

## GENERAL CATALOG 1994-96

Coosa Valley Technical Institute is a unit of
The Georgia Department of Technical and Adult Education
and is accredited by the Commission on Occupational
Education Institutions of the Southern Association of Colleges and Schools

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#### **Americans With Disabilities**

If you need this publication in a different format, please notify Coosa Valley
Technical Institute's Office of Student Services.

## Notice Of Right To Change Provisions Of This Catalog

The statements set forth in this catalog are for informational purposes only and should not be construed as the basis of a contract between students and this institution.

While the provisions of this catalog will ordinarily be applied as stated, Coosa Valley Technical Institute reserves the right to change any provision listed in this catalog, including but not limited to academic requirements for graduation, without actual notice to individual students. Every effort will be made to keep students advised of any such changes. Information on changes will be available in the Office of Student Services. It is especially important that students note that it is their responsibility to keep themselves apprised of current graduation requirements for their particular diploma program.

Coosa Valley Technical Institute 112 Hemlock Street Rome, Georgia 30161

**Telephone 235-1142** 

#### COOSA VALLEY TECHNICAL INSTITUTE

## Message From The President

#### Greetings:

Thank you for your interest in Coosa Valley Tech. This is the catalog of an excellent technical school with the reputation, resources, experience and the desire to help you achieve your goals as they relate to training for employment. As you examine the contents, I hope we can communicate to you our emphasis on quality of instruction and the excellence of our support services. Recognizing that it is sometimes difficult to adequately inform through the written word only, we would appreciate the opportunity to answer any questions you might have or explain in greater detail any material presented herein.

Coosa Valley Tech is part of a large and growing system of coordinating and cooperating institutions and agencies dedicated to serving the occupational training needs of individuals, businesses and industries. In exploring the wide range of training and services that are available, you can be sure we are appreciative of the opportunity to serve you and we will place at your disposal all available resources to help you achieve your goals.

Sincerely,

J. Derward Powell, President

## GENERAL INFORMATION



#### **Our Commitment To You**

Coosa Valley Technical Institute is committed to providing excellence in both physical facilities designed for the learner and qualified faculty prepared to work with students. We believe in the partnership between faculty and student where each shares in the responsibility for learning.

#### History

Coosa Valley Technical Institute was established in 1962 through the joint efforts of the Rome-Floyd Chamber of Commerce, local business and industry, city and county boards of education, and city and county boards of commissioners. From an initial enrollment of 231 full- and part-time students, Coosa Valley Technical Institute has grown and now serves over 7,000 students annually through day, evening, and off-campus credit, non-credit, and adult education programs.

In July 1987, Coosa Valley Technical Institute became a unit of the State Department of Technical and Adult Education and expanded its Board of Directors to include members from Polk and Gordon counties.

#### Location

Coosa Valley Technical Institute is located at 112 Hemlock Street, Rome, Georgia 30161. The school is accessible from Highway 27, South by way of the Darlington Drive/Old Lindale Road exit.

## **Philosophy and Purpose**

The philosophy that forms the basis for Coosa Valley Technical Institute's programs is rooted in the belief that all education, to be acceptable, must be

#### COOSA VALLEY TECHNICAL INSTITUTE

relevant. It also recognizes that the individual's ability to adapt to change is as important as initial preparation for employment. Further, the philosophy of the institution is that the needs and objectives of the individual should take precedence over those of the labor market.

The purpose of Coosa Valley Technical Institute is to provide all citizens with education and training that will enable them to compete successfully for employment in the business and industrial community. An expanded statement of philosophy and purpose is included in the Coosa Valley Technical Institute Policy Manual.

#### Accreditation

Coosa Valley Technical Institute is an accredited member of the Commission on Occupational Education Institutions of the Southern Association of Colleges and Schools.

## **Advisory Committees**

Advisory committees, composed of outstanding representatives from business and industry, meet with school personnel to make recommendations, offer suggestions, and assist in the evaluation of each training program. This input assures the use of state-of-the-art equipment and techniques in each occupational area.

#### Credentials Awarded

Coosa Valley Technical Institute awards a diploma upon the completion of the programs of study listed in this catalog. A certificate may be awarded upon completion of certain non-diploma courses.

#### **Visitors**

Visitors are always welcome at Coosa Valley Technical Institute. Visitors are requested to check with the appropriate office before visiting classes. Groups (high school classes, clubs, and organizations) wishing to visit the campus may call 235-1145 to make an appointment.

## Speakers Bureau

Teachers, civic clubs, and others are encouraged to contact Coosa Valley Technical Institute to request a presentation be made to their membership. To

schedule a member of the Coosa Valley Technical Institute faculty as a speaker for your group, call 235-1145 and speak with the Vice President for Student Services.

#### **Emergency Closing**

The President or designee is authorized to close the school if conditions exist that may threaten the health and safety of students and employees. The President or designee is also authorized to delay the opening hour of the school day and/or to release students and employees before the normal school day ends if hazardous conditions exist. School closings or delayed openings will be announced by area radio stations.

#### Safety

Good work habits, cleanliness, and safety precautions should be observed at all times while on the campus. The use of safety glasses, gloves, shoes, and other protective items are required of those students training in shops, labs, and other designated work sites.

#### **Accidents**

In the event of an accident or illness, the student should request assistance from the nearest instructor or other school personnel. The administration should be contacted in cases where ambulances or police services may be necessary.

## Telephone

Pay telephones are available for student use. Office telephones are for business purposes only. Only emergency telephone messages will be forwarded to students.

## Georgia Relay Center For The Speech and Hearing Impaired

Persons with speech or hearing impairment may communicate with Coosa Valley Technical Institute by dialing:

Voice: 1-800-255-0135 TDD: 1-800-255-0056

## **Equal Opportunity Statement**

Federal law prohibits discrimination on the basis of race, color or national origin (Title IV of the Civil Rights Act of 1964), sex (Title IX of the Education Amendment of 1972), or disability (Section 504 of the Rehabilitation Act of 1973, Americans With Disabilities Act, 1990), in education programs or activities receiving federal financial assistance.

Employees, students and the general public are hereby notified that Coosa Valley Technical Institute does not discriminate in any educational programs, activities or in employment policies. The following individuals have been designated as the employees responsible for coordinating the school's efforts to implement this nondiscrimination policy: Title IX, Charles Rice; Section 504 and/or ADA, David Cox. Inquiries concerning these laws should be addressed to the above individuals and mailed to 112 Hemlock Street, Rome, Georgia 30161.

## Grievance Procedure for Resolving A Complaint Under Title IX and Section 504

Students or employees of Coosa Valley Technical Institute should report any incident where there is reason to believe that they are the objects of discrimination because of race, color, sex, age, national origin, or disability. Students and employees should also report any incident of alleged sexual harassment that occurs on campus.

To report a complaint, file a written statement with:
Charles Rice, Title IX, Sex Equity Coordinator
David Cox, Section 504 Administrator/ADA Coordinator
Craig McDaniel, Administrator, Instructional Programs

This statement must be as specific as possible concerning the (1) complaint and (2) corrective action requested. Unless both of these items are included, the Coordinator/Administrator can take no further action.

Upon receipt of the specific complaint and action requested, a resolution committee will be formed within three school days to conduct a confidential investigation. Within three days of this committee's adjournment, the Coordinator/Administrator will inform the inquirer of its findings.

If the inquirer is not satisfied with the committee report, he or she may appeal to the Vice President for Instructional Services. Further appeals may be made to the President of Coosa Valley Technical Institute, its Board of Directors, and to the State Board of Technical and Adult Education.

## SCHOOL CALENDAR

1994-1	995	1995-1996 (Tentative) Fall Quarter - 1995					
Fall Quarter - 1994							
Classes Begin	Sept. 26, 1994	Classes Begin	Sept. 19, 1995				
Advisement Day	Oct. 31, 1994	Advisement Day	Oct. 25, 1995				
Classes End	Dec. 8, 1994	Classes End	Dec. 1, 1995				
Non-school Days	Oct. 26,1994	Non-school Days	Oct. 25, 1995				
A	Nov. 31, 1994		Nov. 22, 1995				
	Dec. 9-23, 1994		Dec. 4-22, 1995				
	Jan. 3, 1995	Holidays	Nov. 23-24, 1995				
Holidays	Nov. 24-25,1994		Dec. 25-29, 1995				
	Dec. 26-30, 1994		Jan. 1, 1996				
	Jan. 2, 1995		2000 14 14 1				
Winter Quarter - 1	995	Winter Quarter - 1996					
Classes Begin	Jan. 4, 1995	Classes Begin	Jan. 3, 1996				
Advisement Day	Feb. 10, 1995	Advisement Day	Feb. 10, 1996				
Classes End	Mar. 16, 1995	Classes End	Mar. 14, 1996				
Graduation, 7:00 pm	Mar. 16, 1995	Graduation, 7:00 pm	Mar. 14, 1996				
Non-school Days	Feb. 10, 1995	Non-school Days	Jan. 2, 1996				
	Mar. 17-27, 1995		Feb. 10, 1996				
Holiday	Jan. 16, 1995		Mar. 15-25, 1996				
		Holiday	Jan. 15, 1996				
Spring Quarter - 1	995	Spring Quarter - 1996					
Classes Begin	Mar. 28, 1995	Classes Begin	Mar. 26, 1996				
Advisement Day	May. 3, 1995	Advisement Day	May 1, 1996				
Classes End	June 7, 1995	Classes End	June 5, 1996				
Non-school Days	May 3, 1995	Non-school Days	May 1, 1996				
Tron concer baye	June 8-23, 1995	Tron concer baye	June 6-26, 1996				
Holiday	May 29, 1995	Holiday	May 27, 1996				
Summer Quarter -	1995	Summer Quarter -	1996				
Classes Begin	June 26, 1995	Classes Begin	June 27, 1996				
Advisement Day	Aug. 2, 1995	Advisement Day	Aug. 6, 1996				
Classes End	Sept. 6, 1995	Classes End	Sept. 10, 1996				
Graduation, 7:00 pm	Sept. 6, 1995	Graduation, 7:00 pm	Sept. 10, 1996				
Non-school days	Aug. 2, 1995	Non-school Days	July 5, 1996				
	Sept. 7-18, 1995		Aug. 6, 1996				
Holidays	July 4, 1995		Sept. 11-23, 1996				
	Sept. 4, 1995	Holiday	Sept. 2, 1996				

Note: Consult your advisor for evening program dates as they may vary from those shown above.

## **Drug-Free Campus**

As a recipient of federal funds, Coosa Valley Technical Institute supports and complies with the requirements of Georgia Law (HB 1231, Act 1447), Drug-Free Postsecondary Act of 1990 and Federal Law (Public 101-226), The Drug-Free School and Community Act Amendment of 1989, Section 22, Drug-Free Schools and Campuses. Coosa Valley Technical Institute prohibits the unlawful manufacture, distribution, dispensation, possession or use of illegal drugs or controlled substances on CVTI property or at CVTI sponsored events by Coosa Valley Technical Institute faculty, staff, or students. Persons convicted of violating laws regulating illegal drugs and controlled substances will be subject to appropriate disciplinary penalties imposed by the Institution.

## **ADMISSIONS**



#### **Enrollment Categories**

#### Diploma or Certificate Credit Applicants

This category includes applicants to programs and courses of study listed in this catalog that lead to a diploma or technical certificate.

## Institutional Credit Applicants

This category includes applicants to developmental studies classes and/or programs of study that award credentials other than a diploma.

