drafting, including electrical lines, symbols, abbreviations, and notation. Emphasis is placed on typical components such as generators, controls, transmission networks, and lighting, heating, and cooling devices. Upon course completion, a student should be able to draw basic diagrams of electrical and electronic circuits using universally accepted lines and symbols.

**DDT 119**

**ADVANCED ELECTRONIC DRAFTING**

3 Credit Hours

**PREREQUISITE:** DDT 103, 111, DDT 112 or instructor approval.

This course introduces drafting and design techniques dealing with production of electronic equipment for consumer, commercial, and military applications. Emphasis is placed on schematic drawings, connection or wiring diagrams, industrial electronic diagrams, ladder schematics, flow block diagrams, and documentation types and techniques related to the power delivery industry. Upon course completion, a student should be able to prepare documentation specified to ANSI standards and be familiar with the techniques of composition and the unique symbols and practices of industry.

**DDT 121**

**INTERMEDIATE TECHNICAL DRAWING**

3 Credit Hours

**PREREQUISITE:** DDT 103, 111, DDT 112 or instructor approval.

This course is designed to develop a strong foundation in common drafting and design practices and procedures. Topics include auxiliary views, basic space geometry, pictorial drawings, and basic charts and graphs. Upon course completion, a student should be able to project and develop auxiliary views, locate and specify points, lines, and planes in space, develop axonometric, oblique, and perspective drawings and draw basic charts and graphs. **CORE**

**DDT 122**

**ADVANCED TECHNICAL DRAWING**

3 Credit Hours

**PREREQUISITE:** DDT 103, 111, DDT 112 or instructor approval.

This course covers the methods of providing size description and manufacturing information for production drawings. Emphasis will be placed on accepted dimensioning and tolerancing practices including Geometric Dimensioning and Tolerancing for both the Customary English System and the ISO System. Upon course completion, a student should be able to apply dimensions, tolerances, and notes to drawings to acceptable standards, including Geometric Dimensioning and Tolerancing, and produce drawings using and specifying common threads and various fasteners, including welding methods. **CORE**

**DDT 123**

**INTERMEDIATE CAD**

4 Credit Hours

**PREREQUISITE:** DDT 103 or instructor approval.

This course covers intermediate-level concepts and applications of CAD design and drafting. Emphasis will be placed on intermediate-level features, commands, and applications of CAD software. Upon course completion, a student should be able to develop and use external references and paper space, apply higher-level block creation techniques and usage, including attributes, and apply basic-level customization techniques to CAD software. **CORE**
DOD 131
MACHINE DRAFTING BASICS
3 Credit Hours
PREREQUISITE: DDT 121, 122, DDT 123 or instructor approval.
This course in machine drafting and design provides instruction in the largest speciality area of drafting in the United States, in terms of scope and job opportunities. Emphasis will be placed on the applications of multi-view drawings, including drawing organization and content, title blocks and parts lists, assembly drawings, detail drawings, dimensioning and application of engineering controls in producing industrial-type working drawings. Upon course completion, a student should be able to organize, layout, and produce industrial-type working drawings, including the application of title blocks, parts lists, assemblies, details, dimensions, and engineering controls.

DOD 211
INTERMEDIATE MACHINE DRAFTING
3 Credit Hours
PREREQUISITE: DDT 131 or instructor approval.
This second course in machine drafting and design provides more advanced instruction in the largest speciality area of drafting. Topics include applications of previously developed skills in the organization and development of more complex working drawings, use of vendor catalogs and the Machinist's Handbook for developing specifications, and use of standardized abbreviations in working drawings.

DOD 225
STRUCTURAL STEEL DRAFTING
3 Credit Hours
PREREQUISITE: DDT 103, 111, 112, DDT 122 or instructor approval.
This course covers the theory and practical applications necessary to understand the basic design and terminology of structural steel components used in light commercial buildings. Emphasis is placed on structural steel drafting techniques, bolted and welded connections, framing plans, sections, fabrication and connection details, and bills of material. Upon course completion, a student should be able to produce engineering and shop drawings incorporating standard shapes, sizes, and details using the A.I.S.C. Manual and incorporating safety practices.

DOD 231
ADVANCED CAD
4 Credit Hours
PREREQUISITE: DDT 103, 111, 112, DDT 123 or instructor approval.
This course covers the advanced applications of CAD software to engineering projects in various applications, including architectural, civil, mechanical, and environmental engineering, with consideration for advanced physical and psychological principle of CAD. These principles will be applied toward CAD customization and programming principles, for the expressed purpose of increasing productivity and improving the performance of the CAD operator, thereby, making CAD much more producive in an engineering environment. Emphasis will be placed on using intelligent CAD techniques to increase the quality of output. Upon course completion, a student should be able to apply advanced CAD techniques in solving complex problems related to all engineering applications.

DOD 232
CAD CUSTOMIZATION
3 Credit Hours
PREREQUISITE: DDT 123 or instructor approval.
This course introduces the various methods of customizing CAD software to meet individual or company needs. Topics include menu customizing, programming, custom command macros, script files, slides, and slide libraries. Upon course completion, a student should be able to customize and write menus, write programming routines, and write script files for the purpose of increasing the proficiency of the CAD operator.

DOD 233
SOLIDS MODELING
4 Credit Hours
PREREQUISITE: DDT 123 or instructor approval.
This course provides instruction in 3D Design Modeling utilizing the 3D capabilities of CAD software. Emphasis is placed on 3D wire-frame, surface and solids modeling along with the development of 2D detail drawings from 3D models. Upon course completion, a student should be able to generate 3D surface and solid models and 2D orthographic production drawings from created solid models.

DOD 234
3D GRAPHICS AND ANIMATION
3 Credit Hours
PREREQUISITE: DDT 123 or instructor approval.
This course is designed to challenge the imagination of a student in a 3-dimensional problem solving environment. A student will be given a basic introduction to the concepts of 3D design and animation then apply those concepts to a design project. Upon course completion, a student should be able to create and animate objects in a 3-dimensional environment.

DOD 235
SPECIALIZED CAD
4 Credit Hours
PREREQUISITE: DDT 123 or instructor approval.
This course introduces alternative CAD application software and alternative platforms, and can serve as a means of introducing third party programs that work in conjunction with a specific CAD application. Topics include various Graphical User Interfaces (GUIs) and how to navigate them, as well as how to use a third party application to make working in a specific CAD package easier and more productive. Upon course completion, a student should be able to use more than one CAD software package to produce hardcopy and use third party software to make certain tasks easier with a specific CAD program.

DOD 236
DESIGN PROJECT
3 Credit Hours
PREREQUISITE: Instructor approval.
This course is designed for advanced students who aspire to more advanced and specialized skills in one certain drafting area. Emphasis will be placed on a student's ability to apply the principles learned in previous drafting classes in one special area, as approved by the instructor. The required project and how it is to be accomplished must be agreed upon by the instructor and the student. Upon course completion, each student will further reinforce previously learned concepts by applying engineering principles and controls to a personal design project.

DOD 237
CURRENT TOPICS IN CAD
3 Credit Hours
PREREQUISITE: DDT 103 or instructor approval.
This course serves to introduce changing technology and current CAD subjects and software and the computing hardware needed to utilize new products. Topics include current trends in how industries use CAD applications, new developments, improvements and progressions within specific CAD applications as well as the necessary hardware. Upon course completion, a student should be able to use more updated software in a specific CAD application and be more aware of improvements in CAD software and how to apply advancing technology in improving their CAD proficiency.
ELECTRONICS (ILT)

The Electronics program is designed for a student preparing for a career as an electronics technician. The curriculum is designed to provide specific training in basic electronic theory, electrical and electronic circuits, instrumentation and test equipment, transformers, direct and alternating current machinery, SCR controls, programmable logic controls, electronic communications, digital electronics, microprocessor basics and applications, and servicing microcomputers.

In addition to the Associate in Applied Technology Degree, the college offers certificates in Electrical and Industrial Maintenance.

INDUSTRIAL ELECTRONICS
ASSOCIATE IN APPLIED TECHNOLOGY DEGREE

<table>
<thead>
<tr>
<th>Course No./Title</th>
<th>Theory/Lab/Credit Hours</th>
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<tbody>
<tr>
<td>I LT 121</td>
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Select 8 credit hours from one of the following options:

Option I Electronics

<table>
<thead>
<tr>
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<tr>
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<tr>
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<td>I LT 291</td>
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<td>I LT 293</td>
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Option II Electricity

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<tr>
<th>Course No./Title</th>
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<tr>
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Option III Industrial Maintenance

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<tr>
<th>Course No./Title</th>
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<tr>
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General Education Requirements:

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<tr>
<td>COM 101 English Composition I</td>
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<tr>
<td>COM 102 English Composition II</td>
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<tr>
<td>MAH 100 Intermediate College Algebra</td>
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<tr>
<td>MAH 104 Plane Trigonometry</td>
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<td>PHC 201 General Physics I-Trig Based</td>
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<td>PSH 270 Business and Industrial Psychology</td>
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ELECTRICAL CERTIFICATE

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### ELECTRICAL SHORT CERTIFICATE PROGRAM

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<tr>
<th>Course No./Title</th>
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<tr>
<td>ILT 157 Commercial Wiring Lab</td>
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<td>ILT 158 Industrial Wiring</td>
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<td>ILT 159 Industrial Wiring Lab</td>
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<tr>
<td>ILT 170 AC/DC Machinery and Controls</td>
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<td>ILT 201 Industrial Electronics</td>
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<td>ILT 202 Industrial Electrics Lab</td>
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<td>INT 233 Industrial Maintenance Metal</td>
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<td>TRANSMISSION OF ELECTRICITY I</td>
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<td>MANUFACTURING PROCESSING</td>
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<td>INDUSTRIAL INSTALLATION</td>
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### INDUSTRIAL MAINTENANCE CERTIFICATE

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<td>INT 113 Fundamentals of Industrial Hydraulics</td>
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<td>INT 114 Mechanical Measurements and Technical Drawings</td>
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<td>INT 123 Industrial Pumps and Piping Systems</td>
<td>1 6 3</td>
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<tr>
<td>INT 124 Production Equipment Layout and Installation</td>
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<tr>
<td>ILT 138 DC Fundamentals</td>
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<td>ILT 140 AC Fundamentals</td>
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<tr>
<td>ILT 141 AC Fundamentals Lab</td>
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### COURSE DESCRIPTIONS

**ILT 099 PREPARATION FOR ELECTRONICS**

2 Credit Hours

**PREREQUISITE: None**

This course is an entry-level elective for students who want help with the math skills needed for initial success in electronics or similar programs. Topics include decimals numbering system, fractions, scientific notation, negative numbers, trigonometric functions and the right triangle and use of the scientific calculator. All topics will be addressed in electronic contexts. Upon course completion, a student should be able to perform the basic math calculations necessary for entry into electronics.

**ILT 121 SEMICONDUCTOR ELECTRONIC CIRCUITS**

3 Credit Hours

**PREREQUISITE: ILT 176 or instructor approval.**

This course provides a study of electronic circuits. Topics are designed to explain circuits using solid-state devices in a variety of circuit configurations, biasing and classes of operations of amplifiers. Upon course completion, a student should be able to design bipolar and unipolar transistors, thyristors, optoelectronic devices, and integrated circuits.

**ILT 122 SEMICONDUCTOR ELECTRONIC CIRCUITS LAB**

2 Credit Hours

**COREQUISITE: ILT 121.**

This lab focuses on solid-state devices in a variety of circuit configurations, biasing and classes of operations of amplifiers. Upon course completion, a student should be able to design bipolar and unipolar transistors, thyristors, optoelectronic devices, and integrated circuits.

**ILT 123 DIGITAL ELECTRONICS**

3 Credit Hours

**PREREQUISITE: None**

This course introduces digital fundamentals and number systems and includes the study of logic gates, flip flops, registers, combinational circuits, sequential circuits, multiplexers, demultiplexers, and memory devices. Upon course completion, a student should be able to perform binary arithmetic, explain the theories related to digital gates and circuits, utilize Boolean algebra and karnaugh maps to simplify digital designs, and describe the various logic families. **CORE**

**ILT 124 PERSONAL COMPUTER (PC) HARDWARE**

2 Credit Hours

**COREQUISITE: ILT 123.**

This course provides a working knowledge of digital techniques through experimentation on a broad range of combinational and sequential circuits. Includes design and troubleshooting methods. Upon completion of this course and Digital Electronics, a student should be able to construct, evaluate, troubleshoot, repair, and demonstrate the operation of logic circuits. **CORE**

**ILT 129 PERSONAL COMPUTER (PC) HARDWARE**

3 Credit Hours

**PREREQUISITE: None**

This course covers PC hardware terminology, component purpose, configuration, pricing and selecting components and systems, as well as assembling, repairing, and upgrading IBM compatible computers.
I 135  
LOCAL AREA NETWORKS (LANS)  
3 Credit Hours  
PREREQUISITE: I LT 129 or instructor approval.  
This course provides a student with knowledge of planning, installation, maintenance, and administration of local area networks. Upon course completion, a student should be able to install and setup a basic local area network.

I LT 138  
AC FUNDAMENTALS  
3 Credit Hours  
PREREQUISITE: I LT 136 or instructor approval.  
This course focuses on problems faced by maintenance electricians. Topics include troubleshooting, renovations, and recognition of safety hazards. Upon course completion, a student should be able to apply principles to extensive maintenance electricity and troubleshooting techniques.

I LT 141  
AC FUNDAMENTALS LAB  
2 Credit Hours  
COREQUISITE: I LT 140.  
This course provides verification of alternating current theory and complete familiarization with the oscilloscope. Students fabricate circuits and utilize vector analysis to verify the behavior of inductors and capacitors as applied to sine wave alternating current circuits. Upon completion of this course and AC Fundamentals, a student should be able to construct circuitry and perform all necessary AC measurements. CORE

I LT 150  
INDUSTRIAL AUTOMATIC CONTROLS  
3 Credit Hours  
PREREQUISITE: None  
This course focuses on the function of automatic controllers in different modes: on-off, proportional, reset, derivative, ratio, and cascade. Topics include operation of pneumatic, electronic, and computer process control equipment; service of basic process equipment and instrumentation; correct operation and maintenance of valves and pumps; recognizing patterns from data; developing and interpreting control charts; determining control limits; and performing root cause analysis. Upon course completion, a student should be able to write startup and shutdown procedures, operate, monitor, and control continuous and batch model plants.

I LT 151  
INDUSTRIAL AUTOMATIC CONTROLS LAB  
3 Credit Hours  
COREQUISITE: I LT 150.  
This course provides a student with practical experience related to industrial automatic controls. Topics include operation and service of various equipment, development and interpretation of charts and data, and root cause analysis. Upon course completion, a student should be able to write startup and shutdown procedures, operate, monitor, and control continuous and batch model plants.

I LT 154  
RESIDENTIAL WIRING  
3 Credit Hours  
PREREQUISITE: Instructor approval.  
This course is based on the National Electrical Code. Topics include blueprint reading, load calculations, heating systems, service entrance, circuit design and layout, safety, and tools. Upon course completion, a student should be able to apply circuit design and layout of residential wiring with National Electrical Code application.

I LT 155  
RESIDENTIAL WIRING LAB  
2 Credit Hours  
COREQUISITE: I LT 154.  
This lab is based on the National Electrical Code. Topics include blueprint reading, load calculations, heating systems, service entrance, circuit design and layout, safety, and tools. Upon course completion, a student should be able to apply circuit design and layout of residential wiring with National Electrical Code application.

I LT 156  
COMMERCIAL WIRING  
3 Credit Hours  
PREREQUISITE: I LT 154 or instructor approval.  
This course focuses on commercial electrical work. Topics include conduit bending, circuit design, control rigging, pulling cables, and switch gear design. Generation principles and transformers are emphasized. Upon course completion, a student should be able to apply principles of commercial electrical wiring.

I LT 157  
COMMERCIAL WIRING LAB  
2 Credit Hours  
COREQUISITE: I LT 156.  
This lab focuses on commercial electrical work. Topics include conduit bending, circuit design, control rigging, pulling cables, switch gear design. Generation principles and transformers are emphasized. Upon course completion, a student should be able to apply principles of commercial electrical wiring.

I LT 158  
INDUSTRIAL WIRING  
3 Credit Hours  
PREREQUISITE: I LT 154 or instructor approval.  
This course focuses on problems faced by maintenance electricians. Topics include troubleshooting, renovations, and recognition of safety hazards. Upon course completion, a student should be able to apply principles to extensive maintenance electricity and troubleshooting techniques.

I LT 159  
INDUSTRIAL WIRING LAB  
2 Credit Hours  
COREQUISITE: I LT 158.  
This lab includes troubleshooting, renovations, and recognition of safety hazards. Upon course completion, a student should be able to apply principles to extensive maintenance electricity and troubleshooting techniques.
This course focuses on circuit selection. Credit: 3
application of proportional, directional, and pressure control valves and their circuitry. Upon course completion, a student should be able to apply principles of application and troubleshooting of proportional, directional, and pressure control valves and their circuitry.

ILT 161
PROPORTIONAL CIRCUITS LAB
2 Credit Hours
COREQUISITE: ILT 160.
This lab emphasizes the application of proportional, directional, and pressure control valves and their circuitry. Upon course completion, a student should be able to apply principles of application and troubleshooting of proportional, directional, and pressure control valves and their circuitry.