## Other Applicants

This category includes applicants to short-term public service courses, seminars, and workshops.

## **Admissions Policy**

Applicants are admitted on a first-to-qualify/space-available basis. Those who are not admitted must re-apply or up-date their application for admission by specifying a new entry date. Applicants for medical programs must complete additional admissions information in order to be considered for admission to a medical program.

## Admission Requirements For Diploma Applicants

Age: The applicant must be 16 years of age or older. Cosmetology and the health occupations programs require applicants to be 17 years of age or older.

**Education:** Non-high-school graduates are admitted to all diploma programs as either regular or provisional students. NOTE: Students will not be allowed

to graduate and receive a diploma from any full-time instructional program offered by Coosa Valley Technical Institute until they have first earned a high school diploma or GED certificate. GED preparation is available at Coosa Valley Technical Institute.

**Entrance Testing:** Diploma program applicants must be tested to determine regular or provisional admission status. Applicants will not be refused admission based upon admission testing.

Physical Well-being: An applicant should be physically able to attend school regularly and to perform ordinary class and laboratory functions that are required by the program of study.

## Admission Procedures for Diploma and Certificate Programs

- 1. Submit an application for admission.
- 2. Report to the Admissions building for testing if you are seeking to enter a diploma program. For test dates and times, call 235-1145 before 4:00 p.m.
- 3. A \$15.00 application fee is due when an applicant reports for testing.
- A \$5.00 registration fee is due at the time of registration. This fee is payable at the beginning of each quarter and is not refundable.

NOTE: Application to health occupations programs requires physical and dental reports and personal references. Forms are available from the Office of Student Services.

## Admission Procedure for Continuing Technical Education Classes

- 1. Submit an application for admission.
- Pay a \$5 registration fee. This fee is payable at the beginning of each quarter and is not refundable

#### **Transfer Students**

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

## **Credit For Previous Training or Experience**

Credit for high school, college, or technical school courses may be granted by Coosa Valley Technical Institute following a review of an official transcript and/

or performance testing by a member of the Coosa Valley Technical Institute faculty.

## **Admissions Appeal**

Applicants who feel that they were unjustly denied admission to Coosa Valley Technical Institute may appeal to the President of the Institute. The appeal must be in writing and an appropriate period of time must be allowed for its review. The President will make a written report of findings upon concluding the review. Further appeal may be made to the Coosa Valley Technical Institute Board of Directors and to the State Board of Technical and Adult Education.

## **Postsecondary Options Program**

Under the Postsecondary Options Program, a student may attend Coosa Valley Tech in lieu of approved course work during the senior year:

- A student may be accepted under this plan when it has been formally certified to Coosa Valley Tech by the high school counselor that the student has been approved for the program.
- For each quarter's work that the student successfully completes at Coosa Valley Tech, an equivalent number of high school credits is earned toward the graduation requirements of the local board of education. Credit is also earned at Coosa Valley Tech. One Carnegie unit equates to 7.5 quarter hours of work.
- There must be evidence that a student is qualified to successfully complete the curriculum in which he/she is enrolled.
- 4. A student must show evidence that he/she will complete the training program at Coosa Valley Tech after graduation from high school if the length of the training program exceeds the normal school year.
- 5. Admission of students will be based upon:
  - a. Evaluation of high school records
  - b. Recommendation of high school counselor
  - c. Admission test scores

## **Tech Prep Program**

The tech prep program coordinates technical education between the secondary and postsecondary systems. The program is designed to assist those students who have selected to attend a technical institute after graduation from high school. The program includes a common core of math, science, communica-

tions and technology courses designed to lead to an associate degree, technical diploma, or an apprenticeship in a specific area.

Upon completing high school, tech prep students receive credit at the technical institute for certain courses completed at the high school level. Thus, duplication of courses will be eliminated and credit will be given for successfully completed tech prep courses. To receive tech prep credit at the technical institute, the student must meet the institute's admission requirements. High school courses accepted for credit must be approved under the tech prep agreement between the participating school system and Coosa Valley Tech.

## **Veterans Requirements and Procedures**

Veterans and other eligible students receiving Veterans Administration educational entitlement are required to comply with the admissions, academic, and attendance regulations that have been established for all students at Coosa Valley Technical Institute. In addition, those receiving veterans administration benefits must:

- Seek credit for all previous training or experience which could be applicable
  to their chosen program of study. VA regulation 14253 requires that all
  previous training be evaluated for possible credit. A transcript or other documentation of training must be submitted with the individual's eligibility
  papers. Written notice will be given by the school granting or denying such
  credit.
- Once admitted to Coosa Valley Technical Institute, recipients of VA benefits
  must comply with the school's attendance regulations and report any
  schedule changes that could affect their status with the Veterans Administration. Such changes include:
  - a. Dropping or adding subjects.
  - b. Transferring from full- to half-time status (or vice-versa).
  - c. Withdrawing from school.

Any overpayment to a student receiving VA benefits that results from the student's failure to comply with these regulations will become the student's obligation for repayment.

#### **Advanced Placement**

Advanced placement allows a student to receive course credit based on previous experience, formal or informal, and results in advanced standing within a diploma program. Credit may also be allowed for certain vocational courses completed at the high school level. For more information, contact the Office of Student Services

# TUITION, FEES AND REGISTRATION INFORMATION



#### **Tuition and Fees**

The tuition and fees listed below are assessed according to the policies established for all technical institutes governed by the State Board of Technical and Adult Education. Tuition and fees are subject to change without notice.

**Application Fee** 

\$15.00

This one-time, non-refundable fee is due when the applicant applies for admission to a diploma or certificate credit program.

Registration Fee

\$ 5.00

Both diploma and non-diploma applicants pay a registration fee at the beginning of each quarter. Initial payment is due at registration. This fee is not refundable.

**Activity Fee** 

\$7.00 full-time or \$4.00 part-time

This quarterly fee supports student activities and provides student accident insurance coverage. Full-time fee for 12 or more credit hours. Part-time fee for students taking fewer than 12 quarter hours.

**Quarterly Tuition** 

\$204.00

Residents of Georgia may attend tuition free if they apply for a Pell Grant/HOPE Grant through the financial aid office at Coosa Valley Technical Institute. Depending upon financial need and/or the credit hour limitations of the HOPE Grant Program, tuition will be paid by either federal Pell Grant funds or state HOPE Grant funds which are derived from the Georgia Lottery.

Otherwise, full-time diploma credit students enrolled for 12 or more credit hours on campus pay \$204 per quarter. (Fewer than 12 credit hours: \$17.00 per credit hour).

#### Alabama Residents

Residents of Alabama are exempt from out-of-state fees and shall pay the same fees as Georgia residents.

#### Non-Resident Fee

Non-residents (except Alabama) will be charged tuition at a rate 2 times that of a Georgia resident. Foreign nationals will be charged tuition at a rate 4 times that of a Georgia resident. A non-resident is anyone who has not lived in Georgia continuously for the 12 months preceding registration for classes.

## Georgia Residents 62 Years of Age and Older

Residents, 62 years of age and older, may take courses at Coosa Valley Technical Institute on a space-available basis at a reduced fee. Seminars and special courses are excluded. Space available will be determined on the first day of classes.

#### Refund of Tuition and Fees

Seventy-five percent (75%) of the tuition and supply fees will be refunded to the student who makes a written request for refund within the first fourteen (14) consecutive days, including holidays, following the beginning date of the quarter. To request a refund, contact the Business Office. No pro-rata refunds are allowed. Refunds are limited to tuition and supply fees. Requests for refunds will be processed after the student has formally withdrawn from class. Refunds are made by check and mailed within six weeks of withdrawal.

#### Insurance

Accident insurance is required; therefore, a portion of the Activity Fee provides coverage under a school policy effective from fall through summer quarter and which must be renewed each fall.

## **Textbooks and Other Training Aids**

The cost of first-quarter books, personal hand-tools, and/or safety equipment varies with the program of study. In general, these expenses are estimated to cost between \$100.00 and \$175.00.

#### **Transcript Fee**

The first transcript will be processed free. Thereafter, a fee of \$2.00 will be charged for each copy processed. To request a transcript of your grades, contact the Office of Student Services.

## Financial Obligation to the Institute

Failure to meet financial obligations to the institute may result in the student's dis-enrollment with no credit for the quarter. Additionally, such student may be denied enrollment in subsequent quarters. The institute will withhold copies of

educational records of students who have outstanding debts to the institution.

## Registration

Registration for classes is held several days before the beginning of each quarter. Students are notified of these dates. During the registration period students see their advisors or other school officials for assistance in completing class schedules.

After the class schedules are completed, students proceed to pay tuition and fees and to buy textbooks. New students are notified by mail to register on specific dates. For more information on registration, call 235-1142 or 235-1145.

#### **Dropping or Adding Courses**

Students who need to make changes in their schedules must do so within the first 3 days of class. Day students seeking to add classes after 3 days must obtain instructor permission. Evening students must have instructor permission to add classes to their schedule after the first class meeting. To make a schedule change, contact the Office of Student Services and complete the necessary paperwork.

There is no academic penalty for dropping courses during the drop-add period; however, such action is likely to adversely affect the status of most financial assistance programs for which you have established eligibility.

## Change of Program

Students requesting a change of program must meet the admission requirements of the new program, complete a Class Transfer form, and have their request for transfer approved by the Office of Instructional Services.

## COOSA VALLEY TECHNICAL INSTITUTE

## STUDENT FINANCIAL AID



## Qualifying for Financial Aid

Financial aid from federal, state, and local sources is available to qualified students. Most of the available aid is need-based. An application for financial aid should be filed prior to entry but can be filed at anytime. Applicants for financial aid must be accepted for entry (or enrolled) in a diploma or technical certificate program.

Application forms are available from the Office of Student Services or the Office of Instructional Services at Coosa Valley Technical Institute. Assistance in completing the application is available from the Office of Student Services. Call 235-1145 for an appointment with a financial aid officer.

## Satisfactory Progress For Financial Aid Eligibility

Students receiving financial aid from any institutionally controlled or administered aid program must maintain satisfactory academic progress in order to maintain their eligibility for that assistance. See the section on Academic Information for the definition of academic progress.

Additionally: Students receiving financial aid from any Title IV program (Pell Grant, Stafford Loan) must satisfactorily complete at least 70% of the credit hours attempted during an academic year. Failures, incompletes, withdrawals, and courses abandoned by the student (indicated on the transcript by the grade symbols F, INC, WD, or WF) are considered to be class work attempted but not satisfactorily completed.

#### Students Taking Non-Credit Developmental Courses

Financial aid from a Title IV program is not available to students taking non-credit developmental or remedial courses unless they are also enrolled for credit classes. Students enrolled in developmental classes for institutional credit may receive financial aid through the HOPE Grant program.

## Eligibility Requirements For Federal and State Grants

#### **Pell Grant**

\$200 to \$2250 per year payable in four installments. This aid program is available to students with demonstrated financial need who have not earned a Bachelor's Degree. The amount of aid depends upon the cost of the student's program and the results of an analysis of resources available to the student. Application can be made using the Application for Federal Student Aid (AFSA) or the Financial Aid Form (FAF). If approved without conditions, the cost of tuition and fees can be credited against an award during registration or on the first day of the quarter, and the remaining award (if any) made at a later date.