ILT 162
INDUSTRIAL MECHANICS
3 Credit Hours
PREREQUISITE: None
This course includes bench work, machinery installation and pipefitting. Topics include rigging, abrasives, heat treatment of seals, and analysis of vibrations. Upon course completion, a student should be able to demonstrate principles of bench work, machinery installation and pipefitting.

ILT 163
INDUSTRIAL MECHANICS LAB
2 Credit Hours
COREQUISITE: ILT 162.
This lab includes rigging, abrasives, heat treatment of seals, and analysis of vibrations. Upon course completion, a student should be able to demonstrate principles of bench work, machinery installation and pipefitting.

ILT 164
BASIC HYDRAULICS
3 Credit Hours
PREREQUISITE: None
This course is a study in the properties of fluids, force, and motion. Topics include calculations of volume, area and displacement, components for power transfer, and methods of joining pipe and controlling flow. Upon course completion, a student should be able to perform pertinent calculations, identify components for power transfer, and perform methods of joining pipe and controlling flow.

ILT 165
BASIC HYDRAULICS LAB
2 Credit Hours
COREQUISITE: ILT 164.
This lab includes calculations of volume, area and displacement, components for power transfer and methods of joining pipe and controlling flow. Upon course completion, a student should be able to perform pertinent calculations, identify components for power transfer, and perform methods of joining pipe and controlling flow.

ILT 166
BASIC MECHANICS
3 Credit Hours
PREREQUISITE: None
An introductory course for millwrights and mechanics, this course includes topics such as hand and power tools, fasteners, precision measuring tools, lubrication principles, and uses of fluids, pipe and controlling flow. Upon course completion, a student should be able to apply principles of safety with hand and power tools for millwrights and mechanics.

ILT 167
BASIC MECHANICS LAB
2 Credit Hours
COREQUISITE: ILT 166.
This lab includes hand and power tools, fasteners, precision measuring tools, lubrication principles, and uses of fluids, pipe and controlling flow. Upon course completion, a student should be able to apply principles of safety with hand and power tools for millwrights and mechanics.

ILT 168
HYDRAULICS/PNEUMATICS
3 Credit Hours
PREREQUISITE: None
This course provides an introduction to hydraulics/pneumatics. Topics include hydraulic pumps, pneumatic compressors, and work and system components such as valves, filters, regulators, actuators, accumulators, and lubricators. Upon course completion, a student should be able to apply principles of hydraulics/pneumatics.

ILT 169
HYDRAULICS/PNEUMATICS LAB
2 Credit Hours
COREQUISITE: ILT 168.
This lab covers hydraulic pumps, pneumatic compressors, and work and system components such as valves, filters, regulators, actuators, accumulators, and lubricators. Upon course completion, a student should be able to apply principles of hydraulics/pneumatics.

ILT 170
AC/DC MACHINERY AND CONTROLS
3 Credit Hours
PREREQUISITE: ILT 140 or instructor approval.
This course provides a student with knowledge in AC/DC machinery and controls. Topics include the characteristics and operating principles of the different types of AC/DC generators and motors, manual and automatic starters, and controllers. Upon course completion, a student should be able to apply practical skills in AC/DC machinery.

ILT 172
PROGRAMMABLE LOGIC CONTROLLERS
3 Credit Hours
PREREQUISITE: ILT 170 or instructor approval.
This course focuses on the use of PLCs. Topics include operations, programming procedures, fault isolation procedures, and methods of entering, executing, debugging, and changing programs. Upon course completion, a student should be able to apply principles of operation and programming of programmable logic controllers.

ILT 173
PROGRAMMABLE LOGIC CONTROLLERS LAB
2 Credit Hours
COREQUISITE: ILT 172.
This lab focuses on operations, programming procedures, fault isolation procedures, and methods of entering, executing, debugging, and changing programs. Upon course completion, a student should be able to perform functions necessary in the operation and programming of PLCs.

ILT 176
SOLID STATE DEVICES
3 Credit Hours
PREREQUISITE: ILT 138 or instructor approval.
This course covers atomic structure, covalent bonding, semiconductor device construction, characteristics of diodes, special purpose diodes, bipolar transistors, field effect transistors, thyristors, and optoelectronic devices such as LEDs and photo-diodes. Upon course completion, a student should be able to identify solid-state devices and explain their operation.
This course introduces microprocessors, explores course completion, a student should be able to control devices, and perform necessary calculations. This course covers applications of electronics in the industry with a major emphasis on microprocessors as applied to data acquisition and machine control. Topics include A/D and D/A conversion, signal conditioning, sensors and transducers, control devices, stepper motors, and microprocessor interfacing. Upon course completion, a student should be able to describe the operation of various sensors, signal conditioning, A/D and D/A conversion, control devices, and perform necessary calculations.

This course demonstrates the concepts, devices, and applications of electronics in industrial processes. Upon course completion, a student should be able to construct, evaluate, and calibrate basic industrial sensing and control circuits.

This course introduces microprocessors, explores their applications, and emphasizes programming and interfacing the microprocessor chip. Upon course completion, a student should be able to perform binary arithmetic, perform computer arithmetic, describe the basic operation procedures for a microprocessor system, and write programs for a basic microprocessor.

This course provides familiarization of microprocessor instruction sets. Experiments in programming and interfacing provide an understanding of microprocessor theory. Upon course completion, students should be able to program and interface a basic microprocessor system.

This course focuses on the systematic approach to solving problems. Emphasis is placed on instrument failures and their interaction with process down-time. Upon course completion, a student should be able to solve problems on a process simulator or in an actual setting.

This course covers air valve designs and the physical structure of typical solenoid-operated valves. Topics include actuators, vacuum systems, and air-driven and motor-driven pumps. Upon course completion, a student should be able to apply principles of air valve designs and describe the physical structure of typical pneumatics systems.

This course covers air valve designs and the physical structure of typical pneumatics systems. Upon course completion, a student should be able to apply principles of filters, oscillators, classes of amplifiers, and resonance.
EMERGENCY MEDICAL TECHNICIAN (EMT)

Bessemer State Technical College offers evening courses in Emergency Medical Services, Basic and Intermediate. An EMT provides immediate health care at the scene of illnesses or traumatic emergencies. A student usually completes the program in three semesters/terms.

EMERGENCY MEDICAL TECHNICIAN SHORT CERTIFICATE

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<td>Cardiopulmonary Resuscitation I</td>
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<tr>
<td>EMT 140</td>
<td>EMT Preparatory and Pre-hospital EMS Operations</td>
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<tr>
<td>EMT 141</td>
<td>EMT Assessment and Trauma Related Injuries</td>
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<tr>
<td>EMT 142</td>
<td>EMT Medical Emergencies and Pediatric Care</td>
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<td>EMT 143</td>
<td>EMT Basic Clinical Competencies</td>
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<td>EMT 180</td>
<td>Pre-Hospital Operations for Advanced EMS Providers</td>
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<td>EMT 181</td>
<td>Preparatory Management for Advanced EMS Providers</td>
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<td>EMT 182</td>
<td>Cardiovascular Electrophysiology and Management</td>
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<td>EMT 183</td>
<td>EMS Advanced Psychomotor Competencies I</td>
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<td>EMS Advanced Clinical Competencies I</td>
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<tr>
<td>EMT 185</td>
<td>EMS Advanced Life Support Field Preceptorship I</td>
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</table>

Total Credit Hours: 28

The EMT certificate does not require general education courses. All courses in this award are creditable toward an Associate in Occupational Technology Degree (AOT).

COURSE DESCRIPTIONS

EMT 100
CARDIOPULMONARY RESUSCITATION I
1 Credit Hour
PREREQUISITE: None
This course provides a student with concepts as related to areas of basic life support to include coronary artery disease, prudent heart living, symptoms of heart attack, adult one- and two-rescuer CPR, first aid for choking, pediatric basic life support, airway adjuncts, EMS system entry access, automated external defibrillation (AED), and special situations for CPR. Upon course completion, a student should be able to identify situations requiring action related to heart or breathing conditions and effectively implement appropriate
management for each condition. A student who successfully completes this course will receive appropriate documentation of course completion.

EMT 104
FIRST AID FOR STUDENTS OF HEALTH RELATED PROFESSIONS
1 Credit Hour
PREREQUISITE: Current training in CPR or program approval.
This course introduces a student who plans to enter a health-related profession to first aid, and provides educational concepts related to first aid for various health disciplines. The course includes instruction in the emergency administration of oxygen, use of airway adjuncts, medication administration techniques, equipment for mechanical breathing, suctioning techniques, and automated external defibrillation (AED). Upon course completion, a student should have the ability to recognize emergency situations requiring immediate action and appropriately manage these situations.

EMT 140
EMT PREPARATORY AND PREHOSPITAL EMS OPERATIONS
2 Credit Hours
PREREQUISITE: Admission to the EMT-Basic program.
This course is one of four courses (EMT 140, EMT 141, EMT 142, EMT 143) required for successful completion of the EMT-Basic program according to the current National Standard Curriculum for the EMT-Basic. Content areas include introduction to emergency medical care; the well-being of the EMT-Basic; medical/legal and ethical issues; the human body; baseline vitals and SAMPLE history; lifting and moving; airway management; ambulance operations; gaining access; an overview of hazardous materials; incident management systems; mass casualty situations; triage; and state and local EMS rules/regulations. Computer use in simulated scenarios is also included in the course. Successful completion of student cognitive, psychomotor, and affective domain competencies is required in this course. CORE

EMT 142
EMT MEDICAL EMERGENCIES AND PEDIATRIC CARE
3 Credit Hours
PREREQUISITE: Admission to the EMT-Basic Program.
This course is one of four courses (EMT 140, EMT 141, EMT 142, EMT 143) required for successful completion of the EMT-Basic program according to the current National Standard Curriculum for the EMT-Basic. Content areas include general pharmacology; respiratory emergencies; cardiovascular emergencies; diabetic emergencies (including the use of a digital glucometer)/alterable mental status; allergic reactions; poisoning/overdose emergencies; environmental emergencies; behavioral emergencies; obstetrics; and infants/children. Computer use in simulated scenarios will also be included in the course. Successful completion of student cognitive, psychomotor, and affective domain competencies is required in this course. CORE

EMT 143
EMT BASIC CLINICAL COMPETENCIES
1 Credit Hour
PREREQUISITE: Admission to the EMT-Basic program.
This course is one of four courses (EMT 140, EMT 141, EMT 142, EMT 143) required for successful completion of the EMT-Basic program according to the current National Standard Curriculum for the EMT-Basic. It provides students with clinical education experiences to enhance knowledge and skills learned in the EMT-Basic program. Successful completion of student cognitive, psychomotor, and affective domain competencies is required in this course. CORE

EMT 141
EMT ASSESSMENT AND TRAUMA RELATED INJURIES
3 Credit Hours
PREREQUISITE: Admission to the EMT-Basic program. This course is one of four courses (EMT 140, EMT 141, EMT 142, EMT 143) required for successful completion of the EMT-Basic program according to the current National Standard Curriculum for the EMT-Basic. Content areas include scene size-up; initial assessment; focused history and physical exam; medical and trauma; detailed physical exam; on-going assessment; communications; documentation; bleeding and shock; soft tissue injuries; musculoskeletal care; and injuries to the head and spine. Computer use in simulated scenarios is also included in the course. Successful completion of student cognitive, psychomotor, and affective domain competencies is required in this course. CORE

EMT 181
PREPARATORY MANAGEMENT FOR ADVANCED EMS PROVIDERS
3 Credit Hours
PREREQUISITE: Admission to the EMT-Intermediate program. This is one of six courses (EMT 180, EMT 181, EMT 182, EMT 183, EMT 184, EMT 185) required for successful completion of the EMT-Intermediate program in the State of Alabama. The course is taught in accordance with the current National Standard Curricula for the EMT-Intermediate, Paramedic, and requirements set forth by the Alabama Department of Public Health. Content areas include the following as related to the EMT-Intermediate and Paramedic:
- Operations/systems/roles and responsibilities;
- Current Alabama EMS rules and regulations;
- The well-being of the advanced EMS provider;
- Illness and injury prevention;
- Medical/legal considerations and ethics;
- EMS and therapeutic communications;
- Medical terminology; and patient assessment.
Successful completion of student cognitive, psychomotor, and affective domain competencies is required in this course. CORE

EMT 180
PRE-HOSPITAL OPERATIONS FOR ADVANCED EMS PROVIDERS
3 Credit Hours
PREREQUISITE: Admission to the EMT-Intermediate program. Cardiovascular Electrophysiology and Management is one of six courses (EMT 180, EMT 181, EMT 182, EMT 183, EMT 184, EMT 185) required for successful completion of the EMT-Intermediate program in the State of Alabama. The course is taught in accordance with the current National Standard Curricula for the EMT-Intermediate, Paramedic, and requirements set forth by the Alabama Department of Public Health. Content areas include the following as related to the EMT-Intermediate and Paramedic:
- Anatomy, physiology, and electrophysiology of the cardiovascular system;
- Interpretation of lead II electrocardiograms; prehospital 12-lead EKG monitoring, and techniques of management for dysrhythmias. Successful completion of student cognitive, psychomotor, and affective domain competencies is required in this course. CORE
EMT 183
ADVANCED PSYCHOMOTOR COMPETENCIES I
2 Credit Hours
PREREQUISITE: Admission to the EMT-Intermediate program.
This is one of six courses (EMT 180, EMT 181, EMT 182, EMT 183, EMT 184, EMT 185) required for successful completion of the EMT-Intermediate program in the State of Alabama. The course is taught in accordance with the current National Standard Curricula for the EMT-Intermediate, Paramedic, and requirements set forth by the Alabama Department of Public Health. Students validate knowledge and review and validate performance of psychomotor competencies as well as pre-hospital treatment protocols utilized in Alabama's EMS system. Computer use in simulated scenarios is also included in the course. Successful completion of student cognitive, psychomotor, and affective domain competencies is required in this course. CORE

EMT 184
ADVANCED CLINICAL COMPETENCIES I
4 Credit Hours
PREREQUISITE: Admission to the EMT-Intermediate program.
This is one of six courses (EMT 180, EMT 181, EMT 182, EMT 183, EMT 184, EMT 185) required for successful completion of the EMT-Intermediate program in the State of Alabama. The course is taught in accordance with the current National Standard Curricula for the EMT-Intermediate, Paramedic, and requirements set forth by the Alabama Department of Public Health. The course provides a student with opportunities to participate in clinical experiences in various areas of the hospital as well as completion of patient assessments and patient management discussions. Successful completion of student cognitive, psychomotor, and affective domain competencies is required in this course. CORE

EMT 185
ADVANCED LIFE SUPPORT FIELD PRECEPTORSHIP I
3 Credit Hours
PREREQUISITE: Admission to the EMT-Intermediate program.
This is one of six courses (EMT 180, EMT 181, EMT 182, EMT 183, EMT 184, EMT 185) required for successful completion of the EMT-Intermediate program in the State of Alabama. The course is taught in accordance with the current National Standard Curricula for the EMT-Intermediate, Paramedic, and requirements set forth by the Alabama Department of Public Health. The course provides students with opportunities to participate in field experiences in the pre-hospital area with advanced life support EMS units. Students validate competencies under the direction of a field preceptor and begin the process of providing leadership in patient care and management. Each student will have opportunities to participate in review and discussion of patient care reports and to begin the development of clinical decision making. Successful completion of student cognitive, psychomotor, and affective domain competencies is required in this course. CORE

ENGLISH-GENERAL EDUCATION (BSR, COM, SSS)

BSR 070
ESSENTIAL READING SKILLS
3 Credit Hours
PREREQUISITE: Appropriate college placement test score.
This course is designed for those with limited reading skills. Emphasis is placed on basic word attack skills, vocabulary, transitional words, paragraph organization, basic comprehension skills, learning strategies, and decoding skills. Upon course completion, a student should be able to demonstrate competence in the skills required for BSR 090.

BSR 090
INTRODUCTION TO COLLEGE READING
3 Credit Hours
PREREQUISITE: BSR 070 or appropriate college placement test score.
This course introduces effective reading and inferential thinking skills. Emphasis is placed on vocabulary, comprehension, and reading strategies. Upon course completion, each student should be able to determine main ideas and supporting details, recognize basic patterns of organization, draw conclusions, and understand vocabulary in context.

COM 092
BASIC ENGLISH I
3 Credit Hours
PREREQUISITE: Appropriate college placement test score.
This course is a review of basic writing skills and basic grammar. Emphasis is placed on the composing process of sentences and paragraphs in standard American written English. Each student will demonstrate these skills chiefly through the writing of well-developed, multi-sentence paragraphs.