#### **HOPE Grant**

Anyone who has been a Georgia resident for at least one year is eligible for a tuition grant for any diploma credit program. This grant pays tuition and mandatory fees for programs awarding diploma credit and, since it is a grant, does not require that the student repay any money. Applicants are required to apply for the federal Pell grant program and the HOPE award will be reduced or eliminated dependent upon the amount of the Pell award. Dependent upon the number of credit hours scheduled, \$50 to \$100 per quarter is also provided to cover the cost of textbooks.

#### Student Incentive Grant

\$150 to \$450 per year. Available to Georgia residents who are full-time students with a demonstrated financial need. This grant is paid only during the fall, winter, and spring quarters. Application is made by completing the Financial Aid Form (FAF). The deadline for application is May 1 and early application is recommended. Payment is sent to the financial aid office for disbursement.

**Note:** Grants usually do not require repayment when the student has attended class on a regular basis and maintained satisfactory academic progress.

## Eligibility for Scholarships

#### **Equity Scholarship**

Pays tuition, fees, and books for persons entering a program that is not traditional for members of his/her sex. Applicant must be enrolling in a full-time program of study. Completion of a Pell Grant application may be required, but awarding of the scholarship is not necessarily based on financial need.

#### President's Scholarship

A campus-based aid source that can pay a sum equal to an applicant's firstquarter tuition, fees, and/or books for individuals enrolling in certain lowenrollment diploma programs. Applicant must have a demonstrated financial need, lack immediate access to other sources of aid, and have the approval of the financial aid committee. To apply, see the financial aid officer.

#### The Senior Scholarship

A campus-based scholarship program that recognizes outstanding high school seniors throughout the region. Students are nominated by area high schools based upon academic and vocational achievement, financial need, and the intent to gain further skills training at Coosa Valley Technical Institute

## The Job Training Partnership Act (JTPA)

The JTPA program offers job training to Georgia residents who meet certain special needs and income requirements. Sponsorship by JTPA pays the entire cost for tuition, fees, books and other school expenses. Travel costs and child care expenses may also be provided to eligible students. Eligibility is determined using federal and state guidelines. For information and application assistance, contact the JTPA Counselor at Coosa Valley Technical Institute. Call: 235-1145 between 8:30 a.m. and 4:00 p.m.

#### **Veterans and Eligible Dependents**

Former service men, service women, their survivors, and dependents may be eligible for VA Educational Benefits. Coosa Valley Technical Institute is approved by the VA to provide such training. To determine your eligibility, contact the local or regional Veterans Administration Office.

## COOSA VALLEY TECHNICAL INSTITUTE

## **ACADEMIC INFORMATION**



#### Attendance

Students are expected and encouraged to attend each scheduled class. Absences and tardies will become a part of the student's record. It is recognized that there may be times when a student will be unable to attend class. In such cases, it is the student's responsibility to make arrangements with the instructor concerning the completion of work missed. All make-up work will be at the discretion of the instructor.

Because regular attendance is sometimes a critical factor when an employer reviews a student's record, such records may be amended to reflect make-up work and/or reasons for excessive absenteeism.

## Grade Point Average (GPA) Computation

The formula for computing a student's grade point average is as follows: Total grade (quality) points earned divided by total credit hours attempted equals GPA. Institutional credit (developmental studies) shall in no way affect the cumulative grade point average. See *Grading System elsewhere in this section for an explanation of quality points*.

#### **President's List**

Students completing 12 or more credit hours of course work are eligible for the President's List for any quarter in which they achieve a Grade Point Average of 3.5 or higher.

## Satisfactory Academic Progress

Any student in a diploma program who fails to maintain a cumulative grade point average of 2.0 will be placed on academic probation during the next quarter. Students on academic probation must earn a grade point average of 2.0 during the probationary quarter to maintain satisfactory academic progress and must have a cumulative grade point average of 2.0 to be removed from academic probation. Students who fail to earn a grade point average of 2.0 for the probationary quarter may be placed on academic suspension for one quarter. A student who is suspended may apply and be re-admitted to the school on academic probation following one quarter of suspension.

**Note:** See the section on financial aid for information on how unsatisfactory progress will affect financial aid. Students have the right to appeal denial of financial aid based on failure to maintain satisfactory progress if an extenuating circumstance, such as hospitalization, prevented them from making satisfactory academic progress.

#### **Grading System**

Class participation, tests, and final examinations are the major factors contributing to a student's grade. The following grading system is used to report student progress in credit courses:

Letter Grade	Nature of Work	<b>Quality Points</b>
A (90-100	Excellent	4.0
B (80-89)	Good	3.0
C (70-79)	Satisfactory	2.0
D (65-69)	Passing	1.0
F (0-64)	Failure	0
INC	Incomplete	Not computed
IP	In Progress	Not computed
S	Satisfactory Performance	Not computed
U	Unsatisfactory Performance	Not computed
WD	Withdrew (By mid-quarter)	Not computed
WP	Withdrew Passing	Not computed
WF	Withdrew Failing	0
NR	Grade Not Reported	0
EX	Credit Course Exempted	Not computed
TR	Credit Course Transferred	Not computed
AU	Audit Course	Not Computed

A grade of C or better is required in a prerequisite course before a student can progress to the next level of instruction.

A minimum average of C (2.0 GPA) is required for graduation.

#### **Work Ethics Grades**

A work ethics grade of A, B, C, D, or F will be reported in accordance with Georgia Department of Technical and Adult Education standards. The work ethics grade is designed to evaluate student behavior, attendance, and related non-academic factors that constitute good work habits. The work ethics grade will be displayed on the student's official transcript, but will not affect the academic grade point average.

## Other Symbols Used In Grading

- INC This symbol indicates that a student who is performing satisfactory work is unable to meet full course requirements for non-academic reasons. An INC must be removed within one quarter or it will automatically become an F.
- IP This symbol indicates that a final grade could not be posted because the student was not scheduled to complete the course by the end of the quarter. An IP must be followed by a final grade during the next quarter or it will automatically become an F (or U if in a developmental studies course).
- NR Indicates no grade reported. Student should see the instructor for a grade.
- AU Indicates the course was audited for no credit.
- S This symbol indicates satisfactory performance in a developmental studies or other institutional credit course.
- U This symbol indicates unsatisfactory performance in a developmental studies or other institutional credit course.
- WD This symbol indicates that a student was permitted to withdraw from a course without academic penalty. Withdrawal without penalty will not be permitted past the midpoint of the quarter.
- WP This symbol indicates that a student making satisfactory progress was permitted to withdraw from a course past the midpoint of instruction without academic penalty.
- WF This symbol indicates that a student was permitted to withdraw from a course after midpoint while making unsatisfactory progress. The dropping of a course under these circumstances is equivalent to a failure.
- EX This symbol indicates that a credit course has been exempted.
- TR This symbol indicates that a credit course has been transferred from another institution.

#### Graduation

Diplomas and Certificates are awarded to those meeting the requirements of the institute in a graduation ceremony held at the end of the winter and summer quarters. Students who plan to graduate should complete an Application for Graduation form and have it signed by their advisors. This form is available from

the Office of Instructional Services and is used to prepare the diploma. There is no charge for the diploma.

## **Graduation Requirements**

A student must complete the prescribed curriculum for a specific diploma with a cumulative grade point average of 2.0 or better on credit course work taken at Coosa Valley Technical Institute. Transfer credit from other institutions does not carry quality points and is not considered in computing a students grade point average for graduation purposes. All diploma candidates must show proof of high school diploma or GED certificate before a Coosa Valley Technical Institute diploma can be awarded.

#### Withdrawal Procedure

Any student voluntarily withdrawing from diploma credit courses at Coosa Valley Technical Institute following registration must notify the Office of Student Services and complete an official withdrawal form. Those withdrawing before the mid-point of the grading period will receive a WD (withdrawal without academic penalty). Those withdrawing after the mid-point of the grading period will receive either a WP (passing, no academic penalty) or WF (failing, penalty) grade.

**Caution:** Students officially withdrawing from class (and those who abandon course work) are likely to adversely affect most financial aid eligibility that they may have established.

#### **Abandoning Course Work**

A student who discontinues attendance in a course and does not complete an official withdrawal form will be considered actively enrolled through the ending date for the course. Abandoning a course instead of following the official withdrawal procedure may result in a grade of F at the end of the course.

## Student Right To Appeal

Students have the right to appeal any action by the Institute that seeks to discipline their behavior or restrict their participation in ordinary school activities. All appeals must be in writing and must make reference to the specific action by the school that is being appealed. Appeals should be directed to the institute's President and the Board of Directors. Penalties imposed by the institute need not be postponed pending the appeal process.

## STUDENT SERVICES



Personnel from the Office of Student Services help to provide a successful learning environment for students at Coosa Valley Technical Institute. They support the total educational effort through services that include career exploration and evaluation, admissions, student registration, counseling, financial aid, job placement, student follow-up, student records, institutional publications and public relations.

The office is located in the administration building and students are encouraged to speak with any of its staff about the following services:

## Counseling

A professional staff works closely with other faculty to provide counseling services that meet the needs of potential and currently enrolled students. These services include the following:

- Pre-enrollment career exploration counseling.
- · Helping students to develop career plans and personal goals.
- · Counseling students with school-related problems.
- Personal counseling on a confidential basis.
- · Academic counseling and assistance in scheduling courses.

## **Developmental Studies**

The Developmental Studies Program at Coosa Valley Technical Institute serves students who are in need of special counseling or academic assistance. It includes developmental courses designed to improve students' basic abilities in the areas of English composition, mathematics, and reading skills. These courses carry institutional credit and may be taken prior to enrollment in diploma credit courses or in combination with diploma credit courses.

#### **Financial Aid Officer**

Information, forms, and assistance for those seeking financial aid are provided by the Financial Aid Officer located in the Office of Student Services. Details on the types of financial aid available at Coosa Valley Technical Institute can be found in the financial aid section of this publication.

#### Placement and Follow-up

Coosa Valley Technical Institute assists students in locating appropriate employment upon completion of their programs of study. Some assistance in locating part-time work may be given to students during any phase of their enrollment at the institute. The placement office maintains contact with the instructional staff throughout the school and acts as a conduit for job referral. Students may list their employment needs with the placement office at any time during their enrollment or after leaving school.

Periodic follow-up surveys are conducted by the placement office to obtain data from former students. This data assists the institute as it seeks to meet its training objectives. When contacted, former students are urged to promptly return the follow-up survey form.

The Placement Office is located in the Admissions building. Students who wish to confer with the placement officer are encouraged to make an appointment by calling 235-1145.

#### Student Records

A permanent record of course work attempted by students is maintained by the Office of Student Services. A transcript of this record will be provided to others upon the student's request. The first transcript is free but all subsequent requests for transcripts must be accompanied by a \$2.00 fee.

Student records will not be made available to others except where permitted by law or upon the written request of the student (or parent or guardian when the student is less than 18 years of age). Coosa Valley Technical Institute classifies certain items of a student's record as directory information. These items of information may be released to any third party at the discretion of the institute.

The following directory information may be released without the consent of the student:

Name • Address • Date of Birth • Program of Study • Dates of Attendance Any student or parent who objects to the release of directory information may file an objection, in writing, with the Office of Student Services. Upon written request, any presently enrolled or former student may inspect his or her personal educational records and may request a hearing to challenge any information deemed to be misleading or inaccurate.

#### Orientation

Orientation acquaints students with Coosa Valley Technical Institute, its policies, and its services. Orientation for incoming diploma program students is conducted by the Office of Student Services on announced dates just prior to the beginning of each quarter or during the advisement process.