COM 093
BASIC ENGLISH II
3 Credit Hours
PREREQUISITE: A grade of "S" (Satisfactory) in COM 092 or appropriate college placement test score.
This course is a review of composition skills and grammar. Emphasis is placed on coherence and the use of a variety of sentence structures in the composing process and on standard American written English usage. Students will demonstrate these skills chiefly through the writing of paragraph blocks and short essays.
COM 101
ENGLISH COMPOSITION I
3 Credit Hours
PREREQUISITE: Successful completion of COM 093; appropriate college placement test score, or a score of 16 or better on the ACT (or equivalent SAT score). English Composition I provides instruction and practice in the writing of at least six (6) extended compositions and the development of analytical and critical reading skills and basic reference and documentation skills in the composition process. English Composition I may include instruction and practice in library usage.  CORE

COM 102
ENGLISH COMPOSITION II
3 Credit Hours
PREREQUISITE: A grade of "C" or better in COM 101 or the equivalent. English Composition II provides instruction and practice in the writing of six (6) formal, analytical essays, at least one of which is a research project using outside sources and/or references effectively and legally. Additionally, English Composition II provides instruction in the development of analytical and critical reading skills in the composition process. English Composition II may include instruction and practice in library usage.  CORE

COM 103
VOCATIONAL TECHNICAL ENGLISH II
3 Credit Hours
PREREQUISITE: Satisfactory completion of COM 092 or appropriate college placement test score. For LPN students only, this course is designed to enhance writing and speaking skills for the workplace. Emphasis is placed on generating short writings such as job application documents, memoranda, and developing interpersonal communication skills with employees and the public with substantial focus on occupational performance requirements and industry standards. Upon course completion, a student should be able to prepare effective, short, and job related written and oral communications.

COM 131
APPLIED WRITING I
3 Credit Hours
PREREQUISITE: Appropriate college placement test score or the equivalent. This course is a study of various types of written documents required in scientific, technical, and other specialized fields. Emphasis is placed on the production of such documents, including research, documentation, graphical displays, the abstract, appropriate diction, grammar, punctuation, and audience. Students will demonstrate the ability to produce effective reports, letters, memoranda, and similar documents.

SSS 082
BASIC COMMUNICATION SKILLS
3 Credit Hours
This course is designed to prepare eligible students to perform satisfactorily or above in various major and related courses. Diagnostic testing is done to assess specific needs in reading, writing and/or grammar. A small-group instructional approach is employed to improve the student's ability in vocabulary, spelling, reading comprehension, grammar, and writing.

GRAPHICS AND PREPRESS COMMUNICATIONS (GPC)
Bessemer State Technical College offers both an industry standard diploma and short certificate in the rapidly growing field of graphics and prepress. Students will receive a strong foundation in desktop publishing and print design. The curriculum is based on specific training on the major computer software applications used to produce print quality jobs. A student usually completes the program in five semesters/terms.

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<thead>
<tr>
<th>Course No/Title</th>
<th>Theory/Lab/Credit Hours</th>
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<tbody>
<tr>
<td>GPC 111</td>
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<td>GPC 112</td>
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<td>GPC 150</td>
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<td>GPC 152</td>
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<td>SPC 116</td>
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<td><strong>Total Credit Hours:</strong></td>
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All courses in this program are creditable toward an Associate in Occupational Technology (AOT).
**ASSOCIATE IN OCCUPATIONAL TECHNOLOGY DEGREE (AOT)**

This course provides a student with a basic background in computer operations, software applications, and the role and impact of computers in graphic design and communications. Topics include computer terms, hardware components, drawing, image editing and page layout software applications. Upon course completion, a student should be able to perform basic computer operations and file management as well as have an understanding of page layout software applications. CORE

**COURSE DESCRIPTIONS**

**GPC 111**  
**INTRODUCTION TO COMPUTERS IN GRAPHIC AND DESIGN COMMUNICATIONS**  
3 Credit Hours  
PREREQUISITE: None  
This course provides a student with a basic knowledge of computer operations, software applications, and the role and impact of computers in graphic design and communications. Topics include computer terms, hardware components, drawing, image editing and page layout software applications. Upon course completion, a student should be able to perform basic computer operations and file management as well as have an understanding of page layout software applications. CORE

**GPC 112**  
**INTRODUCTION TO THE GRAPHIC COMMUNICATIONS INDUSTRY**  
3 Credit Hours  
PREREQUISITE: None  
This course provides an introduction and overview of the graphic arts and printing industry and job estimating. Emphasis is placed on guest lectures and field trips to graphics and printing facilities. Upon course completion, a student should be able to use industry terminology, understand current and emerging trends in technology and make decisions about career options.

**GPC 116**  
**TECHNICAL GRAPHICS**  
3 Credit Hours  
PREREQUISITE: None  
This course introduces a student to basic drawing techniques and procedures to produce two-dimensional and three-dimensional drawings. Topics included are the use of drawing instruments, geometric shapes, orthographic projection, pictorial representation and perspective application. Upon course completion, a student should be able to produce two-dimensional and pictorial representations of objects to include one- and two-point perspective drawings.

**GPC 120**  
**COMPUTER GRAPHICS**  
3 Credit Hours  
PREREQUISITE: GPC 111 or instructor approval.  
This course introduces a student to digital imaging software. Emphasis is placed on the various tools and capabilities of the software to include painting and editing, creating special effects, basic image corrections, photo retouching, preparing images for web publications and creating color separations. Upon course completion, a student should be able to name and identify the different tools, work with multiple layer images, retouch a photograph, create special effects and prepare an image for a web publication.

**GPC 122**  
**TECHNICAL PROCESSES**  
3 Credit Hours  
PREREQUISITE: None  
This course introduces a student to the basic concepts and skills of image and page production and assembly necessary to produce camera-ready mechanicals. Topics include equipment, materials and techniques used to produce comprehensives and mechanicals, basic graphic arts camera operations, standard dark room procedures, basic scanner operations, and digital image creating. Upon course completion, a student should be able to recognize and evaluate quality line and halftone representations as they produce film, prints, transfers, and scans for use in traditional press production as well as electronic prepress applications. CORE

**GPC 124**  
**COMPUTER DRAWING**  
3 Credit Hours  
PREREQUISITE: GPC 111 or instructor approval.  
This course provides a student with a technical background in computer graphics. Emphasis is placed on the different drawing, modification and editing tools associated with industry-standard software. Upon course completion, a student should be able to identify the different tools associated with the software, create, edit and manipulate text, alter elements using the transformation tools, create charts and graphs, and design custom process colors.

**GPC 126**  
**TYPESetting FUNDAMENTALS**  
3 Credit Hours  
PREREQUISITE: None  
This course provides a study of type and text production. Emphasis is placed on development of the typographic form - from historic pictography representations to modern type styles and high-resolution electronic image setting. Upon course completion, a student should be able to demonstrate basic keyboarding skills for computer typesetting systems and applications, text/type specifications, measurements and text proofing. CORE

**GPC 128**  
**ELECTRONIC PAGE LAYOUT AND ASSEMBLY**  
3 Credit Hours  
PREREQUISITE: GPC 111 or instructor approval.  
This course provides an introduction to electronic page layout using computer software. Topics include importing, combining and manipulating text and graphic elements for composite page layout and production. Upon course completion, a student should be able to produce simple, single-page, spread-page and continuous-page digital documents suitable for low- or high-resolution output as well as electronic prepress file submission. CORE

**GPC 130**  
**BASIC ELECTRONIC PAGE PRODUCTION**  
3 Credit Hours  
PREREQUISITE: GPC 128 or instructor approval.  
This course provides an opportunity to expand a student's knowledge and technical expertise in electronic page production. Topics include production of magazines, newspapers, books, catalogues and other high-volume, multi-page production environments. Upon course completion, a student should be able to complete multi-page projects as members of production teams, and have enhanced organization, communication and problem-solving skills. CORE

**GPC 132**  
**ADVANCED ELECTRONIC PAGE PRODUCTION**  
3 Credit Hours  
PREREQUISITE: GPC 130 or instructor approval.  
This course provides a continuation of Production I. Topics include advanced page layout and composition; creation and maintenance of style calls, style sheets, house styles and style manuals; formatting, editing and maintaining kerns, tracking, hyphenation and justification. Upon course completion, a student should be able to use typographic, color and trapping tables, create and maintain macros and other production-oriented issues.
GPC 134
DIGITAL PREPRESS
3 Credit Hours
PREREQUISITE: GPC 120 and GPC 128 or instructor approval.
This course provides an in-depth study of electronic production techniques for printing and press applications. Topics include file preparation in compliance with industry standards; troubleshooting, correcting and preflighting files; stripping digital files for press, correcting line art and grayscale images and trapping color images. Upon course completion, a student should be able to troubleshoot and resolve technical press problems associated with software applications, fonts and font management, cross-platform conversions, digital imaging, and page layout and imposition.  CORE

GPC 150
BASIC PRINTING AND PRESS OPERATIONS
6 Credit Hours
PREREQUISITE: None
This course is a study of printing processes and the operation of equipment used in the printing industry. Topics include basic press operations, stripping, plate making, paper properties, inks and inking systems, air and water regulation and troubleshooting. Upon course completion, a student should be able to produce one-color printing.

GPC 152
ADVANCED PRINTING AND PRESS OPERATIONS
6 Credit Hours
PREREQUISITE: GPC 150 or instructor approval.
This course provides a study of printing processes and the operation of equipment used in the printing industry. Topics include press operations, stripping, plate making, paper properties, inks and inking systems, air and water regulation and troubleshooting. Upon course completion, a student should be able to produce one-color printing.

GPC 170
ON-LINE GRAPHIC COMMUNICATIONS
3 Credit Hours
PREREQUISITE: GPC 111 or instructor approval.
This course provides an understanding of the Internet and design principles for web sites. Emphasis is placed on software necessary for the creation and maintenance of a web site. Upon course completion, a student should be able to design, implement, and maintain on-line communications.

GPC 180
CURRENT TOPICS IN GRAPHICS AND PRINTING COMMUNICATIONS
3 Credit Hours
PREREQUISITE: None
This course provides a survey of current trends in the graphic communications and printing industry. Emphasis is placed on subjects such as typography and font management, advanced computer graphics or drawing, digital imaging, computer animation and presentation graphics. Upon course completion, a student should be able to perform skills in the newest industry technology.

GPC 182
3D GRAPHICS AND ANIMATION
3 Credit Hours
PREREQUISITE: GPC 111.
This course is designed to tap the imagination of a student in a three-dimensional problem-solving environment. Topics include a basic introduction to the concepts of 3D design and animation that is applied to design projects. Upon course completion, a student should be able to create and animate graphics in a three-dimensional environment.

GPC 191
COOPERATIVE WORK EXPERIENCE
1 Credit Hour
PREREQUISITES: GPC 132 and GPC 150 or instructor approval.
This course provides a student with relevant work experience in the industry. Emphasis is placed on production in a work setting. Upon course completion, a student should be able to understand job responsibilities, working for a company, and applied industry standards.

GPC 192
COOPERATIVE WORK EXPERIENCE
2 Credit Hours
PREREQUISITES: GPC 132 and GPC 150 or instructor approval.
This course provides a student with relevant work experience in the industry. Emphasis is placed on production in a work setting. Upon course completion, a student should be able to understand job responsibilities, working for a company, and applied industry standards.

HORTICULTURE, ORNAMENTAL (OHT)

The Horticulture program presents subject matter and laboratory learning activities that will prepare a student for successful employment in the production, management, sales, and service areas of horticulture.

Each student will receive general background information in the areas of soils, fertilizers, plant propagation, and horticulture sciences. Courses in the areas of landscaping, landscape maintenance, pest control, turf grasses, nursery, and greenhouse production are also offered to provide each student with knowledge necessary to seek and hold employment. Laboratory courses are designed to expose each student to work habits, skills, and machinery needed in most horticultural enterprises. Student experience is supervised and is provided in campus laboratories, greenhouses, nurseries, and landscaping situations. Field trips and co-op training broaden the student's education. A full-time student usually completes the associate degree requirements in five semesters/terms.

The Horticulture certificate is designed to allow a student to specialize in Landscape Design, Landscape Maintenance, Nursery Production, or Turf Management.

ORNAMENTAL HORTICULTURE
ASSOCIATE IN APPLIED TECHNOLOGY DEGREE

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<thead>
<tr>
<th>Course No./Title</th>
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<tr>
<td>OHT 110 Introduction to Horticultural Science</td>
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<tr>
<td>OHT 115 Soils and Fertilizers</td>
<td>2 2 3</td>
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<tr>
<td>OHT 120 Plant Propagation</td>
<td>1 4 3</td>
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<tr>
<td>OHT 125 Turf Management</td>
<td>1 4 3</td>
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<tr>
<td>OHT 130 Nursery Production</td>
<td>1 4 3</td>
</tr>
<tr>
<td>OHT 135 Ornamental Plant Identification and Culture</td>
<td>1 4 3</td>
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<tr>
<td>OHT 136 Residential Landscape Design</td>
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<tr>
<td>OHT 140 Ornamental Plant Pest Management</td>
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<td>OHT 201 Horticultural Business Management</td>
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<td>OHT 211 Greenhouse Crop Production</td>
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<tr>
<td>OHT 215 Landscape Maintenance</td>
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<tr>
<td>OHT 222 Advanced Studies in</td>
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Select 10 credit hours from the following:

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<th>Course No.</th>
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<tr>
<td>OHT 151</td>
<td>Irrigation Systems</td>
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<tr>
<td>OHT 167</td>
<td>Golf Course Maintenance</td>
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<tr>
<td>OHT 216</td>
<td>Special Topics in Horticulture Science</td>
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<td>Seminar in Horticulture</td>
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<td>OHT 230</td>
<td>Vegetable and Orchard Crops</td>
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<tr>
<td>OHT 291</td>
<td>Cooperative Education in Horticulture</td>
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<tr>
<td>OHT 292</td>
<td>Cooperative Education in Horticulture</td>
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**General Education Requirements:**
- COM 101 English Composition I 3 0 3
- COM 102 English Composition II 3 0 3
- DPT 104 Computer Fundamentals 2 3 3
- DPT 196 Commercial Software Application 2 2 3
- MAH 116 Mathematical Applications 3 0 3
- PSH 270 Business and Industrial Psychology 3 0 3
- SPC 106 Fundamentals of Oral Communication 3 0 3

**Total Credit Hours:** 66

**ORNAMENTAL HORTICULTURE SHORT CERTIFICATE:**

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<td>OHT 220</td>
<td>Seminar in Horticulture 1 0 1</td>
</tr>
<tr>
<td>OHT 221</td>
<td>Seminar in Horticulture 2 0 2</td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 24

*The Ornamental Horticulture certificate does not require general education courses.*

** COURSE DESCRIPTIONS  
OHT 110 INTRODUCTION TO HORTICULTURAL SCIENCE 3 Credit Hours  
PREREQUISITE: None  
This course introduces a student to botany, genetics, and plant nomenclature. Topics include an overview of the horticultural industry and career opportunities. Upon course completion, a student should be able to perform basic tasks associated with employment in the horticultural industry. CORE  

OHT 115 SOILS AND FERTILIZERS 3 Credit Hours  
PREREQUISITE: None  
This course is a study of soil properties and the management practices related to the use of fertilizers. Topics include soil classification, mapping, and fertilizer needs based on current and intended use. Upon course completion, a student should be able to develop soil fertility management programs. CORE  

OHT 120 PLANT PROPAGATION 3 Credit Hours  
PREREQUISITE: None  
This course is a study of seed production, root formation, wound healing, and other practical phases of plant reproduction. Methods commonly used to reproduce plants by sexual and asexual means are emphasized. Upon course completion, a student should be able to identify and demonstrate appropriate methods of reproducing plants from seeds, cuttings, and layering. CORE  

OHT 123 TURF MACHINERY 2 Credit Hours  
PREREQUISITE: None  
This course focuses on the use and maintenance of golf course machinery. Topics include greens mowers, cultivation equipment, and fairway mowers. Upon course completion, a student should be able to evaluate new equipment, analyze the cost effectiveness of repairing existing machinery, and operate and service turf machinery.  

OHT 125 TURF MANAGEMENT 3 Credit Hours  
PREREQUISITE: None  
This course is the study of many Southern lawn and sports turf grasses, their establishment and maintenance. Major topics include turf equipment, fertilizers, insect and disease problems, and mowing techniques. Upon course completion, a student should be able to evaluate the quality of an existing turf area and prescribe a maintenance program for turf used for lawns, playing fields, and in parks. CORE  

OHT 130 NURSERY PRODUCTION 3 Credit Hours  
PREREQUISITE: OHT 115 or instructor approval  
This course focuses on all aspects of producing plants in a nursery. Topics include soil and other media for plant growth, container selection, plant propagation, watering and fertilization, pest control, and production practices commonly used by commercial growers. Upon course completion, a student should be able to demonstrate proficiency in all phases of nursery plant productions. CORE  

OHT 135 ORNAMENTAL PLANT IDENTIFICATION AND CULTURE 3 Credit Hours  
PREREQUISITE: None  
This course focuses on the identification and growth requirements of ornamental plants. Topics include identification, habits of growth, cultural requirements, and landscape use of ornamental plants of the southeastern United States. Upon course completion, a student should know common and botanical names of landscape plants and will know the appropriate use of each plant. CORE  

OHT 136 RESIDENTIAL LANDSCAPE DESIGN 4 Credit Hours  
PREREQUISITE: None  
This course provides an overview of the fundamentals of residential site design. Topics include site measuring and base map preparation, functional diagrams, landscape design principles, drafting and drawing procedures, design principles, appropriate use of plant materials, planting, site preparation, and spatial composition. Upon course completion, a student should be able to develop a master plan for a residential property.  

OHT 140 ORNAMENTAL PLANT PEST MANAGEMENT 3 Credit Hours  
PREREQUISITE: None  
This course is a study of plant pests affecting the production and maintenance of ornamental plants. Emphasis is on anthropoid, weeds, cultural control, chemical control, and disease-causing agents including environmental factors. Upon course completion, a student should be able to identify the signs and symptoms of invading pests and the characteristics associated with the onset of diseases in turf grass and ornamental plants and will be able to develop appropriate pest control plans.  

OHT 151 IRRIGATION SYSTEMS 2 Credit Hours  
PREREQUISITE: None  
This course is designed to provide students with the information needed to design, layout, and install an irrigation system on residential and commercial properties. Topics of discussion will include system design, cost estimating, installation techniques, and electronic control devices. Upon course completion, a student should be able to design and install residential and commercial irrigation systems.
OHT 167
GOLF COURSE MAINTENANCE
3 Credit Hours
PREREQUISITE: None
This course introduces a student to procedures commonly used to maintain golf course greens and fairways. Topics include mowing procedures, fertilizing, watering, pest control, over feeding, and greens protection. Upon course completion, a student should be able to demonstrate appropriate greens and fairway maintenance procedures.

OHT 201
HORTICULTURAL BUSINESS MANAGEMENT
3 Credit Hours
PREREQUISITE: None
This course covers the essential information needed to establish and maintain a horticulture-related business. Topics will include the basic principles of business and personnel management, customer service, insurance, finance, and record keeping. Upon course completion, a student should demonstrate an understanding of the requirements to comply with mandated state and federal regulations, manage employees, and meet consumer demands.

OHT 211
GREENHOUSE CROP PRODUCTION
3 Credit Hours
PREREQUISITE: OHT 115 or instructor approval.
This is an introductory course to the use of greenhouse facilities for the production of foliage and flowering plant crops. Topics include propagation, scheduling, soils and media, crop selection, pest management, and methods of production. Upon course completion, a student should be able to produce a wide range of commercial greenhouse crops.

OHT 215
LANDSCAPE MAINTENANCE
2 Credit Hours
PREREQUISITE: None
This course focuses on maintaining plant materials and turf in an existing landscape. Topics include pruning, mowing techniques, pest management, and selection of maintenance equipment. Upon course completion, a student should be able to demonstrate landscape maintenance techniques and will be able to prepare labor-time estimates and cost analysis for maintaining landscapes.

OHT 216
SPECIAL TOPICS IN HORTICULTURAL SCIENCE
1 Credit Hour
PREREQUISITE: None
This lab-oriented course is designed to enhance students' skills needed to perform specific tasks related to ornamental horticulture. Topics are based on the season of the year in which the course is taught and the activities currently being performed by workers in the industry. Each student is given the opportunity to demonstrate his or her ability to perform the seasonal application taught in the course.

OHT 217
SPECIAL TOPICS IN HORTICULTURAL SCIENCE
1 Credit Hour
PREREQUISITE: None
This lab-oriented course is designed to enhance students' skills needed to perform specific tasks related to ornamental horticulture. Topics are based on the season of the year in which the course is taught and the activities currently being performed by workers in the industry. Each student is given the opportunity to demonstrate his or her ability to perform the seasonal application taught in the course.

OHT 220
SEMINAR IN HORTICULTURE
1 Credit Hour
PREREQUISITE: None
This course focuses on current topics in horticulture. Topics are not normally included in the prescribed course of study, but are to ensure that a student remains current in the field.

OHT 221
SEMINAR IN HORTICULTURE
2 Credit Hours
PREREQUISITE: None
This course focuses on current topics in horticulture. Topics are not normally included in the prescribed course of study, but are to ensure that a student remains current in the field.

OHT 222
ADVANCED STUDIES IN HORTICULTURE
2 Credit Hours
PREREQUISITE: None
This course allows a student to do practical research and develop a project of special interest under the guidance and supervision of a faculty member. Each student and faculty member confer in the selection of a project and in the identification of objectives.

OHT 230
VEGETABLE AND ORCHARD CROPS
3 Credit Hours
PREREQUISITE: OHT 115 or instructor approval.
This course focuses on vegetable and fruit crops. Topics include cultural requirements, production procedures, and marketing. Upon course completion, a student should be able to grow vegetables and establish orchard layouts.

OHT 291
COOPERATIVE EDUCATION IN HORTICULTURE
3 Credit Hours
PREREQUISITE: Instructor approval.
This course provides work experience with a college-approved employer in an area related to a student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon course completion, a student should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

OHT 292
COOPERATIVE EDUCATION IN HORTICULTURE
3 Credit Hours
PREREQUISITE: Instructor approval.
This course provides work experience with a college-approved employer in an area related to a student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon course completion, a student should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

HUMANITIES (HMN)
GENERAL EDUCATION

HMN 100
HUMANITIES FORUM
1 Credit Hour
PREREQUISITE: None
In this course, credit is given for participation in lectures, concerts, and other events that have relevance to the study of the humanities. The course may be repeated for credit.
INDUSTRIAL MAINTENANCE TECHNICIAN (INT)

The Industrial Maintenance Technician program prepares a student to install and maintain all types of industrial equipment. A Maintenance Technician graduate will interpret prints, schematics, properly use burning and welding equipment, and identify equipment components and their applications in industrial environments. The program is usually completed in five semesters/terms.

INDUSTRIAL MAINTENANCE TECHNICIAN SHORT CERTIFICATE

Course No./Title Theory/Lab/Credit Hours
INT 111 Industrial Mechanics 3 6 6
INT 113 Fundamentals of Industrial Hydraulics 2 3 3
INT 114 Mechanical Measurements and Technical Drawing 2 3 3
INT 123 Industrial Pumps and Piping Systems 1 6 3
INT 124 Production Equipment Layout and Installation 1 6 3
WDT223 Blueprint Reading for Fabrication 2 4 3
INT 233 Industrial Maintenance Metal Welding/Cutting 1 4 3

Total Credit Hours: 24

Optional Related Courses:

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<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>INT 105</td>
<td>Introduction to Process Technology</td>
<td>3 0 3</td>
</tr>
<tr>
<td>INT 106</td>
<td>Introduction to Process Technology Lab</td>
<td>0 9 3</td>
</tr>
<tr>
<td>INT 109</td>
<td>Industrial Process Equipment and Fittings</td>
<td>3 0 3</td>
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<td>INT 110</td>
<td>Industrial Process Equipment and Fittings Lab</td>
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<tr>
<td>INT 112</td>
<td>Industrial Maintenance Safety Procedures</td>
<td>3 0 3</td>
</tr>
<tr>
<td>INT 115</td>
<td>Industrial Measurements Lab</td>
<td>0 9 3</td>
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<tr>
<td>INT 116</td>
<td>Industrial Measurements</td>
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<tr>
<td>INT 121</td>
<td>Industrial Hydraulics Troubleshooting</td>
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<tr>
<td>INT 122</td>
<td>Preventive and Predictive Maintenance</td>
<td>2 3 3</td>
</tr>
<tr>
<td>INT 207</td>
<td>Industrial Automatic Controls</td>
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<td>INT 208</td>
<td>Industrial Automatic Controls Lab</td>
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</tr>
<tr>
<td>INT 215</td>
<td>Troubleshooting Techniques</td>
<td>1 4 3</td>
</tr>
<tr>
<td>INT 232</td>
<td>Manufacturing Plant Utilities</td>
<td>2 2 3</td>
</tr>
<tr>
<td>INT 242</td>
<td>Fundamentals of Industrial Pneumatics</td>
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The Industrial Maintenance certificate does not require general education courses. All courses in this award are creditable toward a minor in the Associate in Occupational Technology Degree (AOT).

COURSE DESCRIPTIONS

INT 105
INTRODUCTION TO PROCESS TECHNOLOGY
3 Credit Hours
PREREQUISITE: INT 103 or instructor approval.
This course is designed to provide a student with an introduction to process technology and the role of the technician in industry. Topics include plant safety, piping and instrument diagrams, pressures, levels, flows, temperatures, gaskets, packing, lubricants, sealants, and cleaners. Upon course completion, a student should be able to understand process technology concepts and practices. CORE

INT 106
INTRODUCTION TO PROCESS TECHNOLOGY LAB
3 Credit Hours
COREQUISITE: INT 105.
This course provides a student with practical experience with various hand and power tools. Emphasis is placed on use of shop tools and equipment to perform preventive maintenance and light-duty service procedures. Upon course completion, a student should be able to select and use hand and power tools in accordance with OSHA standards. CORE

INT 109
INDUSTRIAL PROCESS EQUIPMENT AND FITTINGS
3 Credit Hours
PREREQUISITE: INT 105 or instructor approval.
This course is designed to teach a student how to install instruments in various mountings. Topics include instrument fitting techniques such as layout, measuring, bending, supporting, leak testing, and craft-related trigonometry. Upon course completion, a student should be able to mount instruments and apply various fitting techniques. CORE

INT 110
INDUSTRIAL PROCESS EQUIPMENT AND FITTINGS LAB
3 Credit Hours
This course provides a student with practical experience related to instrument mounting. Emphasis is placed on instrument fitting techniques. Upon course completion, a student should be able to mount instruments and apply various fitting techniques. CORE

INT 111
INDUSTRIAL MECHANICS
6 Credit Hours
PREREQUISITE: None
This course provides instruction in basic physics concepts applicable to mechanics of industrial production equipment. Topics include the basic application of mechanical principles with emphasis on power transmission, specific mechanical components, alignment, and tension. Upon course completion, a student will be able to perform basic troubleshooting, repair and maintenance functions on industrial production equipment. CORE

INT 112
INDUSTRIAL MAINTENANCE SAFETY PROCEDURES
3 Credit Hours
PREREQUISITE: None
This course is an in-depth study of the health and safety practices required for maintenance in industrial production equipment. Topics include traffic; ladder, electrical, and fire safety; safe work in confined spaces; electrical and mechanical lock-out procedures; emergency procedures; OSHA regulations; MSDS Right-to-Know law, hazardous materials safety; and safety equipment use and care. Upon course completion, a student should be able to implement health and safety practices in an industrial production setting. CORE

INT 113
FUNDAMENTALS OF INDUSTRIAL HYDRAULICS
3 Credit Hours
PREREQUISITE: None
This course includes the fundamental concepts and theories for the safe operation of hydraulic components and systems used with industrial production equipment. Topics include the physical concepts, theories, laws, and the application of these concepts to perform work. Upon completion, a student should be able to service and perform preventive maintenance functions on hydraulic systems. CORE

INT 114
MECHANICAL MEASUREMENTS AND TECHNICAL DRAWINGS
3 Credit Hours
PREREQUISITE: None
This course provides instruction in the use of precision measuring tools and the interpretation of technical drawings. Topics include the use of calipers, micrometers, steel rules, and dial indicators; identifying types of lines and symbols of technical drawings; recognition and interpretation of various types of views; tolerances; and dimensions. Upon course completion, a student should be able to use precision measuring tools and interpret technical drawings. CORE

INT 115
INDUSTRIAL MEASUREMENTS
3 Credit Hours
PREREQUISITE: INT 109 or instructor approval.
This course focuses on craft-related mathematics and process control theory. Topics include elements, transistors, transducers, displacers,
controllers, recorders, control valves, and actuating and electrical devices. Upon completion, a student should be able to understand process control theory and apply the related calculations. CORE

INT 116
INDUSTRIAL MEASUREMENTS LAB
3 Credit Hours
COREQUISITE: INT 115.
This course provides a student with practical experience in process control theory. Emphasis is placed on connecting and calibrating transistors, transducers, displacers, controllers, recorders, control valves, and actuating and electrical devices. Upon completion, a student should be able to install industrial measurement devices. CORE

INT 121
INDUSTRIAL HYDRAULICS TROUBLESHOOTING
3 Credit Hours
PREREQUISITE: INT 113 or instructor approval.
This course provides instruction in maintenance and troubleshooting procedures needed for safe and proper repair of hydraulic systems used with industrial production equipment. Topics include maintenance and troubleshooting procedures; hydraulic system maintenance and troubleshooting techniques; effects of heat, leakage, and contamination on components and system operation; component maintenance and troubleshooting; reading and interpreting system diagrams; and design and troubleshooting of hydraulic circuits and systems. Upon course completion, a student should demonstrate the ability to troubleshoot and repair industrial hydraulic systems.

INT 122
PREVENTIVE AND PREDICTIVE MAINTENANCE
3 Credit Hours
PREREQUISITE: None
This course focuses on the concepts and applications of preventive and predictive maintenance. Topics include the introduction to optic alignment equipment, vibration testing and analysis, data collection, job safety, tool safety, systems analysis, preventive maintenance procedures and tasks, and predictive maintenance concepts. Upon course completion, a student should demonstrate the ability to apply the planning process for proper preventive and predictive maintenance. CORE

INT 123
INDUSTRIAL PUMPS AND PIPING SYSTEMS
3 Credit Hours
PREREQUISITE: None
This course provides instruction in the fundamental concepts of industrial pumps and piping systems.

INT 124
PRODUCTION EQUIPMENT LAYOUT AND INSTALLATION
3 Credit Hours
PREREQUISITE: None
This course provides instruction in the layout and installation of production equipment and the use of rigging and installation tools. Topics include the use of wire rope, chain and metal-mesh, and fiber rope and webbing slings; industrial hoists and cranes; crane operation; scaffolds and ladders; machine anchoring for vibration control; moving and setting new equipment; leveling and alignment; preparing equipment for test runs; test run guidelines; and safety precautions. Upon course completion, a student should be able to install production equipment. CORE

INT 127
INDUSTRIAL AUTOMATIC CONTROLS
3 Credit Hours
PREREQUISITE: INT 115 or instructor permission.
This course focuses on the function of automatic controllers in different modes: on-off, proportional, reset, derivative, ratio, and cascade. Topics include operation of pneumatic, electronic, and computer process control equipment; service of basic process equipment and instrumentation; correct operation and maintenance of valves and pumps; recognizing patterns from data; developing and interpreting control charts; determining control limits; and performing root cause analysis. Upon course completion, a student should be able to write start-up and shut-down procedures, and operate, monitor, and control continuous- and batch-model plants. CORE

INT 128
INDUSTRIAL AUTOMATIC CONTROLS LAB
3 Credit Hours
COREQUISITE: INT 127.
This course provides a student with practical experience related to industrial automatic controls. Topics include operation and service of various equipment, development and interpretation of charts and data, and root cause analysis. Upon course completion, a student should be able to write start-up and shut-down procedures, and operate, monitor and control continuous- and batch-model plants. CORE

INT 215
TROUBLESHOOTING TECHNIQUES
3 Credit Hours
PREREQUISITE: Instructor approval.
This course focuses on the systematic approach to solving problems. Emphasis is placed on instrument failures and their interaction with process down-time. Upon course completion, a student should be able to solve problems on a process simulator or in an actual setting.

INT 223
MANUFACTURING PLANT UTILITIES
3 Credit Hours
PREREQUISITE: None
This course focuses on the theory of operating and maintaining plant utilities. Topics include the operation/control and maintenance of boilers, HVAC systems, and air compressors. Upon course completion, a student should demonstrate the ability to repair and maintain utilities systems in an industrial setting. CORE

INT 224
INDUSTRIAL MAINTENANCE METAL WELDING AND CUTTING TECHNIQUES
3 Credit Hours
PREREQUISITE: None
This course provides instruction in the fundamentals of acetylene cutting and the basics of SMAW welding needed for the maintenance and repair of industrial production equipment. Topics include oxy-fuel safety, choice of cutting equipment, proper cutting angles, equipment setup, cutting plate and pipe, hand tools, types of metal welding machines, rod and welding joints, and common welding passes and beads. Upon course completion, a student should demonstrate the ability to perform metal welding and cutting techniques necessary for repairing and maintaining industrial equipment. CORE

INT 242
FUNDAMENTALS OF INDUSTRIAL PNEUMATICS
3 Credit Hours
PREREQUISITE: None
This course provides instruction in fundamental concepts and theories for the safe operation of pneumatic components and systems used with industrial production equipment. Topics include the physical concepts, theories, laws, and the application of these concepts to perform work; air flow characteristics; actuators; valves; accumulators; symbols and circuitry; filters; servicing safety, and preventive maintenance. Upon course completion, a student should be able to troubleshoot, repair, and maintain industrial pneumatic systems. CORE
LICENSÉD PRACTICAL NURSING (LPN)

The Licensed Practical Nursing program is designed to prepare a student to give basic nursing care to stable, non-acute patients, independent of immediate guidance, and to unstable, acute patients under the direct supervision of a registered nurse, and/or physician.

The nursing faculty members are eager to help and each student continue learning and applying the knowledge necessary for a nursing career. The teaching-learning process is viewed as a two-way process between faculty and each student. The faculty members regard their chief responsibility as facilitating each student's learning by offering guidance in classroom and clinical activities. Each student is referred to the Philosophy and Objectives for the Nursing program to aid him or her in understanding the rationale for actions involving the teaching-learning process.

The program is accredited by the National League for Nursing (NLN) and is approved by the Alabama Department of Postsecondary Education and the Alabama Board of Nursing. A graduate is eligible to write the NCLEX-PN (state licensure examination). Employment opportunities are available in hospitals, nursing homes, clinics, home health, and community agencies throughout the metro Birmingham area.

The program can be completed in four semesters/terms.