Additional orientation information is provided by instructors in each of the institute's programs of study. The Student Handbook is provided to each student to further acquaint him/her with policies and services provided by the school.

#### Change In Name Or Address

Any student who has a change of name or address should notify the Office of Student Services promptly so that accurate records may be maintained.

## Housing

Coosa Valley Technical Institute does not provide housing for students attending the school; however, assistance will be provided to applicants planning to locate in the area

## COOSA VALLEY TECHNICAL INSTITUTE

# STUDENT ORGANIZATIONS AND ACTIVITIES



Student activities include clubs, a field day celebration, and activities within the programs of study. There is also an annual competition to select an outstanding student who represents the school in the Georgia Occupational Award of Leadership program.

#### Student Activity Board

The Student Activity Board is an organization composed of students elected from each program of study. This student organization, along with advisors from the institution, is responsible for all student activities sanctioned by the institution.

## GOAL The Georgia Occupational Award of Leadership Program

The Georgia Occupational Award of Leadership is a recognition program designed to honor outstanding students in Georgia's postsecondary technical institutes. Competition begins at the local level with nominations of outstanding students by their instructors. A school winner is selected and finalists are honored at a banquet.

The local winner advances to state-wide competition during an expense-paid week in Atlanta. The grand prize awarded to the state GOAL winner is a new automobile.

## **Field Day**

During the spring, a portion of a day is set aside for field day. Classes are suspended to allow students to enjoy games, contests, music, hot dogs, hamburgers, and soft drinks.

#### VICA - Vocational Industrial Clubs Of America

Vocational Industrial Clubs of America (VICA) is a national organization for students in trade, industrial, technical, and health occupations programs. There are clubs in public high schools, technical schools, junior colleges, and universities. At Coosa Valley Technical Institute, VICA is the largest student organization with membership from most of the school's programs. Students from the school's VICA club compete annually in regional skill Olympics and usually send winners to state and/or national skill Olympic competitions. Club members representing Coosa Valley Technical Institute have consistently won medals at all levels of competition.

# PROGRAMS



Three distinct non-diploma services are provided by personnel from the Office of Economic Development Programs. They are:

Continuing Technical Education
Customized Training for Existing Industry
Quick Start Training for New and Expanding Industry

The training may utilize on-campus facilities, be taught at the business or plant site, or be held at Coosa Valley Technical Institute's Industrial Training facility located in the Rome-Floyd County Center for Industry complex on Callahan Street in Rome.

Business and industry representatives are encouraged to contact the Office of Economic Development Programs for a complete explanation of the services provided and a listing of training that is available. The telephone number is 235-6756.

## **Continuing Technical Education**

Coosa Valley Technical Institute's continuing education programs focus on topics that deal with Computer Utilization, Health, and Safety.

#### **Computer And Software Training**

These courses range from 6 to 24 clock-hours in length. Morning and evening schedules are available at the main campus or at the Industrial Training Center.

Instruction is available for the following topics and can be arranged for others:

Introduction to Microcomputers
DOS (beginning/advanced)
Word Perfect (beginning/advanced)
Lotus (beginning/advanced)
d-Base (beginning/advanced)
PageMaker (beginning/advanced)

Computer Assisted Drafting

Paradox (beginning/advanced)
Harvard Graphics (beginning/advanced)
Corel Draw (beginning/advanced)
Humancad Mannequin (beginning/advanced)
Lotus/Quattro Pro (beginning/advanced)

Microsoft Windows (beginning/advanced)

## **Economic Development Programs**

#### **Customized Training For Existing Industry**

Coosa Valley Technical Institute offers existing industry a wide range of assistance in training and re-training employees. Choose from any of the following series topics or request customized training that is designed to meet the special needs of your company.

#### Safety/Employee Awareness Series

These courses range from 2 to 40 clock-hours in length. Morning and evening schedules are available. Instruction is available for the following topics and can be arranged for others:

Agenda 2000: Safety, Health & Environment

CPR Heartsaver

First Responder Blood-borne Pathogens

Proper Lifting: Prevention Of Back Trauma

Ergonomics AIDS Update

Certified Nursing Assistant

Basic First Aid Job Safety Analysis

Supervisor's Safety Development Program

Safety In The Workplace

Lockout/Tagout (OSHA Standards) Hazardous Materials Awareness

Forklift Safety

Child Care Development Workshop

#### **Total Quality Improvement Series**

These courses range from 4 to 100 clock-hours in length. Morning and evening schedules are available. Instruction is available for the following topics and can be arranged for others.

Total Quality Transformation - Overview

(For service or manufacturing industries)
ISO 9000 European Quality Systems

Statistical Process Control

Leadership Development In Quality

Implementation

Heating & Air Conditioning Review Course

**Electrical Codes Review** 

**Building High Performance Team Skills** 

**Business Letter Writing** 

Medical Transcription

Total Quality Transformation - Workshop

(For service or manufacturing industries)

Word Class Manufacturing - Overview

Demand Flow Technology

Kepner-Tregoe Problem Solving/Decision

Making

Decision Making/Problem Solving

Office Operations Quality Training Professional Resume Preparation

Basic Blueprint Reading

Conversational Spanish

#### Multi-craft Mechanical/Electrical Maintenance Series

These courses range from 3 to 140 clock-hours in length. Morning and evening schedules are available. Instruction is available for the following topics and can be arranged for others.

Pre-employment Skills Workshop Shop Math Series For Maintenance

Personnel

Science Foundations For Maintenance

Personnel

Mechanical Maintenance Series

Welding Skills Series

Maintenance Skills Assessment Program
Precision Measurement Series for
Maintenance Personnel
General Industrial Maintenance Series
Electrical Fundamentals Series

**Electrical Maintenance Series** 

#### **Quick Start**

Coosa Valley Technical Institute, in conjunction with the State Quick Start program, offers many customized training services for new or expanding manufacturing firms. The purpose of Quick Start is to allow the industry to have a trained work force the very first day of the new or expanded operation.

Our certified industrial trainers provide qualifying industries with a total training package designed to make the industry self-sufficient for its future training needs. When possible, company employees are utilized as key persons in the training process.

Available are custom-designed and comprehensive training based upon an analysis of specific needs and anticipated outcomes. Typical examples of training developed for Quick Start businesses are:

- Manufacturing and Equipment Operations This includes company orientation, process orientation, job specific equipment operation, blueprint reading, precision measurements, machining, welding, forklift operations, safety and quality training, and automated manufacturing involving CNC and/or PLC applications.
- Customized Office Operations This includes company orientation, job specific skills, customer service, managing the difficult customer, computer soft- ware applications, telephone and interpersonal skills.
- Productivity Enhancement This includes presentations dealing with total quality management, statistical process control, problem solving and decision making.
- Employee Involvement This includes team skills training and focuses on the development of self-directed teams, enhanced communication skills, effective meeting management, consensus decision making, and effective conflict resolution.

During the past 20 years, Georgia's Quick Start program has trained more than 135,000 people for over 1,000 firms.

For additional information, contact

Nancy Gribble, Director of Economic Development Programs

Coosa Valley Technical Institute, 112 Hemlock Street

Rome, Georgia 30161 or Telephone: 235-6756.

## COOSA VALLEY TECHNICAL INSTITUTE

# ADULT EDUCATION AND SPECIAL SERVICES



# **Adult Literacy Services**

Coosa Valley Technical Institute offers adult literacy services to residents of Floyd, Polk, and Gordon counties. Classes are provided at the Adult Education Center on the Coosa Valley Tech campus and at sites located in each of the counties served.

Preparation for the General Educational Development Test (GED) and English as a second language are two of the free instructional services offered to improve adult literacy. For more information, call Susan Hackney at 235-6756.

# Workplace Literacy and Basic Skills Assessment

The literacy need of employees in northwest Georgia can cover a wide spectrum — from learning to read and write through certifying high school level skills. We offer area business and industry customized assessment and training programs at the work site or elsewhere utilizing:

- Adult Literacy
- Assessment using the Bennett Mechanical Test
- Adult Basic Education
- Assessment using the Test of Adult Basic Education
   English as a Second Language
- GED Preparation
   Literacy Audit
- Reading and/or Math Refresher Courses

Georgia Tax Credit For Adult Basic Skills Education - Employers who sponsor basic academic skills training for their employees can earn a tax credit of up to \$150 per successful completer as defined by the program's official procedures manual. The Coosa Valley Tech Office of Adult Literacy is authorized to certify such programs and is also available to develop programs for area business and industry on a cost recovery basis.

# General Educational Development Test (GED)

Coosa Valley Technical Institute has been designated as an official test center for administering the Test of General Educational Development (GED). Those making satisfactory scores on this test receive a High School Equivalency

#### COOSA VALLEY TECHNICAL INSTITUTE

Diploma from the Georgia Department of Technical and Adult Education. Preparation for the GED is provided free of charge; however there is a fee for GED testing.

Persons interested in taking the GED test should be 18 years of age or older; however, persons under 18 may take the test with special permission from the State of Georgia.

The Office of Adult Literacy schedules frequent test sessions. Call 235-6756 to pre-register for the GED test.

# Consumer and Family Life Skills

Coosa Valley Tech offers a variety of community-service classes through workshops and seminars that deal with consumer education, clothing and textiles, crafts, and job-seeking skills. The focus of Consumer and Family Life Skills classes is on ways to cope with consumer problems. Other workshops and seminars offer instruction in a variety of creative activities. Call 235-1142 for more information.

# **Single Parent Classes**

Single parents with minor children may get the employability skills they need to enter and succeed in the workplace through this unique program that offers financial support and individualized training. Known as New Connections In Georgia, the program is five weeks in length and classes are from 9:00 a.m. to 12:00 noon, Monday through Friday.

The New Connections program is open to unmarried, widowed, or divorced parents who have custody (or joint custody) of minor children and are either unemployed or greatly underemployed residents of Polk, Floyd, or Gordon counties.

The New Connections program is free to qualified applicants. To apply for the New Connections program, call Emily Eidson at 235-1142.

# DIPLOMA CREDIT PROGRAMS



# **Diploma Programs**

Classes leading to a diploma are generally taught during the hours 8:00 a.m. to 2:30 p.m. or 6:00 to 10:30 p.m., but may be offered at other times throughout the day. Diploma programs are governed by standards that provide uniform admission and curricular requirements for all such programs offered by technical institutes operated by the Georgia Department of Technical and Adult Education. Satisfactory completion of course work carries diploma credit.

Diploma credit is transferrable to other technical institutes within the system operated by the Department of Technical and Adult Education.

# Warranty

Any graduate of a Coosa Valley Technical Institute diploma program who is deficient in a competency identified in the state program standard shall be retrained at the request of the employer at no cost to the employer or employee for tuition or instructional fees. This warranty is valid for two consecutive years following the student's date of graduation. The implementation of this warranty began the fall quarter, 1989 and applies to those programs that have implemented state program standards.

# **ACCOUNTING**

# **Program Description**

The Accounting program prepares students for employment as accounting assistants. The courses of study included in the program cover both general business concepts and technical competencies needed by persons entering the field. Some of the topics covered by this program are personal and business accounting, the accounting cycle, corporate accounting, cost accounting, budgeting, computerized accounting, and the use of database management and electronic spreadsheet software.

## **Program Length**

A full-time student can complete the 69 credits required for a diploma in 4 quarters. Actual program length will depend upon the credit hours earned per quarter.