LICENSÉD PRACTICAL NURSING DIPLOMA

Course No./Title Theory/Lab/Credit Hours
LPN 110 Introduction to Nursing 1 3 2
LPN 111 Basic Nursing Concepts 3 0 3
LPN 112 Basic Nursing Concepts Clinical/Lab 0 9 3
LPN 113 Body Structure and Function for LPN 2 3 3
LPN 116 Basic Nutrition 2 0 2
LPN 118 Mental Health Concepts 2 0 2
LPN 122 Adult Health I 2 6 4
LPN 123 Pharmacology I 0 3 1
LPN 132 Adult Health II 2 6 4
LPN 133 Pharmacology II 0 3 1
LPN 134 Maternal Health Nursing 1 3 2
LPN 135 Child Health Nursing 1 3 2
LPN 145 Role Transition 0 3 1
LPN 161 Applied Clinical Concepts 0 12 4
LPN 171 Applied Clinical Concepts II 0 12 4
LPN 181 Applied Clinical Concepts III 0 12 4

Choose 3 hours from the following:

LPN 102 Medical Terminology for Practical Nursing* 3 0 3
LPN 114 Dosage Calculations 0 2 1
LPN 200 Current Health Issues and Trends 3 0 3
LPN 201 Geriatric Nursing Concepts 3 0 3
LPN 202 Reading EKG's for Practical Nursing 3 0 3
LPN 203 IV Therapy Concepts 2 3 3
LPN 205 Directed Studies I for LPN 1 0 1
LPN 206 Directed Studies II for LPN 2 0 2
LPN 207 Directed Studies III for LPN 3 0 3
LPN 208 Long-Term/Restorative Nursing LPN 3 0 3
LPN 209 NCLEX-PN Examination Review 0 2 1
LPN 210 Pharmacotherapeutics for LPN 3 0 3

General Education Requirements:
COM 103 Vocational Technical English II 3 0 3
MAH 105 Math for Nurses 2 2 3
Total Credit Hours: 51

*This course may be substituted as an LPN elective with permission of Department Chair.

LPN 111 BASIC NURSING CONCEPTS
3 Credit Hours
PREREQUISITE OR COREQUISITE: LPN 110, LPN 113 or BIO 147 (COREQUISITE: LPN 112).
This course is designed to assist a student to acquire fundamental knowledge to be utilized in holistic care of clients for optimum health promotion, maintenance, and restoration. Emphasis is placed on the nursing process, physical assessment, medication administration and basic nursing skills. Upon course completion, a student will demonstrate knowledge necessary to deliver safe and effective nursing care. CORE

LPN 112 BASIC NURSING CONCEPTS CLINICAL/LAB
3 Credit Hours
PREREQUISITE or COREQUISITE: LPN 110, LPN 113 or BIO 147 (COREQUISITE: LPN 111).
This course provides a student with opportunities to develop and practice basic nursing skills in the laboratory and to apply these skills in the clinical setting. Emphasis is placed on the nursing process, physical assessment, basic nursing skills and medication administration. Upon course completion, a student will demonstrate skills necessary to deliver safe and effective basic nursing care. CORE

LPN 113 BODY STRUCTURE AND FUNCTION FOR LPN
3 Credit Hours
PREREQUISITE: Admission to program or permission of instructor.
This course is designed to enable a student to acquire a basic knowledge of normal structure and function of body systems. Content focuses on the interrelationships among the organ systems and the relationship of each organ system to homeostasis. Upon course completion, a student will demonstrate basic knowledge of body systems and their interrelationships.

LPN 114 DOSAGE CALCULATIONS
1 Credit Hour
PREREQUISITE or COREQUISITE: MAH 100 or above and permission of instructor.
This course introduces calculation of solutions and intravenous infusion rates. Upon course completion, a student will demonstrate proficiency in calculating drug dosages and IV infusion rates for adults and children.
MACHINE TOOL TECHNOLOGY (MTT)

Machinists use tools such as lathes, drill presses, and milling machines to produce precision metal parts. They use their knowledge of the working properties of metals—such as steel, cast iron, aluminum, and brass—and their skill with machine tools to plan and carry out the operations needed to make machined products that meet precise specifications. Increasingly, the machine tools are computer numerically controlled (CNC), which means that the controllers are computers. These machines enable machinists to be more productive and to produce parts with a level of precision that is not possible with traditional machining techniques.

MACHINE TOOL TECHNOLOGY CERTIFICATE

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<thead>
<tr>
<th>Course No./Title</th>
<th>Theory/Lab/Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>MTT 101 Basic Machining Technology</td>
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<tr>
<td>MTT 102 Intermediate Machining Technology</td>
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<td>MTT 104 Basic Machining Calculations</td>
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<td>MTT 111 Introduction to Computer Numerical Control</td>
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<tr>
<td>MTT 112 Basic Computer Numerical Control Turning</td>
<td>3 0 3</td>
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<tr>
<td>MTT 113 Basic Computer Numerical Control Milling</td>
<td>3 0 3</td>
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<tr>
<td>MTT 121 Basic Blueprint Reading for Machinists</td>
<td>3 0 3</td>
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<tr>
<td>MTT 122 Advanced Blueprint Reading for Machinists</td>
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<tr>
<td>MTT 131 Introduction to Metrology</td>
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<td>MTT 212 Advanced Computer Numerical Control Turning</td>
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<td>MTT 213 Advanced Computer Numerical Control Milling</td>
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<td>MTT 214 Computer Numerical Control Graphics Programming Turning</td>
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<td>MTT 215 Computer Numerical Control Graphics Programming Milling</td>
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<td>COM 131 Applied Writing I</td>
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<td>DPT 196 Commercial Software Application</td>
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<td>MAH 116 Mathematical Applications</td>
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<td>SPC 116 Introduction to Interpersonal Communication</td>
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<td>Total Credit Hours:</td>
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All courses in this program are creditable toward an Associate in Occupational Technology Degree (AOT).

MACHINE TOOL TECHNOLOGY/CNC SHORT CERTIFICATE

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<tr>
<td>MTT 101 Basic Machining Technology</td>
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<td>MTT 102 Intermediate Machining Technology</td>
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<td>MTT 104 Basic Machining Calculations</td>
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<td>MTT 121 Basic Blueprint Reading for Machinists</td>
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<tr>
<td>MTT 131 Introduction to Metrology</td>
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<td>Total Credit Hours:</td>
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The Machine Tool Technology short certificate does not require general education courses. All courses in this award are creditable toward an Associate in Occupational Technology Degree (AOT).

COURSE DESCRIPTIONS

MTT 101 BASIC MACHINING TECHNOLOGY

3 Credit Hours

COREQUISITE: MTT 104 or instructor approval.

This course introduces the concepts and capabilities of computer numerical controller control systems. Topics include the basic principles of control systems, including the selection and use of machine tools and machine programs. Upon course completion, a student should be able to perform basic operations on a machine tool and to interpret basic drawings, visualize parts, and make pictorial sketches. CORE

MTT 102 INTERMEDIATE MACHINING TECHNOLOGY

3 Credit Hours

COREQUISITE: MTT 101 and MTT 104 or instructor approval.

This course introduces the advanced concepts and capabilities of computer numerical controller control systems. Topics include the programming, setup, and operation of CNC turning centers and milling machines. Upon course completion, a student should be able to safely perform the basic operations of measuring, layout, drilling, and milling. CORE

MTT 103 BASIC MACHINING CALCULATIONS

3 Credit Hours

COREQUISITE: MTT 101 or instructor approval.

This course introduces basic calculations as they relate to machining operations. Emphasis is placed on basic calculations and their applications in the machine shop. Upon course completion, a student should be able to perform basic shop calculations.
MIT 122
ADVANCED BLUEPRINT READING FOR MACHINISTS
3 Credit Hours
PREREQUISITE: MTT 121 or instructor approval.
This course introduces more complex industrial blueprints. Emphasis is placed on auxiliary views, section views, violations of true project, special views, applications of GD 8 1, and interpretation of complex parts. Upon course completion, a student should be able to read and interpret complex industrial blueprints.

MIT 131
INTRODUCTION TO METROLOGY
3 Credit Hours
PREREQUISITE: None
This course introduces the care and use of precision measuring instruments. Emphasis is placed on the inspection of machine parts and use of a wide variety of measuring instruments. Upon course completion, a student should be able to demonstrate the correct use of measuring instruments. CORE

MIT 142
ADVANCED MACHINING CALCULATIONS
2 Credit Hours
PREREQUISITE: MTT 104 or instructor approval.
This course combines mathematical functions with practical machine shop applications and problems. Emphasis is placed on gear ratios, lead screws, indexing problems, and their applications in the machine shop. Upon course completion, a student should be able to calculate solutions to machining problems.

MIT 201
ADVANCED MACHINING TECHNOLOGY
5 Credit Hours
PREREQUISITE: MTT 101, 102 and MTT 104 or instructor approval.
This course provides an introduction to advanced and special machining operations. Emphasis is placed on working to specified tolerances with special and advanced setups. Upon course completion, a student should be able to produce a part to specifications. CORE

MIT 212
ADVANCED COMPUTER NUMERICAL CONTROL TURNING
2 Credit Hours
PREREQUISITE: MTT 112 or instructor approval.
This course covers advanced methods in setup and operation of CNC turning centers. Emphasis is placed on programming and production of complex parts. Upon course completion, a student should be able to demonstrate skills in programming, operations, and setup of CNC turning centers.

MIT 213
ADVANCED COMPUTER NUMERICAL CONTROL MILLING
2 Credit Hours
PREREQUISITE: MTT 113 or instructor approval.
This course covers advanced methods in setup and operation of CNC machining centers. Emphasis is placed on programming and production of complex parts. Upon course completion, a student should be able to demonstrate skills in programming, operations, and setup of CNC machining centers.

MIT 214
COMPUTER NUMERICAL CONTROL GRAPHICS PROGRAMMING TURNING
3 Credit Hours
PREREQUISITE: MTT 112 or instructor approval.
This course introduces Computer Numerical Control graphics programming and concepts for turning center applications. Emphasis is placed on the interaction of menus to develop a shape file in graphics CAM system and to develop tool path geometry and part geometry. Upon course completion, a student should be able to develop a job plan using CAM software, including machine selection, tool selection, operational sequence, speed, feed, and cutting depth.

MIT 215
COMPUTER NUMERICAL CONTROL GRAPHICS PROGRAMMING MILLING
3 Credit Hours
PREREQUISITE: MTT 113 or instructor approval.
This course introduces Computer Numerical Control graphics programming and concepts for machining center applications. Emphasis is placed on developing a shape file in a graphics CAM system and transferring coded information from CMA graphics to the CNC milling center. Upon course completion, a student should be able to develop a complete job plan using CMA software to create a multi-axis CNC program.
BASIC NUTRITION
2 Credit Hours
PREREQUISITE: Admission to program or permission of instructor.
This course introduces a student to basic principles of nutrition and the role of nutrition in promotion and maintenance of health. Emphasis is placed on the functions of nutrients and their requirements throughout the life span. Upon course completion, a student will demonstrate knowledge of basic nutrition principles necessary for health promotion and maintenance.

MENTAL HEALTH CONCEPTS
2 Credit Hours
PREREQUISITE: Admission to program or permission of instructor.
This course is designed to provide an overview of psychological adaptation and coping concepts used throughout the life span. Topics include therapeutic communication skills, normal and abnormal behaviors, treatment modalities, and developmental needs. Upon course completion, a student will demonstrate the ability to assist the client in maintaining psychological integrity through the use of the nursing process.

ADULT HEALTH I
4 Credit Hours
PREREQUISITE: LPN 110, 111, 112, LPN 113 or BIO 147.
PREREQUISITE or COREQUISITE: LPN 123, LPN 136, or HPS 104 (COREQUISITE: Appropriate clinical course).
This course provides a student with principles necessary to meet the needs of the individual throughout the adult life span in a safe and ethical manner using the nursing process. The focus of the course is on meeting the needs of individuals requiring emergency care and with diseases/disorders of the cardiovascular, respiratory, endocrine, reproductive, nervous, and sensory systems. Upon course completion, a student will demonstrate knowledge necessary to deliver safe and effective nursing care.

PHARMACOLOGY I
1 Credit Hour
PREREQUISITE: LPN 110, 111, 112, LPN 113 or BIO 147 (COREQUISITES: LPN 131, 132, LPN 134 or LPN 135 and appropriate clinical course).
This course provides a student with knowledge of pharmacological agents used to treat disorders related to the co-requisite nursing theory course. The nursing process provides the framework for the study of medications, classifications, physiological action, common side effects, appropriate nursing action and criteria for evaluating effectiveness of drug therapy. Upon course completion, a student will demonstrate knowledge necessary to safely administer medications.

MATERNAL HEALTH NURSING
2 Credit Hours
PREREQUISITE: LPN 110, 111, 112, LPN 113 or BIO 147 (COREQUISITE: Appropriate clinical course).
This course focuses on the childbearing cycle of the family unit and the role of the nurse in care of mother and newborn and facilitator of adaptation. Course content includes the normal pregnancy and complications, labor and delivery, care of the newborn, post-partum care, and drug therapy. Upon course completion, a student will demonstrate knowledge needed to deliver safe and effective nursing care for the family unit in the child-bearing cycle. CORE

CHILD HEALTH NURSING
2 Credit Hours
PREREQUISITE: LPN 110, 111, 112, LPN 113 or BIO 147 (COREQUISITE: Appropriate clinical course).
This course is designed to provide a student with knowledge necessary to meet the physiological, psychosocial, cultural, and developmental needs of the sick or well child from infancy through adolescence in a safe and ethical manner. Course content includes aspects of growth and development, health supervision, prevention and care of the pediatric client. Upon course completion, a student will demonstrate knowledge needed to deliver safe and effective care to children. CORE

ROLE TRANSITION
1 Credit Hour
PREREQUISITE: LPN 110, 111, 112, LPN 113 or BIO 147 or permission of instructor.
This course is designed to provide a student with the knowledge and skills necessary to make the transition from student to LPN practitioner. Content includes the professional responsibilities of the LPN, leadership skills, quality assurance, fiscal management, professional accountability, resume preparation, job interviewing skills, obtaining/resigning employment, and preparation for the NCLEX-PN. Upon course completion, a student will demonstrate knowledge and skills necessary for entry into practical nursing.

APPLIED CLINICAL CONCEPTS
4 Credit Hours
PREREQUISITE: LPN 110, 111, 112, LPN 113 or BIO 147 (COREQUISITE: Appropriate clinical course).
This course provides a student with opportunities to apply concepts and principles of client care in a structured environment. Client experiences are designed to provide opportunity for application of nursing process, psychomotor skills, critical thinking, and knowledge of client care for clients throughout the life span. Upon course completion, a student will demonstrate knowledge and skills necessary to provide safe and effective care to clients utilizing the nursing process.

APPLIED CLINICAL CONCEPTS II
4 Credit Hours
PREREQUISITE: LPN 110, 111, 112, LPN 113 or BIO 147 (COREQUISITE: Appropriate clinical course).
This course provides a student with opportunities to apply concepts and principles of client care in a structured environment. Clinical experiences are designed to provide opportunity for application of...
This theory course is designed to allow a student to demonstrate knowledge necessary to adapt to a changing health care environment.

**LPN 181 APPLIED CLINICAL CONCEPTS III**

4 Credit Hours

PREREQUISITE: LPN 110, 111, 112, LPN 113 or BIO 147 (COREQUISITE: LPN 131, 132, LPN 134 or LPN 135).

This course provides a student with opportunities to apply concepts and principles of client care in a structured environment. Clinical experiences are designed to provide opportunities for application of the nursing process, psychomotor skills, critical thinking, and knowledge of client care for clients throughout the life span. Upon course completion, a student will demonstrate knowledge and skills necessary to provide safe and effective care utilizing the nursing process.

**LPN 200 CURRENT HEALTH ISSUES AND TRENDS**

3 Credit Hours

PREREQUISITE: Permission of instructor.

This theory course is designed to allow a student to explore issues that affect health care. Topics include issues that are relevant to current nursing practice. Upon course completion, a student will demonstrate knowledge necessary to adapt to a changing health care environment.

**LPN 201 GERIATRIC NURSING CONCEPTS**

3 Credit Hours

PREREQUISITE: Permission of instructor.

This course is designed to provide a student with an opportunity to explore physiological, psychosocial, cultural and developmental needs of the geriatric client. Content will include physical and psychosocial needs unique to the geriatric client, methods of health promotion, maintenance and restoration, issues related to death and dying, long-term care, and pharmacological considerations. Upon course completion, a student will demonstrate knowledge and skills necessary to provide effective care to the geriatric client.

**LPN 202 READING EKG'S FOR PRACTICAL NURSING**

3 Credit Hours

PREREQUISITE: Permission of instructor.

This course provides a student with the knowledge and skills for interpretation of electrocardiograms. Emphasis is placed on the recognition and treatment of common atrial, junctional, and ventricular arrhythmias. Upon course completion, a student will demonstrate knowledge and skills necessary for recognition of normal and abnormal heart rhythms.

**LPN 203 IV THERAPY CONCEPTS**

3 Credit Hours

PREREQUISITE: Permission of instructor.

This course provides a student with advanced knowledge and skills in the principles of intravenous fluid therapy. Emphasis is placed on anatomy review, phlebotomy techniques, and intravenous therapy procedures and delivery systems. Upon course completion, a student will demonstrate knowledge and skills necessary to deliver safe and effective intravenous therapy.

**LPN 205 DIRECTED STUDIES I FOR LPN**

1 Credit Hour

PREREQUISITE: Permission of instructor.

This course provides a student with an opportunity to expand knowledge of practical nursing. Learning activities will be tailored to meet the unique needs of a student. Upon course completion, a student will meet requirements as specified in a preconstructed contractual agreement.

**LPN 206 DIRECTED STUDIES II FOR LPN**

2 Credit Hours

PREREQUISITE: Permission of instructor.

This course provides a student with an opportunity to expand knowledge of practical nursing. Learning activities will be tailored to meet the unique needs of a student. Upon course completion, a student will meet requirements as specified in a preconstructed contractual agreement.

**LPN 207 DIRECTED STUDIES III FOR LPN**

3 Credit Hours

PREREQUISITE: Permission of instructor.

This course provides a student with an opportunity to expand knowledge of practical nursing. Learning activities will be tailored to meet the unique needs of a student. Upon course completion, a student will meet requirements as specified in a preconstructed contractual agreement.

**LPN 208 LONG-TERM/RESTORATIVE NURSING FOR LPN**

3 Credit Hours

PREREQUISITE: Permission of instructor.

This course is designed to assist a student in meeting requirements as specified in a preconstructed contractual agreement.

Upon course completion, a student will demonstrate knowledge and skills necessary to deliver safe and effective care for the client requiring long-term and restorative care.

**LPN 209 NCLEX-PN EXAMINATION REVIEW**

3 Credit Hours

PREREQUISITE: Permission of instructor.

This course is designed to assist a student in preparation for the practical nursing licensure examination (NCLEX-PN). Emphasis is placed on test-taking skills, computer-assisted simulations and practice tests, development of a prescriptive plan of remediation, and content specific to the practice of practical nursing.
MAH 105
MATH FOR NURSES
3 Credit Hours
PREREQUISITE: Appropriate mathematics placement test score.
This course is a comprehensive review of arithmetic with basic algebra and introduces calculations of solutions and systems of measurement to meet the practical nursing program requirement. Topics include a review of basic arithmetic, metric system conversions, ratio and proportion, and conversions among and between the metric, apothecaries, and household unit systems and intravenous infusion rates as well as ethical, cultural, and legal aspects of accurate mathematical skills. Upon completion, a student should demonstrate proficiency in calculating drug dosages and IV infusion rates for adults and children.

MAH 112
PRECALCULUS ALGEBRA
3 Credit Hours
PREREQUISITE: All core mathematics courses in Alabama must have as a minimum prerequisite high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement test score. An alternative to this is that a student should successfully pass Intermediate College Algebra with a C or higher or appropriate mathematics placement test score. This course emphasizes the algebra of functions, including polynomial, rational, exponential, and logarithmic functions. The course also covers systems of equations and inequalities, quadratic inequalities, and the binomial theorem. Additional topics may include matrices, Cramer’s Rule, and mathematical induction. CORE

MAH 116
MATHMATICAL APPLICATIONS
3 Credit Hours
PREREQUISITE: MAH 090 or appropriate mathematics placement score.
This course provides practical applications of mathematics and includes selected topics from consumer math and algebra. Some topics included are integers, percent, interest, ratio and proportion, metric system, probability, linear equations, and problem solving.

MAH 246
MATHEMATICS OF FINANCE
3 Credit Hours
PREREQUISITE: Completion of MAH 116 or appropriate mathematics placement score.
This course explores mathematics applications relevant to business practices. Topics covered include simple and compound interest, credits, trade and bank discounts, annuities, amortization, depreciation, stocks and bonds, insurance, capitalization, and perpetuities.

SSS 080
BASIC MATHEMATICS
3 Credit Hours
PREREQUISITE: None
This course prepares an eligible student for various major and general education courses as well as everyday situations by developing and strengthening essential competencies. Diagnostic testing is done to assess a student’s specific needs in mathematics. Each student is provided individual and group instruction. Topics include whole numbers, fractions, decimals and measurement, and other basic topics depending on the student’s needs.

SSS 081
BASIC ALGEBRA
3 Credit Hours
PREREQUISITE: None
This course prepares an eligible student for various major and general education courses by strengthening and developing the concepts and skills of arithmetic and elementary algebra. Each student is provided individual and group instruction. Topics include signed numbers, exponents, evaluating literal expressions, and solving equations as well as other basic algebraic topics.

NURSING ASSISTANT SHORT CERTIFICATE
Course No/Title Theory/Lab/Credit Hours
NAS 111 Fundamentals of Long-Term Care 3 4 5
NAS 112 Fundamentals of Long-Term Care Clinical 0 6 2
NAS 113 Fundamentals of Home Health Nursing 3 4 5
NAS 114 Fundamentals of Home Health Nursing Clinical 0 6 2
EMT 100 Cardiopulmonary Resuscitation I 1 0 1
EMT 104 First Aid for Students of Health Related Professions 1 0 1
Total Credit Hours: 16

The Nursing Assistant certificate does not require general education courses.

COURSE DESCRIPTIONS
NAS 111
FUNDAMENTALS OF LONG-TERM CARE
5 Credit Hours
PREREQUISITE: None
This course provides a student with necessary theory and laboratory experiences for the development of skills required of the long-term care nursing assistant. Emphasis is placed on infection control, safety, body mechanics, communications, observation, and personal and restorative care. Upon completion of this course, a student will be able to apply theoretical concepts to care of the resident/client and perform skills in accordance with the Omnibus Budget Reconciliation Act (OBRA) 1987 guidelines.

NURSING ASSISTANT (NAS)
The Nursing Assistant program is designed to prepare a student to give basic nursing care to clients requiring long-term care or home health care and to fulfill the Omnibus Budget Reconciliation Act (OBRA) federal requirements for training long-term care nursing assistants. A graduate of the program is eligible to take the certification examination to become a Certified Nursing Assistant (CNA). The program is approved by the Alabama Department of Postsecondary Education and the Alabama Department of Public Health.

A full-time student usually completes the program in one semester/term. The program is offered during the day and does not require a high school diploma or GED.
NAS 112
FUNDAMENTALS OF LONG-TERM CARE CLINICAL
2 Credit Hours
COREQUISITE: NAS 111 or instructor approval.
This course is designed to assist a student to develop the knowledge, attitudes and skills needed to perform basic nursing care safely and efficiently in a supervised long-term care clinical setting.
Emphasis is placed on the application of knowledge, attitudes and skills appropriate for the long-term care nursing assistant. Upon course completion, a student will demonstrate beginning competence in the delivery of care to the client in a long-term care facility.

NAS 113
FUNDAMENTALS OF HOME HEALTH CARE
5 Credit Hours
PREREQUISITE: None
This course provides a student with the necessary theory and laboratory experiences for the development of skills required to qualify as a Home Health Aide. Emphasis is placed on the acquisition of skills in communication, observation, mobility, personal care, and infection control that are required to care for the home-bound client of all ages. Upon course completion, a student will be able to apply concepts and skills in areas required by the Omnibus Budget Reconciliation Act (OBRA) 1987 and the Nation Association of Home Care.

NAS 114
FUNDAMENTALS OF HOME HEALTH CARE CLINICAL
2 Credit Hours
COREQUISITE: NAS 113 or instructor approval.
This course is designed to assist a student to develop knowledge, attitudes and skills needed to perform basic nursing care safely and efficiently in a supervised home health care clinical setting.
Emphasis is placed on application of knowledge, attitudes and skills needed appropriate for the home health care aide. Upon course completion, a student will demonstrate beginning competence in care of the client in the home care setting.

OFFICE ADMINISTRATION (SET)
The Office Administration program prepares a student for as many as 14 different occupations as defined in the Dictionary of Occupational Titles.
A highlight of the program is its individualized offerings. A student may choose the program option that best suits his or her needs – associate degree or certificate – and then choose electives to customize his or her selection.
Another unique characteristic of the Office Administration program is the ability of a student to "challenge" basic courses and receive advanced credit when prior education (perhaps in a high school program) or experience is documented.

Each student is trained in the basic office skills of typing, filing, telephone operations, 10-key calculator, shorthand, and employment preparation. Each Office Administration student also receives hands-on experience in today's electronic office, including word processing or desktop publishing. It is also possible to combine majors with other business areas such as retail merchandising, accounting, or data processing.

Each student is encouraged to join and participate in the on-campus professional organizations: Collegiate Secretaries International and Phi Beta Lambda. Both organizations host events each term that promote student leadership and growth. A graduate of the Office Administration Associate Degree program is eligible to sit for the Certified Professional Secretaries (CPS) exam, the hallmark of success in this profession.

OFFICE ADMINISTRATION ASSOCIATE IN APPLIED TECHNOLOGY DEGREE
Course No/Title Theory/Lab/Credit Hours
SET 100 Beginning Keyboarding 2 3 3
SET 104 Advanced Keyboarding 2 3 3
SET 110 Navigating Windows 2 3 3
SET 125 Basic Word Processing 2 3 3
SET 126 Advanced Word Processing 2 3 3
SET 130 Electronic Calculations 2 3 3
SET 133 Business Communications 3 0 3
SET 138 Records and Information Management 2 3 3
SET 200 Machine Transcription 2 3 3
SET 217 Office Management 3 0 3
SET 218 Office Procedures 2 3 3
SET 232 The Electronic Office 2 3 3
SET 243 Spreadsheet Applications 2 3 3
SET Office Administration Elective 3 0 3

Select 6 hours from the following:
Associate Degree programs:*

ACT Accounting Technology
DPT Computer Science
REM Retail Merchandising

General Education Requirements:
COM 101 English Composition I 3 0 3
COM 102 English Composition II 3 0 3
DPT Data Processing Course* 3
DPT Data Processing Course* 3
MAH 116 Mathematical Applications* or MAH 246 Mathematics of Finance* 3 0 3
PSH 270 Business and Industrial Psychology* or ECON 231 Principles of Macroeconomics* 3 0 3

SPC 106 Fundamentals of Oral Communication 3 0 3

Total Credit Hours: 72

*Must be approved in advance by a student's faculty advisor.

OFFICE ADMINISTRATION SHORT CERTIFICATE
Course No/Title Theory/Lab/Credit Hours
SET 101 Beginning Keyboarding 2 3 3
SET 104 Advanced Keyboarding 2 3 3
SET 125 Basic Word Processing 2 3 3
SET 138 Records and Information Management 2 3 3
SET 217 Office Management 3 0 3
SET 243 Spreadsheet Applications 2 3 3
SET Office Administration Elective 3 0 3

General Education Requirement:
COM 101 English Composition I 3 0 3
Total Credit Hours: 24

COURSE DESCRIPTIONS
SET 100
BASIC KEYBOARDING
3 Credit Hours
PREREQUISITE: None
This course is designed to develop touch keyboarding skills for efficient use of the typewriter or microcomputer. Emphasis is on speed and accuracy in keying alphabetic, symbol, and numeric information. Upon course completion, a student should be able to demonstrate proper techniques while keying on a typewriter or microcomputer keyboard.

SET 101
BEGINNING KEYBOARDING
3 Credit Hours
PREREQUISITE: None
This course is designed to enable a student to use the touch method of keyboarding. Emphasis is on speed and accuracy in keying alphabetic symbols
and numeric information using the typewriter or microcomputer keyboard. Upon course completion, a student should be able to demonstrate proper technique and an acceptable rate of speed and accuracy, as defined by the course syllabus, in the production of basic business documents such as memos, letters, reports, and tables. CORE

SET 104
ADVANCED KEYBOARDING
3 Credit Hours
PREREQUISITE: SET 101 or permission of instructor. This course is designed to assist a student in continuing to develop speed and accuracy using the touch method of keyboarding. Emphasis is on increasing the production of business documents using decision-making skills. Upon course completion, a student should be able to demonstrate proficiency and an acceptable rate of speed and accuracy in the production of business documents. CORE

SET 110
NAVIGATING WINDOWS
3 Credit Hours
PREREQUISITE: None
This course is designed to introduce a student to the Windows environment. Emphasis is on Windows as a graphical user interface and includes operations and applications that use the Windows environment. Upon course completion, a student should be able to demonstrate proficiency in the operation and management of applicable hardware and software.

SET 111
BASIC SHORTHAND/SPEEDWRITING
3 Credit Hours
PREREQUISITE: None
This course is designed to introduce a student to shorthand/speedwriting. Emphasis is on the reading and writing outlines, taking dictation, and transcribing documents. Upon course completion, a student should be able to take dictation and read from shorthand outlines.

SET 112
ADVANCED SHORTHAND/SPEEDWRITING
3 Credit Hours
PREREQUISITE: SET 111 or permission of instructor. This course is designed to reinforce shorthand/speedwriting. Emphasis is on developing speed and accuracy. Upon course completion, a student should be able to take dictation at an acceptable rate and produce mailable transcripts.

SET 125
BASIC WORD PROCESSING
3 Credit Hours
PREREQUISITE: SET 101 or permission of instructor. This course is designed to provide a student with basic word processing skills. Emphasis is on using software features to create, edit, and print common office documents. Upon course completion, a student should be able to demonstrate the ability to use industry-standard software to generate appropriately formatted, accurate, and attractive business documents such as memo, letters, reports, and tables.

SET 126
ADVANCED WORD PROCESSING
3 Credit Hours
PREREQUISITE: SET 125 or permission of instructor. This course is designed to increase student proficiency in using advanced word processing functions. Emphasis is on the use of industry-standard software to maximize productivity. Upon course completion, a student should be able to demonstrate the ability to generate complex documents such as forms, newsletters, and multipage documents.

SET 130
ELECTRONIC CALCULATIONS
3 Credit Hours
PREREQUISITE: None
This course teaches the touch system. Emphasis is on basic mathematical functions. Upon course completion, a student should be able to demonstrate an acceptable rate of speed and accuracy to solve problems based on typical business applications.

SET 132
BUSINESS CORRESPONDENCE
3 Credit Hours
PREREQUISITE: Permission of instructor. This course focuses on business correspondence. Emphasis is on correspondence and reports. Upon course completion, a student should be able to produce effective business correspondence.

SET 133
BUSINESS COMMUNICATIONS
3 Credit Hours
PREREQUISITE: Permission of instructor. This course is designed to provide a student with skills necessary to communicate effectively. Emphasis is on the application of communication principles to produce clear, correct, logically organized business communications. Upon course completion, a student should be able to demonstrate effective communication techniques in written, oral, and nonverbal communications.

SET 138
RECORDS AND INFORMATION MANAGEMENT
1-3 Credit Hours
PREREQUISITE: None
This course focuses on managing office records and information. Emphasis is on filing procedures, methods, systems, supplies, equipment, and modern technology used in the creation, protection, and disposition of records stored in a variety of forms. Upon course completion, a student should be able to perform basic filing procedures.

SET 139
OFFICE PRACTICUM
1-3 Credit Hours
PREREQUISITE: Permission of instructor. This course is designed to provide a student with an opportunity to develop skills in a simulated office environment. Emphasis is on the integration of classroom learning with practical experiences that relate meaningfully to office careers. Upon course completion, a student should be able to demonstrate the ability to apply knowledge and skills gained in the classroom to the office environment.

SET 200
MACHINE TRANSCRIPTION
3 Credit Hours
PREREQUISITE: SET 101 or permission of instructor. This course is designed to develop a student's transcription skill development in the production of business reports. Emphasis is on the use of industry-standard software to generate complex documents. Upon course completion, a student should be able to accurately transcribe documents from dictated recordings.

SET 201
LEGAL TERMINOLOGY
3 Credit Hours
PREREQUISITE: None
This course is designed to familiarize a student with common legal terms. Emphasis is on the word root building system combining Greek and Latin roots, prefixes, suffixes, and forms that make legal terms easy to use. Upon course completion, a student should be able to understand and use legal terminology.

SET 202
LEGAL TRANSCRIPTION
3 Credit Hours
PREREQUISITE: SET 101 and SET 201 or permission of instructor. This course is designed to familiarize each student with legal terms and provide transcription skill development in the production of legal correspondence, forms, and court documents through classroom instruction and
outside lab. Emphasis is on transcribing legal documents from dictated recordings. Upon course completion, a student should be able to transcribe legal documents.

**SET 203**
**LEGAL OFFICE PROCEDURES**
3 Credit Hours
PREREQUISITE: SET 125 or permission of instructor. This course focuses on the responsibilities of professional support personnel in a legal environment. Emphasis is on legal terminology, the production of appropriate forms and reports, and office procedures and practices. Upon course completion, a student should be able to perform office support tasks required for employment in a legal environment.

**SET 211**
**MEDICAL TERMINOLOGY**
3 Credit Hours
PREREQUISITE: None
This course is designed to familiarize a student with medical terminology. Emphasis is on the spelling, definition, pronunciation, and usage of medical terms. Upon course completion, a student should be able to communicate effectively using medical terminology.

**SET 212**
**MEDICAL TRANSCRIPTION**
3 Credit Hours
PREREQUISITE: SET 101 and SET 211 or permission of instructor. This course introduces a student to standard medical reports, correspondence, and related documents transcribed in a medical environment. Emphasis is on transcribing medical records and operating a transcribing machine. Upon course completion, a student should be able to accurately transcribe medical documents from dictated recordings.