## **Employment Opportunities**

Graduates find employment in banks, retail, wholesale, and manufacturing operations, and in government. Duties vary with the employer and include accounting assistant, balance clerk, teller, pay-roll clerk, credit clerk, insurance clerk, bookkeeper 1 and 2, cost clerk, general ledger bookkeeper, billing-control clerk, and account-information clerk.

#### **Entrance Dates**

Spring and Fall entry dates are recommended because they provide the applicant with the best course scheduling sequence. Entry is possible in any quarter that offers a required or elective course that is open to a beginning student.

#### **Entrance Requirements**

The requirements for regular admission to the Accounting program are:

Education: High school diploma or equivalent (GED)

Tests: Appropriate placement test scores for program admission

Age: 16 years or older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students are allowed to take developmental studies courses and/or certain occupational courses as designated by standards governing the program. The requirements for provisional admission are:

Education: High school diploma or equivalent (GED) preferred but not re-

quired for admission; however, students will not be allowed to graduate and receive a diploma until they have first earned a

high school diploma or equivalent (GED certificate)

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Age: 16 years or older

#### **Transfer Students**

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

## **Associate Degree Opportunity**

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

#### **ACCOUNTING CURRICULUM**

Required Courses	<b>Credit Hours</b>
ENG 111 Business English	5
ENG 112 Business Communications	5
MAT 111 Business Math	5
PSY 100 Interpersonal Relations	3
BUS 101 Keyboarding/Typewriting	5
BUS 102 Intermediate Typewriting	5
or BUS 108 Word Processing (5)	
BUS 104 Microcomputer Fundamentals	5
ACC 101 Principles of Accounting I	5
ACC 102 Principles of Accounting II	5
ACC 103 Principles of Accounting III	5
ACC 104 Computerized Accounting	3
ACC 105 Accounting Database Fundamentals	3
ACC 106 Accounting Spreadsheet Fundamentals	3
and ACC 107 Full-time Accounting Internship	12
or ACC 108 Half-time Accounting Internship (6)	
and XXX XXX Occupationally Related Electives (6)	
or XXX XXX Occupationally Related Electives (12)	
Credits required for graduation:	69

#### AIR CONDITIONING TECHNOLOGY

## **Program Description**

Air Conditioning Technology offers a sequence of courses that prepare students for careers in the air conditioning, heating, and ventilation industry. Topics include: refrigeration; air conditioning; heating systems; electrical wiring, automatic controls, and electric motors; and trouble-shooting heating and air conditioning systems.

#### **Employment Opportunities**

Graduates find employment as an air conditioning servicers/installers, furnace servicers/installers, refrigeration mechanics, and as general maintenance personnel.

## Program Length

A full-time student can complete the 83 credits required for a diploma in 4 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

# **Entrance Requirements**

The requirements for regular admission to the program are:

Education: High school diploma or equivalent is not required for admis-

sion; however, students will not be allowed to graduate and receive a diploma until they have first earned a high school

diploma or GED certificate

Tests: Appropriate placement test scores for program admission

Age: 16 years and older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students may take developmental studies courses and/or certain occupational courses as designated by standards governing the program. The requirements for provisional admission are:

Education: The same as for regular admission

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Age: 16 years or older

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

#### **Associate Degree Opportunity**

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

#### AIR CONDITIONING TECHNOLOGY CURRICULUM

Requ	iired	Courses	Credit Hou
ENG	101	English	5
		General Mathematics	5
<b>PSY</b>	100	Interpersonal Relations	3
ACT	100	Refrigeration Fundamentals	4
ACT	101	Principles & Practices of Refrigeration	7
ACT	102	Refrigeration Systems Components	7
ACT	103	Electrical Fundamentals	8
ACT	104	Electric Motors	3
<b>ACT</b>	105	Electrical Components	5
ACT	106	Electric Control Systems & Installation	4
ACT	107	Air Conditioning Principles	6
ACT	108	Air Conditioning Systems & Installation	3
ACT	109	Troubleshooting Air Conditioning Systems	7
ACT	110	Gas Heating Systems	5
ACT	111	Electric Heating Systems	3
ACT	112	Heat Pumps	3
XXX	XXX	Technical or Related Electives	5
		Credits required for graduation:	83

## **AUTO COLLISION REPAIR TECHNOLOGY**

## **Program Description**

Students of Auto Collision Repair Technology have both classroom and handson experiences with damaged cars and trucks. Their training includes techniques for straightening, repairing, replacing, and refinishing damaged vehicles. Coosa Valley Technical Institute provides fully equipped body repair and painting facilities. Upon completion of the program's core curriculum, a student may take specialized courses to become either a Major Collision Repair Technician or a Paint and Refinishing Technician or both.

# **Employment Opportunities**

Graduates find employment with automobile and truck dealerships and with repair shops specializing in body repair and painting. Duties are varied and include body repair technician, frame technician, and spray painting technician.

## **Program Length**

A full-time student can complete the 64 credits required for a diploma in 4 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Dates**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

# **Entrance Requirements**

The requirements for regular admission to the program are:

Education: High school diploma or equivalent is not required for admis-

sion; however, students will not be allowed to graduate and receive a diploma until they have first earned a high school

diploma or GED certificate

Tests:

Appropriate placement test scores for program admission

Age: 16 years or older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students may take developmental studies courses and/or certain occupational courses as designated by standards governing the program. The requirements for provisional admission are:

Education: Same as for regular admission status

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Age: 16 years or older

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

**Associate Degree Opportunity** 

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

# **AUTO COLLISION REPAIR TECHNOLOGY CURRICULUM**

Required Courses	<b>Credit Hours</b>
ENG 100 English	5
MAT 101 General Mathematics	5
PSY 100 Interpersonal Relations	3
ACR 100 Safety	1
ACR 101 Automobile Components Identification	5 5 3 1 3 1 2 3 3 2 3 2 3 2
ACR 102 Equipment and Hand Tools Identification	1
ACR 104 Mechanical and Electrical Systems	2
ACR 105 Body Fiberglass, Plastic, Rubber Repair Technique	es 3
ACR 106 Welding and Cutting	3
ACR 107 Trim, Accessories, and Glass	2
ACR 109 Damage Identification and Assessment	3
ACR 110 Minor Collision Repair	2
and one of the following occupational specializations:	
Major Collision Repair	
ACR 120 Conventional Frame Repair	2 2 2 4 3 4 2 1 3 8
ACR 121 Unibody Identification/Damage Analysis	2
ACR 122 Unibody Measuring and Fixturing Systems	2
ACR 123 Unibody Straightening Systems/Techniques	4
ACR 124 Unibody Welding Techniques	3
ACR 125 Unibody Structural Panel Repair/Replace	4
ACR 126 Conventional Body Structural Panel Repair	2
ACR 127 Unibody Suspension and Steering Systems	1
ACR 128 Bolt-on Body Panel Removal/Replacement	3
XXX XXX Occupationally Related Electives	64
Credits required for graduation:	
or completion of the basic program and the following spe	cialization:
Paint and Refinishing	
ACR 130 Sanding, Priming, and Paint Preparation	4
ACR 131 Acrylic Lacquer Refinishing Application	3
ACR 132 Special Refinishing Application	4
ACR 133 Acrylic Enamels Refinishing Application	6 6 2
ACR 134 Urethane Enamels Refinishing Application	6
ACR 135 Tint and Match Colors	2
XXX XXX Occupationally Related Electives	~~

Credits required for graduation

64

#### **AUTOMOTIVE TECHNOLOGY**

#### **Program Description**

The Automotive Technology program prepares students for employment as service technicians. The curriculum includes both classroom and lab courses. Practical experience in vehicle servicing is gained in the lab under the supervision of an experienced service technician. Coosa Valley Technical Institute provides an auto servicing facility that features modern computer-diagnostic equipment. Students are required to provide their own set of small hand tools.

## **Employment Opportunities**

Graduates find employment with automobile and truck dealerships, repair shops, government, transportation systems, and utility motor pools.

## **Program Length**

A full-time student can complete the 123 credits required for a diploma in 7 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Dates**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make it advisable to apply early.

# **Entrance Requirements**

The requirements for regular admission to the program are:

Education: High school diploma or equivalent is not required for admis-

sion; however, students will not be allowed to graduate and receive a diploma until they have first earned a high school

diploma or GED certificate

Tests: Appropriate placement test scores for program admission

Age: 16 years and older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students may take certain developmental studies courses and/or occupational courses as designated by standards governing the program. The requirements for provisional admission are:

Education: The same as for regular admission status

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

#### **Associate Degree Opportunity**

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

## **AUTOMOTIVE TECHNOLOGY CURRICULUM**

Requ	ired	Courses	Credit Hours
<b>ENG</b>	101	English	5
MAT	101	General Mathematics	5
<b>PSY</b>	100	Interpersonal Relations	3
<b>AUT</b>	100	Introduction to Automotive Technology	3
<b>AUT</b>	101	Engine Diagnosis I	6
AUT	102	Brake Systems	6
AUT	103	Suspension and Steering	8
AUT	104	Automatic Transmissions/Transaxle I	3
AUT	105	Clutch Diagnosis and Repair	3
AUT	106	Introduction to Automotive Electrical Systems	6
<b>AUT</b>	107	Starting and Charging Systems	5
AUT	108	Ignition Systems	6
AUT	109	Electrical/Electronic Instrumentation	7 5
AUT	110	Engine Diagnosis II	5
AUT	111	Fuel and Exhaust Systems	3
		Emissions Control Systems	12
<b>AUT</b>	202	Automatic Transmission/Transaxle II	13
AUT	203	Manual Transmission/Transaxle	3
AUT	204	Drivelines	3
		Four-Wheel Drive Components	3
		Heating and Air Conditioning Systems	6
		Occupationally Related Electives	9
or A	UT 20	08 Automotive Tech Internship / PSY 100 exempt (12	
		Credits required for graduation:	123

## **BUSINESS AND OFFICE TECHNOLOGY**

# **Program Description**

Business and Office Technology prepares students for employment in a variety of positions in today's automated office. Graduates of the program receive a Business and Office Technology diploma with a specialization in Medical Secretary.

# **Employment Opportunities**

Graduates find employment in both general and specialized medical office positions. Graduates may be employed as medical transcriptionists, receptionists, and general office clerks.

## **Program Length**

A full-time student can complete the 87 credits required for a diploma in 5 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

# **Entrance Requirements**

The requirements for regular admission to the Business and Office Technology program are:

Education: High school diploma or equivalent is not required for admis-

sion; however, students will not be allowed to graduate and receive a diploma until they have first earned a high school

diploma or GED certificate

Tests: Appropriate placement test scores for program admission

Age: 16 years and older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students may take certain developmental studies courses and/or occupational courses as designated by standards governing the program. The requirements for provisional admission are:

Education: The same as for regular admission status

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

#### **Associate Degree Opportunity**

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See pages 92 for complete information.

## **BUSINESS AND OFFICE TECHNOLOGY CURRICULUM**

Required Courses	Credit Hours
ENG111 Business English	5
ENG 112 Business Communications	5
MAT 111 Business Math	5
PSY 100 Interpersonal Relations	3
BUS 101 Keyboarding/Typewriting	5
BUS 102 Intermediate Typewriting	5
BUS 103 Advanced Typewriting	5
BUS 104 Microcomputer Fundamentals	5
BUS 106 Office Procedures	4
BUS 108 Word Processing	5
and the following specialization:	
Medical Secretary	
BUS 201 Advanced Word Processing	3
BUS 208 Office Accounting	4
BUS 211 Medical Terminology	4
BUS 212 Anatomy and Terminology	5 3
BUS 213 Medical Transcription I	
BUS 214 Medical Transcription II	3
BUS 215 Medical Secretary Internship	12
and XXX Occupationally Related Electives	6
or BUS 225 Office Simulation (8) and Related Electives (10)	
Credits required for graduation:	87

#### CARPENTRY

## **Program Description**

The Carpentry program provides classroom, lab, and live-work training designed to produce an entry-level residential carpenter. Coosa Valley Technical Institute provides major power tools for use by students during training. Students are required to provide personal hand-tools. A diploma in Carpentry with residential specialization is awarded upon completion of the program.

## **Employment Opportunities**

Graduates are employable as carpenter apprentices, framing carpenters, form builders, roofers, and carpenter helpers. With experience, graduates may become finish carpenters, estimators, subcontractors, and contractors.

## Program Length

A full-time student can complete the 72 credits required for a diploma in 4 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

# **Entrance Requirements**

The requirements for regular admission to the Carpentry program are:

Education: High school diploma or equivalent is not required for admis-

sion; however, students will not be allowed to graduate and receive a diploma until they have first earned a high school

diploma or GED certificate

Tests: Appropriate placement test scores for program admission

Age: 16 years and older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students may take certain developmental studies courses and/or occupational courses as designated by standards governing the program. The requirements for provisional admission are:

Education: The same as for regular admission status

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

## **Associate Degree Opportunity**

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

# **CARPENTRY CURRICULUM**

Required Courses	Credit Hours
ENG 100 English	5
MAT 101 General Mathematics	5
PSY 100 Interpersonal Relations	3
CAR 101 Safe Use of Hand and Power Tools	5
CAR 103 Materials	5
CAR 105 Print Reading	5
CAR 107 Site Layout, Footings, and Foundations	4
CAR 110 Floor Framing	3
CAR 111 Wall Framing	3
CAR 112 Ceiling and Roof Framing	6
CAR 114 Roof Covering	1
CAR 115 Insulation, Interior Wall and Ceiling Cove	erings 4
CAR 117 Interior Trim	2
CAR 118 Exterior Finishes and Trim	5
and the Residential Carpentry Specialization	
CAR 121 Cornice and Soffit	1
CAR 123 Finish Floors	3
CAR 125 Interior Doors	2
CAR 126 Stairs	3
CAB 101 Cabinet Design and Layout (or elective)	2
CAB 102 Cabinet Assembly I ( or elective)	5
Credits required for graduation:	72

## COMPUTER PROGRAMMING

## **Program Description**

Computer Programming students learn the concepts, principles, and techniques of writing computer software for business applications. Students use a main-frame data processing system to test their programs, solve problems, maintain records, and store data.

## **Employment Opportunities**

Graduates are qualified for jobs as entry-level business computer programmers and computer support personnel with financial institutions, hospitals, insurance companies, manufacturers, government, agencies, and educational institutions.

## **Program Length**

A full-time student can complete the 111 credits required for a diploma in 5 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall and Spring entry dates are recommended because they provide the applicant with the best course scheduling sequence. Entry is possible in any quarter offering required or elective courses that accept beginning students.

# **Entrance Requirements**

The requirements for regular admission to the program are:

Education: High school diploma or equivalent (GED)

Tests: Appropriate placement test scores for program admission

Age: 16 years and older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students may take certain developmental studies courses and/or occupational courses as designated by standards governing the program. The requirements for provisional admission are:

#### Education:

High school diploma or equivalent is not required for admission; however, students will not be allowed to graduate and receive a diploma until they have first earned a high school diploma or GED certificate

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

#### Associate Degree Opportunity

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

#### COMPUTER PROGRAMMING CURRICULUM

Required Cours			Courses	Credit Hours
ENG111		111	Business English	5
	ENG	112	Business Communications	5
	MAT	111	Business Math	5
	PSY	100	Interpersonal Relations	3
			Principles of Accounting I	5
	ACC	102	Principles of Accounting II	5
			Keyboarding	3
	CIS	102	Introduction to Computers	6
	CIS	103	Operating Systems Concepts	4
	CIS	105	Program Design and Development	5
	CIS	112	Systems Analysis and Design	4
	CIS	113	COBOL I	8
	CIS	114	COBOL II	8
	CIS	214	Database Management	6
	and t	he fo	ollowing related electives:	
	XXX	XXX	Advisor recommended related electives	15
	plus	Lang	ruage Electives: (24 hrs. as approved by instructor)	
	CIS	215	COBOL III	8
	CIS	216	COBOL IV	8
			RPG Programming I	8
	CIS		RPG Programming II	8
			Credits required for graduation:	111

#### COSMETOLOGY

#### **Program Description**

This program provides classroom and salon-based training that prepares students to successfully take the licensing examination given by the Georgia Board of Cosmetology. Students develop skills in haircutting, styling, waving, tinting, bleaching, safety, sanitation, and customer relations.

## **Employment Opportunities**

Graduates find employment as cosmetology salespersons, cosmetologists, hair stylists, receptionists, salon managers, and as independent salon operators.

#### **Program Length**

A full-time student can complete the 71 credits and 1500 unit hours required for a diploma in 4 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

# **Entrance Requirements**

The requirements for regular admission to the Cosmetology program are:

Education: High school diploma or equivalent is not required for admis-

sion. Completion of the 9th grade is required and students will not be allowed to graduate and receive a diploma until they have first earned a high school diploma or GED certificate

Tests: Appropriate placement test scores for program admission

Age: 16 years and older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students may take certain developmental studies courses and/or occupational courses as designated by standards governing the program. The requirements for provisional admission are:

Education: The same as for regular admission status

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

## **Associate Degree Opportunity**

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

## COSMETOLOGY CURRICULUM

Requ	ired	Courses	Credit Hours
ENG	101	English	5
		Basic Mathematics	3
PSY	100	Interpersonal Relations	3
		Introduction to Cosmetology Theory	5
		Introduction to Permanent Waving/Relaxing	2
cos	102	Introduction to Hair Color	4
cos	103	Introduction to Skin, Scalp, and Hair	2
cos	104	Introduction to Manicuring & Pedicuring	1
		Introduction to Shampooing & Styling	3
cos	106	Introduction to Haircutting	2
cos	107	Haircutting Techniques	2
		Permanent Waving and Relaxing	3
cos	109	Hair Color	2
cos	110	Skin, Scalp, and Hair	2
cos	111	Styling	3
cos	112	Manicuring and Pedicuring	1
		Practicum I	4
cos	114	Practicum II	8
cos	115	Practicum/Internship I	4
cos	116	Practicum/Internship II	5
		Salon Management	4
XXX	XXX	Occupationally Related Electives	3
		Credits required for graduation:	71

#### DRAFTING

## **Program Description**

This program prepares students for a career in the broad field of drafting. Instruction stresses the skills and techniques required to produce quality graphic documents used in engineering, architecture, and industry. Computer assisted drafting (CAD) equipment is an integral part of the program.

# **Employment Opportunities**

Graduates find employment with engineering firms, manufacturers, government agencies, planning commissions, and home builders.

## **Program Length**

A full-time student can complete the 69 credits required for a diploma in 4 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

#### **Entrance Requirements**

The requirements for regular admission to the Drafting program are:

Education: High school diploma or equivalent is not required for admis-

sion; however, students will not be allowed to graduate and receive a diploma until they have first earned a high school

diploma or GED certificate

Tests: Appropriate placement test scores for program admission

Age: 16 years and older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students may take certain developmental studies courses and/or occupational courses as designated by standards governing the program. The requirements for provisional admission are:

Education: The same as for regular admission status

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Age: 16 years and older

#### Transfer Students

Transfer students who were regularly admitted and who were in good standing

in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

#### Associate Degree Opportunity

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

## **DRAFTING CURRICULUM**

Required Courses	<b>Credit Hours</b>
CMP 101 Introduction to Microcomputers	3
ENG 101 English	5
MAT 103 Algebraic Concepts	5
MAT 104 Geometry and Trigonometry	5
PSY 100 Interpersonal Relations	3
DDF 101 Introduction to Drafting	6
DDF 102 Size and Shape Description I	5
DDF 103 Size and Shape Description II	5
DDF 104 Pictorial Drawing	3
DDF 105 Auxiliary Views	3
DDF 106 Fasteners	3
DDF 107 Introduction to CAD	5
DDF 108 Intersections and Development	5
DDF 109 Assembly Drawings I	5
DDF 110 Assembly Drawings II	5
XXX XXX Technically Related Electives	3
Credits required for graduation:	69
Suggested elective:	
DDS 202 Advanced CAD	6
Note: Students may substitute these courses for DDF 1	09 and DDF 110
DDS 205 Residential Architectural Drawing I	6
DDS 208 Residential Architectural Drawing II	6

#### **ELECTRONICS TECHNOLOGY**

#### **Program Description**

This sequence of courses prepares students for careers in the Electronics Technology profession. Students discover the basic principles of electronics and utilize algebra to do lab projects involving electronic circuits, semiconductors, transistors, and other components of electronic systems.

#### **Employment Opportunities**

Electronic technician, test technician, instrumentation technician, assembly technician, electronic assembler, maintenance mechanic, robotics technician, field technician, and quality control technician.

#### **Program Length**

A full-time student can complete the 121 credits required for a diploma in 6 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

# **Entrance Requirements**

The requirements for regular admission to the program are:

Education: High school diploma or equivalent is not required for admis-

sion; however, students will not be allowed to graduate and receive a diploma until they have first earned a high school

diploma or GED certificate

Tests: Appropriate placement test scores for program admission

Age: 16 years and older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students may take certain developmental studies courses and/or occupational courses as designated by standards governing the program. The requirements for provisional admission are:

Education: The same as for regular admission status

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

#### **Associate Degree Opportunity**

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

## **ELECTRONICS TECHNOLOGY CURRICULUM**

Required Courses			Credit Hours
ENG	102	Technical Writing	5
		Algebraic Concepts	5
		Trigonometry	5
PSY	100	Interpersonal Relations	3
ELC	104	Soldering Technology I	1
ELC	106	Direct Current Circuits I	4
ELC	108	Direct Current Circuits II	7
ELC	109	Alternating Current I	7
ELC	110	Alternating Current II	7
ELC	111	Electronics Microcomputer Applications I	3
		Electronics Microcomputer Applications II	3
ELC	114	Solid State Devices I	7
ELC	115	Solid State Devices II	4
ELC	116	Soldering Technology II	1
ELC	117	Linear Integrated Circuits	7
ELC	118	Digital Electronics I	7
ELC	119	Digital Electronics II	7
ELC	120	Microprocessor I	7
ELC	121	Microprocessor II	4
ELC	122	Microprocessor Interfacing	7
ELC	123	Communications Electronics Survey	7
		Industrial Electronics Survey	4
XXX	XXX	Technical or Related Electives	9
		Credits required for graduation:	121

#### ADVANCED ELECTRONICS TECHNOLOGY

#### **Program Description**

This sequence of courses allows those who have completed the course work required for a diploma in Electronics Technology to continue their studies. A diploma in Advanced Electronic Technology may be earned by completing the Electronics Technology program and one Advanced Electronics Technology specialization. Students may choose to specialize in Computer Electronics Technology, Industrial Electronics Technology, or Communications Electronics Technology.