**SET 213**
**ADVANCED MEDICAL TRANSCRIPTION**
3 Credit Hours
PREREQUISITE: SET 212 or permission of instructor. This course is designed to develop skills in medical transcription. Emphasis is on diagnostic studies and laboratory, radiology, and pathology reports. Upon course completion, a student should be able to demonstrate proficiency in the preparation of a variety of reports and forms used in the medical environment.

**SET 214**
**MEDICAL OFFICE PROCEDURES**
3 Credit Hours
PREREQUISITE: SET 125 or permission of instructor. This course focuses on the responsibilities of professional support personnel in a medical environment. Emphasis is on medical terms, the production of appropriate forms and reports, and office procedures and practices. Upon course completion, a student should be able to perform office support tasks required for employment in a medical environment.

**SET 215**
**HEALTH INFORMATION MANAGEMENT**
3 Credit Hours
PREREQUISITE: Permission of instructor. This course focuses on the structure, analysis and management of medical records. Emphasis is on filing and managing medical records; coding of diseases, operations and procedures; and the legal aspects of medical records. Upon course completion, a student should be able to maintain medical records.

**SET 217**
**OFFICE MANAGEMENT**
3 Credit Hours
PREREQUISITE: None
This course is designed to enable a student to effectively function in an office support role. CORE

**SET 218**
**OFFICE PROCEDURES**
3 Credit Hours
PREREQUISITE: SET 101 or permission of instructor. This course introduces the basic concepts and applications of office information systems. Emphasis is on the components and capabilities of systems used to produce, communicate and manage information. Upon course completion, a student should be able to use office information systems.

**SET 227**
**INFORMATION PROCESSING CONCEPTS**
3 Credit Hours
PREREQUISITE: SET 101 or permission of instructor. This course introduces the basic concepts and applications of office information systems. Emphasis is on the components and capabilities of systems used to produce, communicate and manage information. Upon course completion, a student should be able to use office information systems.

**SET 230**
**ELECTRONIC PUBLISHING**
3 Credit Hours
PREREQUISITE: Permission of instructor. This course is designed to provide a student with a foundation in the use of computerized equipment and application software as tools in the performance of a variety of office tasks. Emphasis is on the role of the office professional in the selection and application of appropriate technology to the specific task or combination of tasks. Upon course completion, a student should be able to demonstrate proficiency in the selection of appropriate computerized tools to complete designated tasks.

**SET 232**
**THE ELECTRONIC OFFICE**
3 Credit Hours
PREREQUISITE: SET 125 or permission of instructor. This course is designed to develop skill in the use of integrated software through classroom instruction and outside lab. Emphasis is on the use of computerized equipment, software, networking, and communications technology. Upon course completion, a student should be able to satisfactorily perform a variety of office tasks using current technology.

**SET 235**
**TRENDS IN OFFICE TECHNOLOGY**
3 Credit Hours
PREREQUISITE: Permission of instructor. This course addresses current trends in office technology. Emphasis is on technology relevant to the office environment such as electronic mail, multimedia interaction, presentation hardware and software, and Internet use. Upon course completion, a student should be aware of current technological applications for the modern office.

**SET 240**
**CERTIFIED PROFESSIONAL SECRETARY REVIEW**
3 Credit Hours
PREREQUISITE: Permission of instructor. This course is a review of office administration, technology, accounting, business law, economics, management, and communication topics. Emphasis is on the skills required of professional administrative support. Upon course completion, a student should be able to perform a variety of business-related skills.
SET 243
SPREADSHEET APPLICATIONS
3 Credit Hours
PREREQUISITE: Permission of instructor.
This course provides a student with skills needed in performing spreadsheet tasks. Emphasis is on spreadsheet terminology and design, common formulas, and proper file and disk management procedures. Upon course completion, a student should be able to design, format, and graph effective spreadsheets.

SET 244
DATABASE CONCEPTS
3 Credit Hours
PREREQUISITE: SET 101 or permission of instructor.
This course focuses on database management. Emphasis is on the use of database software for business applications. Upon course completion, a student should be able to create and manipulate data files and format output as documents and reports.

SET 245
DATA ENTRY
3 Credit Hours
PREREQUISITE: SET 101 or permission of instructor.
This course focuses on the use of computerized equipment and software in performing data-entry tasks. Emphasis is on the basic features of data-entry software, terminology, and proper file and disk management procedures. Upon course completion, a student should be able to perform data-entry applications.

SET 246
OFFICE GRAPHICS AND PRESENTATIONS
3 Credit Hours
PREREQUISITE: SET 125 or permission of instructor.
This course focuses on producing business slides and presentations. Emphasis is on software tools, presentation options, design and presentation considerations. Upon course completion, a student should be able to design and produce a business presentation.

SET 247
SPECIAL PROJECTS
3 Credit Hours
PREREQUISITE: SET 125 or permission of instructor.
This course is an in-depth study of topics of special interest under the direct supervision of an instructor. Emphasis is on the use of modern technology to study, research and improve skills in a specialized office support area. Upon course completion, a student should be able to demonstrate enhanced knowledge and/or skills gained through an individualized project.

SET 248
ADVANCED OFFICE PRACTICUM
3 Credit Hours
PREREQUISITE: Permission of instructor.
This course is designed to provide a student with an opportunity to develop skill in a simulated office environment. Emphasis is on the integration of classroom learning with practical experiences that relate meaningfully to office careers. Upon course completion, a student should be able to demonstrate the ability to apply knowledge and skills gained in the classroom to the office environment.

SET 291
OFFICE INTERNSHIP CO-OP
1 Credit Hour
PREREQUISITE: Permission of instructor.
This course provides work experience with a college-approved employer in an area related to a student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon course completion, a student should be able to demonstrate employability skills, and satisfactorily perform work-related competencies.

ORIENTATION (ORN)
GENERAL EDUCATION

ORN 103
ORIENTATION
1 Credit Hour
PREREQUISITE: None
This course offers topics on studying, test anxiety, note taking, memory improvement, time management and organizational skills.

PHYSICS (PHC)
GENERAL EDUCATION

PHC 120
INTRODUCTION TO PHYSICS
4 Credit Hours
PREREQUISITE: MAH 100.
This course provides an introduction to general physics for non-science majors. Topics include fundamentals of mechanics; properties of matter, heat, and temperature; electricity and magnetism; optics and modern physics. Laboratory is required.

PHC 201
GENERAL PHYSICS I-TRIG BASED
4 Credit Hours
PREREQUISITE: MAH 118.
This course is designed to cover general physics at a level that assumes previous exposure to college algebra, basic trigonometry. Specific topics include mechanics, properties of matter and energy, thermodynamics, and periodic motion. Laboratory is required.

PSYCHOLOGY (PSH)
GENERAL EDUCATION

PSH 270
BUSINESS AND INDUSTRIAL PSYCHOLOGY
3 Credit Hours
PREREQUISITE: Permission of instructor or two semesters completed.
This course is a study of interpersonal relations in the working environment, interpersonal communications, and techniques for selection and supervision of personnel.

PSH 276
HUMAN RELATIONS
3 Credit Hours
PREREQUISITE: Permission of instructor.
For ASE students only. This course focuses on readings, interpersonal experiences, individual testing, employer visits, and open discussions. Its goal is to assist a student in making a successful transition from classroom to the world of work.
RETAIL MERCHANDISING (REM)

The Retail Merchandising program provides educational experiences for a student whose career objectives are in marketing and sales. Effective selling, advertising as it relates to retailing, buying merchandise for resale, consumer and commercial credit management, and organizational and supervisory management are emphasized. Each major subject is complemented with case analysis and/or computer simulation enabling a student to gain the practical application of theory learned in classroom lectures.

RETAIL MERCHANDISING
ASSOCIATE IN APPLIED TECHNOLOGY DEGREE

Course No./Title Theory/Lab/Credit Hours
REM 111 Intro to Retail 3 0 3
REM 121 Applied Advertising 3 0 3
REM 141 Credit and Collections 3 0 3
REM 150 Retailing Internship 0 15 3
REM 173 Fundamentals of Selling 3 0 3
REM 212 Retail Buying 3 0 3
REM 213 Visual Merchandising 2 2 3
BUS 261 Business Law I 3 0 3
BUS 275 Principles of Management 3 0 3
Total Credit Hours: 24

The Retail Merchandising certificate does not require general education courses.

COURSE DESCRIPTIONS

REM 111
INTRODUCTION TO RETAIL
3 Credit Hours
PREREQUISITE: None
This course examines the role of retailing in the economy. Topics include the development of present retail structure, functions performed, effective operations, and managerial problems resulting from current economic and social trends. Upon course completion, a student should be able to demonstrate an understanding of the basic principles of retailing.

REM 121
APPLIED ADVERTISING
3 Credit Hours
PREREQUISITE: None
This course is a study of advertising, its influence on consumer awareness and the purchase of products, and the fundamental principles associated with advertising activities. Topics include the purpose of advertising and other sales promotional techniques, principles of advertising, budgeting marketing and advertising plans, regulations and controls of advertising, media evaluation, target marketing and selection, campaign planning, and trends in advertising. Upon course completion, a student should be able to identify the functions and purposes of advertising and develop a comprehensive advertising campaign. CORE

REM 141
CREDIT AND COLLECTIONS
3 Credit Hours
PREREQUISITE: None
This course covers areas of collection that provide an understanding of the expertise needed to manage collection operations. Topics include principles and practices in the extension of credit, collection procedures, and laws pertaining to credit extension and collection. Upon course completion, a student should be able to demonstrate an understanding of the concepts covered. CORE

REM 150
RETAILING INTERNSHIP
3 Credit Hours
PREREQUISITE: Completion of one semester with a Cumulative GPA of 2.0 or better or permission of instructor.
This course is designed to provide a student with experience in the retail or merchandising business. Emphasis is placed on retail experience gained on the job in a supervised internship. Upon course completion, a student should develop an understanding of the retail market by participating in a business setting.

REM 173
FUNDAMENTALS OF SELLING
3 Credit Hours
PREREQUISITE: None
This course emphasizes sales strategy and techniques and effective communications with customers, supervisors and co-workers. Topics include customer relations, customer motives, positive and professional image, product/service knowledge, selling techniques and procedures, sales presentations, and the ethics of selling. Upon course completion, a student should be able to analyze customer needs and wants and close a sale based on customer responses. CORE

REM 212
RETAIL BUYING
3 Credit Hours
PREREQUISITE: None
This course introduces the fundamental principles of buying, merchandising, and accounting for products and services. Topics include assortment planning, locating resources, ordering merchandise, pricing for profit, and financial statements and ratios. Upon course completion, a student should be able to identify important factors to consider when determining type, quantity, and price of merchandise to be purchased. CORE

REM 213
VISUAL MERCHANDISING
3 Credit Hours
PREREQUISITE: None
This course focuses on the components of display necessary for the effective visual presentation of goods and services, including the principles and techniques common to display work in various types of businesses. Topics include design and color principles, tools and materials of the trade, props and fixtures, lighting and signing, installation of displays, store planning, and safety. Upon course completion, a student should be able to design and construct effective visual merchandising displays.
REM 223
CONSUMER BEHAVIOR
3 Credit Hours
PREREQUISITE: None
This course is designed to describe consumer behavior as applied to the exchange processes involved in acquiring, consuming, and disposing of goods and services. Topics include an analysis of basic and environmental determinants of consumer behavior with emphasis on the decision-making process. Upon course completion, a student should be able to analyze concepts related to the study of the individual consumer.

REM 250
ADVANCED RETAILING INTERNSHIP
3 Credit Hours
PREREQUISITE: REM 150 or permission of instructor.
This is a continuation of REM 150. Emphasis is placed on retail experience gained on the job in a supervised internship. Upon completion, a student should develop an understanding of the retail market by participating in a business setting.

BUS 261
BUSINESS LAW I
3 Credit Hours
PREREQUISITE: None
This course provides an overview of legal principles affecting businesses. Topics include contracts, agency and employment, negotiable instruments, bailments, and sales of goods.

BUS 262
BUSINESS LAW II
3 Credit Hours
PREREQUISITE: BUS 261 or permission of instructor.
This course is a continuation of BUS 261. Topics include legal principles related to partnerships, corporations, real property and leases, insurance, security devices, bankruptcy, trust and estates; government regulations of business and labor; civil and criminal liability; and business security.

BUS 275
PRINCIPLES OF MANAGEMENT
3 Credit Hours
PREREQUISITE: None
This course provides a basic study of the principles of management. Topics include planning, organizing, staffing, directing, and controlling with emphasis on practical business applications.

BUS 276
HUMAN RESOURCE MANAGEMENT
3 Credit Hours
PREREQUISITE: None
This course provides an overview of the responsibilities of the supervisor of human resources. Topics include the selection, placement, testing, orientation, training, rating, promotion, and transfer of employees.

BUS 279
SMALL BUSINESS MANAGEMENT
3 Credit Hours
PREREQUISITE: None
This course provides an overview of the creation and operation of a small business. Topics include buying a franchise, starting a business, identifying capital resources, understanding markets, managing customer credit, managing accounting systems, budgeting systems, inventory systems, purchasing insurance, and the importance of appropriate legal counsel.

ECN 231
PRINCIPLES OF MACROECONOMICS
3 Credit Hours
PREREQUISITE: None
This course is an introduction to macroeconomic theory, analysis, and policy applications. Topics include the following: scarcity, demand and supply, national income analysis, major economic theories concerning monetary and fiscal policies as stabilization measures, the banking system, and other economic issues or problems including international trade. CORE

SPC 106
FUNDAMENTALS OF ORAL COMMUNICATION
3 Credit Hours
RECOMMENDATION: Successful completion of COM 101.
Fundamentals of Oral Communication is a performance course that includes the principles of human communication: intrapersonal, interpersonal and public. It surveys current communication theory and provides practical application. CORE

SPC 116
INTRODUCTION TO INTERPERSONAL COMMUNICATION
3 Credit Hours
PREREQUISITE: None
This course is an introduction to the basic principles of interpersonal communication. CORE
WELDING (WDT)

The Welding program provides a student the opportunity to acquire the necessary skills, knowledge, and experience for employment in welding occupations. Emphasis is on the technical aspects of welding. Instruction is offered in the welding of carbon steel, stainless steel and aluminum. Training is also conducted in oxyfuel, plasma cutting, torch burning, joint preparation, layout/fitting, and welding inspection and testing.

WELDING DIPLOMA

<table>
<thead>
<tr>
<th>Course No./Title</th>
<th>Theory/Lab/Credit Hours</th>
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<tbody>
<tr>
<td>WDT 111 Cutting Processes</td>
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<tr>
<td>WDT 112 Shielded Metal Arc Fillet</td>
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<tr>
<td>WDT 113 Blueprint Reading</td>
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<tr>
<td>WDT 114 Gas Metal Arc Fillet</td>
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<tr>
<td>WDT 153 Shielded Metal Arc Grooves</td>
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<tr>
<td>WDT 158 Consumable Welding Processes Certification</td>
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<tr>
<td>WDT 166 Flux Core Arc Welding</td>
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<tr>
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<tr>
<td>WDT 281 Aluminum Mig Arc Welding:</td>
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<td>WDT 281 Aluminum Mig Arc Welding:</td>
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<td>WDT 291 Welding Certification</td>
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<td>WDT 268 Gas Tungsten Arc Fillet</td>
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<td>WDT 291 Aluminum Mig Arc Welding:</td>
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<td>WDT 291 Aluminum Mig Arc Welding:</td>
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<td>WDT 291 Welding Certification</td>
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<td>SPC 116 Introduction to Interpersonal</td>
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Total Credit Hours: 24

The Welding certificate does not require general education courses. All courses in this award are creditable toward an Associate in Occupational Technology Degree (AOT).

COURSE DESCRIPTIONS

WDT 111 CUTTING PROCESSES

3 Credit Hours

PREREQUISITE: None

This course covers the rules of safety and identification of shop equipment and provides a student with the skills and knowledge necessary for the safe operation of oxy-fuel cutting, carbon arc cutting and plasma arc cutting. Topics include safety, proper equipment setup, and identification of oxy-fuel, carbon arc cutting and plasma arc cutting equipment. Upon course completion, a student should be able to identify safety hazards, gases, equipment and components, and set-up equipment for proper application. CORE

WDT 112 SHIELDED METAL ARC FILLET

3 Credit Hours

PREREQUISITE: None

This course provides a student with instruction on safety practices and terminology in the shielded metal arc welding (SMAW) processes. Emphasis is placed on safety, welding terminology, equipment identification, set-up and operation, and related information in the shielded metal arc welding process. Upon course completion, a student should be able to identify safety hazards and welding equipment, understand welding terminology related to SMAW, and know the proper clothing to wear while in a welding environment. CORE

WDT 113 BLUEPRINT READING

3 Credit Hours

PREREQUISITE: None

This course provides a student with the understanding and fundamentals of industrial blueprint reading. Emphasis is placed on reading and interpreting lines, views, dimensions, weld joint configurations and weld symbols. Upon course completion, a student should be able to interpret welding symbols and blueprints as they apply to welding and fabrication. CORE

WDT 114 GAS METAL ARC FILLET

3 Credit Hours

PREREQUISITE: None

This course introduces a student to the gas metal arc welding process. Emphasis is placed on safe operating practices, handling and storage of compressed gasses, process principles, component identification, and base and filler metal identification. Upon course completion, a student should be able to identify safe operating practices and principles, describe proper cylinder storage, and identify base and filler metals. CORE

WDT 153 SHIELDED METAL ARC GROOVES

3 Credit Hours

PREREQUISITE: WDT 112 or instructor approval.