#### **Employment Opportunities**

Advanced electronic technician, test technician, instrumentation technician, assembly technician, electronic assembler, maintenance mechanic, robotics technician, field technician, and quality control technician.

#### **Program Length**

A full-time student can complete the 157 credits required for a diploma in 8 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

## **Entrance Requirements**

The requirements for regular admission to the Advanced Electronics Technology program are the same as those for Electronics Technology.

#### **Transfer Students**

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

#### ADVANCED ELECTRONICS TECHNOLOGY CURRICULUM

Required Courses		Courses	Credit Hours
<b>ENG</b>	102	Technical Writing	5
MAT	103	Algebraic Concepts	5
MAT	105	Trigonometry	5
PSY	100	Interpersonal Relations	3
ELC	104	Soldering Technology I	1
ELC	106	Direct Current Circuits I	4
ELC	108	Direct Current Circuits II	7
ELC	109	Alternating Current I	7
ELC	110	Alternating Current II	7

# **DIPLOMA CREDIT PROGRAMS**

		Electronics Microcomputer Applications I	3
		Electronics Microcomputer Applications II	3
ELC	114	Solid State Devices I Solid State Devices II	7
ELC	115	Solid State Devices II	4 1 7 7 7
ELC	116	Soldering Technology II	1
ELC	117	Linear Integrated Circuits	7
<b>ELC</b>	118	Digital Electronics I	7
ELC	119	Digital Electronics II	7
ELC	120	Microprocessor I	7
ELC	121	Microprocessor II	7 4 7 7
ELC	122	Microprocessor Interfacing	7
ELC	123	Communications Electronics Survey	7
ELC	124	Industrial Electronics Survey	4
and (	one o	f the following Advanced Electronics Specialization	ons:
		Electronics Technology Specialization	
		Introduction to Computer Architecture	4
ELC	201	Computer Peripherals	4
ELC	202	Networking I Operating Systems I	3
ELC	203	Operating Systems I	3
ELC	204	Compiled High Level Language	3
ELC	205	Data Communications Networking II	2
ELC	206	Networking II	3
ELC	207	Operating Systems II	3 3 3 2 3 3 3
		Computer System Trouble Shooting	
XXX	XXX	Technical or Tech. Related Electives	17
		Credits Required for Graduation:	157
		Electronics Technology Specialization	
		Process Control	7
ELC	212	Motor Controls Programmed Controls	7
ELC	213	Programmed Controls	7 3 3
ELC	214	Indust. Electronics Mechanical Drives	3
ELC	215	Fluid Power for Industrial Electronics	3
		Industrial Robotics	3
XXX	XXX	Technical or Tech. Related Electives	15
		Credits Required for Graduation:	157
		cations Electronics Technology Specialization	7
ELC	220	AM and SSB Circuit Analysis FM Circuit Analysis	4
			4
		Advanced Modulation Techniques Antennae and Transmission Lines	7
ELC	223	Microwave Communications and Radar	7
			7 7 7
		Optical Communications Techniques Technical or Tech. Related Electives	9
^^^	^^^	Credits Required for Graduation:	157
		Cieulo Regulleu IVI GiduuduVII.	101

#### INDUSTRIAL ELECTRICAL TECHNOLOGY

## **Program Description**

The Industrial Electrical Technology program consists of classroom and lab training in electrical wiring, motor controls and control systems, electrical code requirements, and the maintenance of electrical equipment. Emphasis is placed on the installation, programming, and use of programmable logic controllers.

## **Employment Opportunities**

Graduates find employment with electrical contractors, the maintenance departments of area industries, with government agencies, and with various businesses that install electrical devices.

#### **Program Length**

A full-time student can complete the 88 credits required for a diploma in 5 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

#### **Entrance Requirements**

The requirements for regular admission to the program are:

Education: High school diploma or equivalent is not required for admis-

sion; however, students will not be allowed to graduate and receive a diploma until they have first earned a high school

diploma or GED certificate

Tests: Appropriate placement test scores for program admission

Age: 16 years and older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students may take certain developmental studies courses and/or occupational courses as designated by standards governing the program. The requirements for provisional admission are:

Education: The same as for regular admission status

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

## **Associate Degree Opportunity**

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

# INDUSTRIAL ELECTRICAL TECHNOLOGY CURRICULUM

Required Courses			Credit Hour
ENG	101	English	5
		General Mathematics	5
PSY	100	Interpersonal Relations	3
CMP	101	Introduction to Microcomputers	3
ELT	101	Safety	2
ELT	102	Electricity Principles	9
ELT	103	Residential Wiring I	4
ELT	104	Residential Wiring II	4
ELT	105	Residential Wiring III	3
ELT	106	Electrical Prints, Schematics, Symbols	3
ELT	107	Commercial Wiring I	4
ELT	108	Commercial Wiring II	4
ELT	109	Commercial Wiring III	4
ELT	111	Single Phase and Three Phase Motors	5
ELT	112	Variable Speed Controls	7
ELT	113	Programmable Logic Control I	4
ELT	114	Programmable Logic Control II	2
ELT	115	Diagnostic Trouble Shooting	2
ELT	116	Transformers	4
ELT	117	National Electrical Code Industrial Applications	4
ELT	118	Electrical Controls	7
		Credits required for graduation:	88

#### INDUSTRIAL MAINTENANCE

#### **Program Description**

The Industrial Maintenance program prepares students for employment in a variety of positions in the industrial field of production equipment maintenance. Topics covered by the program generally address the maintenance needs of companies served by Coosa Valley Technical Institute.

#### **Employment Opportunities**

Graduates find employment as industrial maintenance trainees with local or regional businesses and industries.

#### **Program Length**

A full-time student can complete the 78 credits required for a diploma in 4 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

#### **Entrance Requirements**

The requirements for regular admission to the program are:

Education: High school diploma or equivalent is not required for admis-

sion; however, students will not be allowed to graduate and receive a diploma until they have first earned a high school

diploma or GED certificate

Tests: Appropriate placement test scores for program admission

Age: 16 years and older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students may take certain developmental studies courses and/or occupational courses as designated by standards governing the program. The requirements for provisional admission are:

Education: The same as for regular admission status

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Age: 16 years and older

#### Transfer Students

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

**Associate Degree Opportunity** 

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

# INDUSTRIAL MAINTENANCE CURRICULUM

Requ	Credit Hour		
ENG	101	English	5
		Algebraic Concepts	5
		Interpersonal Relations	3
		Introduction to Microcomputers	3
		Direct Current Circuits I	4
ELC	109	Alternating Current I	7
		Industrial Maintenance Safety Procedures	2
		ourse work for one or both of the following s	pecializations:
Elect	rical	Specialization	
		Programmable Logic Controls I	4
		Programmable Logic Controls II	2
IMT	118	DC and AC Motors	4
IMT	119	Fundamentals of Motor Controls	4
IMT	120	Magnetic Starters & Breaking	4
IMT	121	Two-wire Control Circuits	3
		Advanced Motor Controls	3
IMT	123	Variable Speed Motor Controls	4
		PLC Practicum	4
IMT	129	Industrial Wiring I	5
		Industrial Wiring II	5
		Industrial Maintenance Electrical Review	3
XXX	XXX	Technical or Tech. Related Electives	4
		Credits Required for Graduation:	78
		al Specialization	
		Refrigeration Fundamentals	4
		Lathe Operations I	7
		Metal Welding & Cutting Techniques	3
		Industrial Mechanics I	7
		Industrial Mechanics II	6
		Industrial Hydraulics	8
		Pneumatics I	4
IMT	128	Pumps and Piping Systems	2
		Industrial Maintenance Mechanical Review	3
XXX	XXX	Technical or Tech. Related Electives	5
		Credits Required for Graduation:	78

#### INFORMATION AND OFFICE TECHNOLOGY

## **Program Description**

The Information and Office Technology program prepares students for employment in a variety of positions in today's automated office. Graduates of the program have skills in typing, word processing, information processing, and communications. An Information and Office Technology diploma with specialization in either Information Processing Specialist or Secretary is awarded.

#### **Employment Opportunities**

Graduates find employment as receptionists, typists, general office clerks, terminal system operators, secretaries, and information processing specialists.

# **Program Length**

A full-time student can complete the 70 credits required for a diploma in 4 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

## **Entrance Requirements**

The requirements for regular admission to the Information & Office Technology program are:

Education: High school diploma or equivalent is not required for admis-

sion; however, students will not be allowed to graduate and receive a diploma until they have first earned a high school

diploma or GED certificate

Tests: Appropriate placement test scores for program admission

Age: 16 years and older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students may take certain developmental studies courses and/or occupational courses as designated by standards governing the program. The requirements for provisional admission are:

Education: The same as for regular admission status

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

#### **Associate Degree Opportunity**

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

# INFORMATION AND OFFICE TECHNOLOGY CURRICULUM

Required Courses	Credit Hours			
ENG 111 Business English	5			
ENG 112 Business Communications	5			
MAT 111 Business Math	5			
PSY 100 Interpersonal Relations	3			
BUS 101 Keyboarding/Typewriting	5			
BUS 102 Intermediate Typewriting	5			
BUS 103 Advanced Typewriting	5			
BUS 104 Microcomputer Fundamentals	5			
BUS 106 Office Procedures	4			
BUS 107 Machine Transcription	3			
BUS 108 Word Processing	5			
and completion of one or both of the following specializations:				
Information Processing Specialist				
BUS 105 Database Fundamentals	3			
BUS 201 Advanced Word Processing	3			
BUS 202 Spreadsheet Fundamentals	3			
BUS 204 Information Processing Specialist Internship				
or Extra Electives	6			
XXX XXX Occupationally Related Electives	5			
Credits required for graduation:	70			
Secretary				
BUS 201 Advanced Word Processing	3			
BUS 208 Office Accounting	4			
BUS 221 Secretary Internship or Extra Electives	6			
XXX XXX Occupationally Related Electives	7			
Credits required for graduation:	70			

## MACHINE TOOL TECHNOLOGY

#### **Program Description**

The Machine Tool Technology program is a sequence of class and lab courses that provide students with the skills necessary for employment as machinists. The program covers the operation and set-up of general machine shop equipment, characteristics of metals, and computer/CNC literacy.

# **Employment Opportunities**

Graduates of the Machine Tool Technology program are qualified to work as grinder operators, milling machine operators, lathe operators, drill press operators, and as machinist/CNC operators.

## **Program Length**

A full-time student can complete the 85 credits required for a diploma in 4 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

# **Entrance Requirements**

The requirements for regular admission to the program are:

Education: High school diploma or equivalent is not required for admis-

sion; however, students will not be allowed to graduate and receive a diploma until they have first earned a high school

diploma or GED certificate

Tests: Appropriate placement test scores for program admission

Age: 16 years and older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students may take certain developmental studies courses and/or occupational courses as designated by standards governing the program. The requirements for provisional admission are:

Education: The same as for regular admission status

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

#### Associate Degree Opportunity

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

## MACHINE TOOL TECHNOLOGY CURRICULUM

Required Courses	Credit Hours
ENG 101 English	5
MAT 101 General Mathematics	5
PSY 100 Interpersonal Relations	3
MCH 101 Introduction to Machine Tool	6
MCH 102 Blueprint Reading for Machine Tool	5
MCH 104 Machine Tool Math I	5
MCH 105 Machine Tool Math II	5
MCH 107 Characteristics of Metal/Heat Treat.	4
MCH 109 Lathe Operations I	7
MCH 110 Lathe Operations II	6
MCH 112 Surface Grinder Operations	6
MCH 114 Blueprint Reading II	5
MCH 115 Mill Operations I	7
MCH 116 Mill Operations II	6
MCH 118 Computer/CNC Literacy	5
XXX XXX Electives	5
Credits required for graduation:	85

#### ADVANCED MACHINE TOOL TECHNOLOGY

## **Program Description**

The Advanced Machine Tool Technology program provides graduates of the Machine Tool Technology program and others with the opportunity to continue training in one or more areas of specialization. A student may earn an Advanced Machine Tool Technology diploma with specialization as Advanced General Machinist, CNC Specialist, and/or Tool & Die Specialist. Elective credit earned by Machine Tool Technology graduates can be applied to the requirements for any of the following Advanced Machine Tool Technology specializations.