This course provides instruction and demonstrations in the shielded metal arc welding process on carbon steel plate with various size F3 and F4 group electrodes in all positions. Emphasis is placed on welding groove joints and using various size F3 and F4 group electrodes in all positions. Upon course completion, a student should be able to make visually acceptable groove weld joints in accordance with AWS D1.1 welding certification procedures. CORE

WDT 158 CONSUMABLE WELDING PROCESSES CERTIFICATION

3 Credit Hours

PREREQUISITE: Instructor approval.

This course is designed to teach students the practical application of the various welding theories: shielded metal arc welding, gas metal arc welding, and flux core arc welding. Topics included are safety, equipment, set-up, joint design and preparation, and gas flow rates. Upon course completion, a student should be able to perform fillet and groove welds with the prescribed electrodes and transfer mode in various positions. CORE

WDT 186 FLUX CORE ARC WELDING

3 Credit Hours

PREREQUISITE: None

This course deals with flux-core arc welding, and emphasizes equipment operations and weld quality, and develops manual welding skills on carbon steels using flux-cored electrodes in all positions with fillet and groove welds.
WDT 167
FLUX CORE ARC WELDING CERTIFICATION
3 Credit Hours
PREREQUISITE: None
This course involves welding multi-pass groove joints with the flux-cored arc welding process in all welding positions and related information.

WDT 180
SPECIAL TOPICS
3 Credit Hours
PREREQUISITE: None
This course allows a student to plan, execute, and present results of individual projects in welding. Emphasis is placed on enhancing skill attainment in the welding field. Upon course completion, a student should be able to demonstrate and apply competencies identified and agreed upon between the student and instructor.

WDT 217
SHEilded METAL ARC WELDING CARBON PIPE
3 Credit Hours
PREREQUISITE: None
This course introduces a student to the practices and procedures of welding carbon steel pipe using the shielded metal arc welding (SMAW) process. Emphasis is placed on pipe positions, electrode selection, joint geometry, joint preparation and fit-up. Upon course completion, a student should be able to identify pipe positions, electrodes, proper joint geometry, joint preparation, and fit-up in accordance with applicable code.

WDT 218
CERTIFICATION
3 Credit Hours
PREREQUISITE: Instructor approval.
This course covers certification requirements for industry to the applicable code for the prescribed welding process. Topics include certification requirements for pre-qualified welding procedures. Upon course completion, a student should be able to identify certification and code requirements for the applicable welding process.

WDT 223
BLUEPRINT READING FOR FABRICATION
3 Credit Hours
PREREQUISITE: WED 113 or instructor approval.
This course provides a student with advanced skills in identifying and interpreting lines, views, dimensions, notes, bill of materials, and the use of tools of the trade. Emphasis is placed on figuring dimensional tolerances, layout, and fitting of different component parts. Upon course completion, a student should be able to interpret, layout, and fabricate blueprints to given tolerances and construct a bill of materials list.

WDT 225
GAS METAL ARC GROOVE
3 Credit Hours
PREREQUISITE: WED 132 or instructor approval.
This course provides instruction and demonstration on groove welds, using both ferrous and non-ferrous metals, in all positions, according to AWS D1.1 code. Topics include safe operating principles, equipment setup, joint preparation, and selection of tungsten with emphasis placed on manipulating skills. Upon course completion, a student should be able to produce groove welds according to AWS D1.1 code.

WDT 265
GAS TUNGSTEN ARC GROOVE
3 Credit Hours
PREREQUISITE: None
This course provides a period of instruction and demonstration with the gas tungsten arc process to produce groove welds, using both ferrous and non-ferrous metals, in all positions, according to AWS D1.1 code. Topics include safe operating principles, equipment setup, joint preparation, and selection of tungsten with emphasis placed on manipulating skills. Upon course completion, a student should be able to produce groove welds according to AWS D1.1 code.

WDT 266
GAS TUNGSTEN ARC FILLET
3 Credit Hours
PREREQUISITE: WED 132 or instructor approval.
This course provides a period of instruction and demonstration with the gas tungsten arc process to produce fillet welds, using both ferrous and non-ferrous metals, in all positions, according to AWS D1.1 code. Topics include safe operating principles, equipment setup, joint preparation, and selection of tungsten with emphasis placed on manipulating skills. Upon course completion, a student should be able to produce fillet welds according to AWS D1.1 code.

WDT 267
ALUMINUM MIG ARC WELDING: SPECIAL TOPICS
3 Credit Hours
PREREQUISITE: None
This course is designed to prepare a student to weld with the aluminum MIG extended reach in all positions. This course is also designed to prepare a student in fast-production welding.
APPLICATION FOR ADMISSION

Bessemer State Technical College
Admissions Office
P.O. Box 308, Bessemer, AL 35021
(205) 428-6391 or 1-800-235-5368
www.bstc.cc.al.us

Please Print Clearly in Ink.

<table>
<thead>
<tr>
<th>Full legal name:</th>
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<tbody>
<tr>
<td>Preferred first name:</td>
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<tr>
<td>Birth name or other names under which your records may appear:</td>
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<td>Phone:</td>
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- Single
- Married
- Divorced
- Widowed
- Have Dependent Children

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<tr>
<td>ZIP</td>
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<td>Country of Citizenship</td>
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If you are a resident alien, please check box and provide number: ☐ Resident Alien No.: 

The following information is for federal/state reporting requirements. The information provided below will not in any way affect the admission decision.

- Gender: ☐ Male
- Ethnic Group: ☐ Black
- Hispanic
- American Indian
- Other

- Have you ever applied to this college? ☐ Yes ☐ No
- Have you ever attended this college? ☐ Yes ☐ No
- Are you a graduate of this college? ☐ Yes ☐ No

Your planned enrollment date:
- Fall
- Spring
- Summer
- Mini-Term A
- Mini-Term B

Class time preferred:
- Day
- Night
- Saturday
- Sunday

Program of Study:
- Educational goal at Bessemer State Technical College:

Your planned length of stay:
- 1 Semester/Term
- 1 Year
- 2 Years

High School:

<table>
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<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Graduation Date:</td>
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</table>

Check the status which applies to you:
- Regular High School Diploma (passed exit exam)
- Occupational Diploma
- Certificate of Completion
- GED
- Not a High School Graduate

Note: You must contact your high school and request a transcript be sent to Bessemer State Technical College, Admissions Office, P.O. Box 308, Bessemer, AL 35021.

List all schools or colleges attended since leaving high school, including a current or anticipated enrollment, if applicable.

If you have not attended any colleges since leaving high school, check the block marked NONE.

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<th>Name of Institution</th>
<th>City &amp; State</th>
<th>Dates Attended</th>
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</table>

Note: You must have official transcripts sent from each college attended to Bessemer State Technical College, Admissions Office, P.O. Box 308, Bessemer, AL 35021. Most schools charge a nominal fee for transcripts.
If you plan to apply for financial assistance, check the appropriate box(es):

- JTPA
- Rehabilitation
- Veterans
- Other
- Pell Grant
- Scholarship
- Veterans Dependent
- Other

Note: If you plan to participate in any financial program at Bessemer State Technical College, you should contact the college’s Office of Student Financial Services as soon as possible. If you have attended another college during the current academic year, you must have that college send an official financial aid transcript whether or not aid was received at that school. FAILURE TO SUBMIT OFFICIAL ACADEMIC AND FINANCIAL AID TRANSCRIPTS PRIOR TO REGISTRATION WILL NEGATIVELY AFFECT YOUR FINANCIAL AID. Please note that students enrolled at Bessemer Tech for occupational, personal, or temporary reasons only are not eligible for federal financial aid.

The following information is required by the U.S. Treasury Department in accordance with the Taxpayer Relief Act of 1997 (the Hope Scholarship Tax Credit and Lifetime Learning Credit).

- I am not claimed as a dependent on anyone else’s tax return. My taxpayer ID#: ________________
- Spouse’s Name: _____________________________________________________________

- I am claimed as a dependent. The tax filer’s ID#: ________________
- Parent’s name: ____________________________________________ Phone: __________________________
- Address: ____________________________________________ Street County
- City State ZIP Country of Citizenship

All males ages 18-26 must certify compliance or intent to comply with the U.S. Military Service Act (50 USC App. 453) and State of Alabama Legislative Act 91-584 by checking one of the following:

- I have registered with Selective Service.
- I am not yet 18 years old. I will register when I reach the age of 18.
- I am not required to register.

- Employed
- Part-Time
- Full-Time

- Hours worked per week: ____________________________ Occupation: ____________________________ Job Title: ____________________________
- Name of Employer: _____________________________________________________________
- Company has Employee Education Reimbursement Plan: Yes No

In case of emergency, contact:

- Name: ____________________________________________ Phone: ____________________________
- Family Physician: ____________________________ Phone: ____________________________

Permission is granted by the applicable signature(s) below for the student named in this application to receive any emergency treatment or any other medical or surgical care deemed necessary by emergency medical personnel; also, when necessary for executing such care, permission for hospitalization at any accredited hospital is granted, and I will assume responsibility for the bill for these services.

I hereby certify that the information contained in this application is accurate and complete to the best of my knowledge. I understand that submitting false, incomplete, or misrepresented information constitutes grounds for rejection of this application or dismissal from the college.

- Applicant’s Signature Date
- Parent’s/Guardian’s Signature If Applicable Date

It is the official policy of the Department of Postsecondary Education and Bessemer State Technical College that no person in Alabama shall, on the grounds of race, color, disability, sex, religion, creed, national origin, or age, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program, activity, or employment. Bessemer State Technical College complies with non-discriminatory regulations under Title VI and Title VII of the Civil Rights Act of 1964; Title IX Educational Amendment of 1972; and Section 504 of the Rehabilitation Act of 1973.
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ADM/STUDENT SERVICE OFFICES
ADMINISTRATION AND CONTROL

Bessemer State Technical College is part of the state system of two-year colleges authorized by the Alabama Legislature under Act No. 93, approved May 3, 1963. This institution is under the supervision of the Alabama State Board of Education. The President of the college is directly responsible to the State Board of Education through the Department of Postsecondary Education, Dr. Fred Gainous, Chancellor.

President ......................................................... W. Michael Bailey

Human Resources and Academic Support

Dean of Instruction ............................................ Ron Moon
Assistant Dean of Instruction, Vocational and Technical Programs ........... Charles Murray
Coordinator, Allied Health Programs ................................ Bobbie Daniel
Chair, Related Studies Department ................................ Margaret Filipowski
Director, Short-Term and Continuing Education .............................. Dennis Winn
Director, Corporate Services ...................................... Al Craig
Coordinator, High School Relations .................................. Rick Sandretto
Librarian, Learning Resource Center .................................. Diane Gregg
COLLEGE PERSONNEL

Student Development Services

Dean of Students .......................................................... Mattie H. Ray
JTPA Coordinator/Assistant to the Dean of Students ...................... Cynthia Anthony
Director, Admissions ......................................................... Jim Natale
Registrar ............................................................................. Lori Chisem
Counselor ............................................................................. Jerome Levy
Counselor ............................................................................. Sherry Quan
Coordinator, Career Planning and Job Placement ....................... Sundra Smith
Coordinator, MIRROR Program .............................................. Barbara Hosea-Studdard
Coordinator, Special Needs .................................................... Dana Chang
Director, Student Support Services Program ......................... Claretha Finley
Counselor/Coordinator, Student Support Services .................... Elijah Anthony
Intervention Specialist ......................................................... Renay Herndon

Management and Operations

Dean of Finance .................................................................. Al Cox
Director, Student Financial Services ......................................... Deborah Marcus
Comptroller ............................................................................ Marilyn Creagh
Manager, Bookstore .............................................................. Greg Murray
Assistant Manager, Bookstore ................................................ Lillie Pearson
Manager, Cafeteria ................................................................ Lesley Romano
Director, Plant Operations .................................................... John Hayes
Assistant Manager, Plant Operations ......................................... Cleveland Martin
Officer, Safety ....................................................................... Joel McFall
FULL-TIME FACULTY

Lanette Baker ................................................................................. Office Administration
BS, MA, Auburn University

Gale Bearden ................................................................. Licensed Practical Nursing
BS, Athens State College; MA, University of Alabama in Birmingham

Al Blethen ................................................................. Automotive Service Technology
B.S.Ed., University of Alabama

Carol Copeland ................................................................. Licensed Practical Nursing
B.S.Ed., Athens State College

Melissa Cruseo ................................................................................. Office Administration
BS, MA, University of Alabama in Birmingham

Bobbie S. Daniel ................................................................. Licensed Practical Nursing
BS, Athens State College; M.A., University of Alabama in Birmingham

Don Daniel ........................................................................ Drafting and Design Technology
B.S.Ed., Athens State College; M.A., University of Alabama in Birmingham

Leevell Dansby Jr. ................................................................. ASEP Instructor/Coordinator
BS, Athens State College

Joy Davis ................................................................. General Education
MA, University of Alabama; B.A., University of Montevallo

Charles Ellison ........................................................................ General Education
BS, M.A., University of Montevallo

Margaret Filipowski ................................................................. General Education
A.B., Indiana University; M.A., Valparaiso University

Cynthia Grimes ................................................................. Licensed Practical Nursing
B.A., University of Alabama; B.S.N., University of Alabama in Birmingham; M.A.Ed.,
University of Montevallo; M.S.N., Troy State University; FNP, University of Alabama

Jimmy Hall ........................................................................ Air Conditioning/Refrigeration
B.S.Ed., Athens State College

M. C. Hardley ................................................................. Drafting and Design Technology
BS, University of Alabama in Birmingham; M.A., University of Alabama

Judy House ........................................................................ Office Administration
BS, University of Alabama; M.A., University of Alabama in Birmingham

Judy Johnson ........................................................................ Commercial Art
B.F.A., M.Ed., University of Montevallo

Fred Rapp ........................................................................ Ornamental Horticulture
BS, Clemson University; M.A., University of Alabama

Harold Kirkpatrick ................................................................. Diesel Mechanics
B.S.Ed., Athens State College

Karen Kirkpatrick ................................................................. Data Entry/Clerical
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<td>B.S., Jacksonville State University, M.A., Ed.D., University of Alabama</td>
<td>Accounting Technology</td>
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<tr>
<td>Roy Ledford</td>
<td>B.S., Athens State College</td>
<td>Welding</td>
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<tr>
<td>Rick Partain</td>
<td>B.S., Samford University, M.S., University of Alabama in Birmingham</td>
<td>Computer Science Technology</td>
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<tr>
<td>Fred Ranelli</td>
<td>B.A., University of Alabama in Birmingham</td>
<td>Computer Science Technology</td>
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<tr>
<td>Clifford Ray</td>
<td>B.S.Ed., Athens State College, M.S., Alabama Agriculture and Mechanical University</td>
<td>Air Conditioning/Refrigeration</td>
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<tr>
<td>Marie Annette Ray</td>
<td>B.S., University of Missouri, M.A.T., University of Montevallo</td>
<td>Student Support Services</td>
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<tr>
<td>Rich Raymond</td>
<td>A.A.T., Bessemer State Technical College</td>
<td>Electronics Technology</td>
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<tr>
<td>Sharon Romine</td>
<td>B.S.N., University of Alabama; M.S.N., University of Alabama in Birmingham</td>
<td>Licensed Practical Nursing</td>
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<tr>
<td>Carol Scroggins</td>
<td>B.S., Athens State College, M.A., University of Alabama in Birmingham</td>
<td>Licensed Practical Nursing</td>
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<tr>
<td>Deborah Smith</td>
<td>B.S., M.A., University of Alabama in Birmingham</td>
<td>Dental Assisting</td>
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<tr>
<td>Robert Smith</td>
<td>B.A., University of Montevallo</td>
<td>Ford ASSET</td>
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<tr>
<td>Laura Steadman</td>
<td>A.S.N., Pensacola Jr. College; B.S.N., Auburn University in Montgomery;</td>
<td>Licensed Practical Nursing</td>
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<td></td>
<td>M.S.N., Troy State University; F.N.P., University of Alabama in Birmingham</td>
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<tr>
<td>Mary Frances Stewart</td>
<td>B.A., Birmingham Southern College, M.A., University of Alabama in Birmingham</td>
<td>Student Support Services</td>
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<tr>
<td>Judy Stowe</td>
<td>B.S.N., M.A.Ed., M.S.N., University of Alabama in Birmingham</td>
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<tr>
<td>Gordon Thomason</td>
<td>B.S.Ed., Athens State College, M.A., University of Alabama in Birmingham</td>
<td>Building Construction</td>
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<td>Chris Tortorici</td>
<td>B.S.Ed., Athens State College</td>
<td>Automotive Mechanics</td>
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<tr>
<td>Barbara Warren</td>
<td>B.S.Ed., Auburn University, B.S., Samford University, CPA.</td>
<td>Accounting</td>
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<tr>
<td>Annette Wright</td>
<td>R.N., St. Vincent's Hospital School of Nursing; B.S.N., Auburn University in Montgomery; M.S.N., Troy State University, F.N.P., University of Alabama in Birmingham</td>
<td>Licensed Practical Nursing</td>
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<tr>
<td>Allen Young</td>
<td>B.S., East Tennessee State University, M.A., University of Montevallo</td>
<td>Retail Merchandising</td>
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