#### Program Length

A full-time student can complete the 123 credits required for a diploma in 7 quarters. Actual program length will depend upon the credit hours earned per quarter.

## **Employment Opportunities**

Depending upon area(s) of specialization, a graduate may be employed as a machinist, CNC operator, CNC programmer, or tool & die maker.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

## **Entrance Requirements**

The requirements for regular admission to are:

Education: High school diploma or equivalent is not required for admis-

sion; however, students will not be allowed to graduate and receive a diploma until they have first earned a high school

diploma or GED certificate

Tests: Appropriate placement test scores for program admission

Age: 16 years and older

#### **Transfer Students**

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

# ADVANCED MACHINE TOOL TECHNOLOGY CURRICULUM

Credit Hours	
5	
5	
3	

# **DIPLOMA CREDIT PROGRAMS**

MCH 101	Introduction to Machine Tool	6
MCH 102	Blueprint Reading for Machine Tool	5
MCH 104	Machine Tool Math I	5
MCH 105	Machine Tool Math II	5
MCH 107	Characteristics of Metal/Heat Treat.	4
MCH 109	Lathe Operations I	7
MCH 110	Lathe Operations II	6
MCH 112	Surface Grinder Operations	6
MCH 114	Blueprint Reading II	6 5 7 6 5
MCH 115	Mill Operations I	7
MCH 116	Mill Operations II	6
MCH 118	Computer/CNC Literacy	5
XXX XXX	X Electives	5
	Machine Tool Technology Credits:	85
and com	pletion of one or more of the following sp	ecializations:
Advance	d General Machinist	
MCA 201	Advanced Milling I	7
MCA 203	Advanced Milling II	6
	Advanced Lathe Operations I	7
MCA 207	Advanced Lathe Operations II	6
MCA 208	Advanced Grinding I	4 3
MCA 209	Advanced Grinding II	3
XXX XXX	K Electives	5
	Total credits required for graduation:	123
CNC Spe		
	CNC Fundamentals	7
	CNC Mill Manual Programming	7
	CNC Lathe Manual Programming	7
	CNC Practical Applications	6
	CAD/CAM Programming	6
XXX XX	X Electives	5
	Total credits required for graduation:	123
	Die Specialist	
	Die Design I	6
	Die Construction I	5
	B Die Design II	7 5
	Die Construction II	5
	Machining Math III	4
	3 Characteristics of Metal/Heat Treat. II	5
XXX XXX	Electives	123
	Total credits required for graduation:	123

# MARKETING MANAGEMENT

## **Program Description**

The Marketing Management program prepares students for employment in a variety of positions with department and specialty stores, and in general sales. Topics covered include buying, merchandising, sales promotion, customer service, management and supervision, and entrepreneurship.

## **Employment Opportunities**

Employment may be as a store manager, buyer, manager trainee, sales representative, merchandise manager, customer service representative, or display advertiser.

# **Program Length**

A full-time student can complete the 88 credits required for a diploma in 4 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

## **Entrance Requirements**

The requirements for regular admission to the program are:

Education: High school diploma or equivalent (GED)

Tests: Appropriate placement test scores for program admission

Age: 16 years and older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students may take certain developmental studies courses and/or occupational courses as designated by standards governing the program. The requirements for provisional admission are:

Education: The same as for regular admission status

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Age: 16 years and older

#### **Transfer Students**

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

# **Associate Degree Opportunity**

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

# MARKETING MANAGEMENT CURRICULUM

Requ	ired	Courses Cre	dit Hours
ACT	101	Principles of Accounting I	5
CMP	101	Introduction to Microcomputers	3
<b>ENG</b>	111	Business English	5
<b>ENG</b>	112	Business Communications	5
MAT	111	Business Math	5
PSY	100	Interpersonal Relations	3
MKT	100	Introduction to Marketing	5
MKT	101	Principles of Management	5
<b>MKT</b>	103	Business Law	5
MKT	104	Principles of Economics	5
MKT	106	Fundamentals of Selling	5
MKT	107	Buying	5
MKT	108	Advertising	4
MKT	109	Visual Merchandising	4
and t	he fo	llowing for a Marketing Administration Specialization	diploma
MKT	110	Entrepreneurship	8
MKT	130	Marketing Admin. Occupationally-Based Instruction I	3
MKT	131	Marketing Admin. Occupationally-Based Instruction II	3
XXX	XXX	Occupationally Related Electives	10
		Credits required for graduation:	88
and/d	or the	e following for a Retail Management Specialization di	oloma:
MKT	125	Retail Operations Management	5
MKT	136	Retail Management Occupationally-Based Instruction I	3
MKT	137	Retail Management Occupationally-Based Instruction II	3
XXX	XXX	Occupationally Related Electives	13
		Credits required for graduation:	88

#### MEDICAL ASSISTING

## **Program Description**

The Medical Assisting program combines business and medical courses to prepare individuals for employment in a physician's office or other health care facility. The business subjects cover typing, basic accounting, filing, receptionist duties, insurance, and related skills needed for the administrative activities of a physician's office. The medical courses cover medical terminology, anatomy, pharmacology, lab techniques, EKG, CPR, injections, vital signs, and techniques for assisting the physician in patient care.

## **Employment Opportunities**

Graduates find employment in private physician's offices, clinics, emergency care facilities, hospitals, and with other health care organizations.

### **Program Length**

A full-time student can complete the 81 credits required for a diploma in 4 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall entry is possible. Applicants are encouraged to enter business classes in the Spring or Summer for typing or other credit courses. Limits on class size make early application advisable.

## **Entrance Requirements**

The requirements for regular admission to the program are:

Education: High school diploma or equivalent required for admission

Tests: Appropriate placement test scores for program admission

Age: 17 years and older

Other: Medical and dental exam, personal references.

#### **Transfer Students**

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

### **Associate Degree Opportunity**

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

# MEDICAL ASSISTING CURRICULUM

Requ	ired	Courses	Credit Hour
ENG	101	English	5
MAT	101	General Mathematics	5
PSY	101	Psychology	5
AHS	101	Anatomy and Physiology	5
BUS	101	Keyboarding/Typewriting	5
BUS	106	Office Procedures	3
MAS	101	Medical Law and Ethics	2
AHS	109	Medical Terminology for Allied Health	3
MAS	103	Pharmacology	5
MAS	104	Medical Administrative Procedures I	3
MAS	105	Medical Administrative Procedures II	5
MAS	108	Medical Assisting Skills I	5
MAS	109	Medical Assisting Skills II	5
MAS	112	Human Diseases	5
MAS	113	Maternal and Child Care	5
MAS	117	Medical Assisting Externship	6
MAS	118	Medical Assisting Seminar	4
BUS	104	Elective: Microcomputer Fundamentals	5
		Credits required for graduation:	81

### MICROCOMPUTER SPECIALIST

## **Program Description**

The Microcomputer Specialist program is designed to prepare students for entry-level jobs using microcomputers, terminals, and data-entry systems. Business applications utilizing spreadsheet, database, and word processing software is included

## **Employment Opportunities**

Graduates may find employment in data entry, computer sales, and as computer support personnel.

## **Program Length**

A full-time student can complete the 98 credits required for a diploma in 5 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

## **Entrance Requirements**

The requirements for regular admission to the program are:

Education: High school diploma or equivalent (GED)

Tests: Appropriate placement test scores for program admission

Age: 16 years and older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students may take certain developmental studies courses and/or occupational courses as designated by standards governing the program. The requirements for provisional admission are:

Education: High school diploma or equivalent is not required for admis-

sion; however, students will not be allowed to graduate and receive a diploma until they have first earned a high school

diploma or GED certificate

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Age: 16 years and older

#### **Transfer Students**

Transfer students who were regularly admitted and who were in good standing

in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

## **Associate Degree Opportunity**

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

## MICROCOMPUTER SPECIALIST CURRICULUM

Required Courses		<b>Credit Hours</b>	
ENG	111	Business English	5
<b>ENG</b>	112	Business Communications	5
MAT	111	Business Math	5
PSY	100	Interpersonal Relations	3
		Principles of Accounting I	5
		Principles of Accounting II	5
		Keyboarding	3
CIS	102	Introduction to Computers	6
CIS	103	Operating Systems Concepts	4
CIS	105	Program Design and Development	5
CIS	122	Microcomputer Installation/Maintenance	3
CIS	123	Microcomputer Productivity Tools	8
		Microcomputer Database Programming	8
CIS		Advanced Microcomputer Productivity Tools	8
and i	Relat	ed Electives	
XXX	XXX	Occupational (CIS Prefix) elective	4
XXX	XXX	Advisor recommended related electives	13
plus	Lang	guage Electives (8 hrs. as approved by instructor)	
XXX	XXX	Advisor recommended language electives	8
		Credits required for graduation:	98

# PARAMEDIC TECHNOLOGY

## **Program Description**

The Paramedic Technology program prepares persons who have a minimum of six months experience working as basic EMTs for certification as paramedics and appropriate employment in the health services field. Graduates of the program receive an Paramedic Technology diploma and are eligible to sit for the paramedic certification test.

**NOTE**: Coosa Valley Technical Institute offers the Basic Emergency Medical Technician course required for entry into this program. For information on Basic EMT training, call 235-6756.

## **Employment Opportunities**

Graduates find employment with emergency medical services, hospital emergency rooms, the military, industry, clinics, and local fire and police services.

## **Program Length**

A full-time student can complete the 58 credits required for a diploma in 4 quarters. Actual program length will depend upon the credit hours earned per quarter.

### **Entrance Date**

Classes for Paramedic Technology students begin in October. Persons who need the Basic EMT course may enter in January or July. Early application is encouraged.

### **Entrance Requirements**

The requirements for regular admission to the program are:

Education: High school diploma or equivalent (GED) and be currently

certified as a Basic Emergency Technician and documentation

of six months experience working as a basic EMT

Tests: Appropriate placement test scores for program admission

Age: 18 years and older (furnish birth certificate)

Other: Pass written and practical exam on Basic EMT skills, Recom-

mendation from medical director where employed, 3 letters of reference, Have a valid Georgia driver's license, No felony convictions, Not dependent on drugs/alcohol (statement required)

## **Basic EMT Program Entrance Requirements**

This 220 clock-hour program has the same basic education, test, and age requirements as above plus 3 letters of reference, a valid Georgia driver's license, no felony convictions, and not dependent on drugs/alcohol (statement required)

#### **Transfer Students**

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

### **Associate Degree Opportunity**

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 45 to 50 quarter hours of academic course work at Floyd College. See page 92 for complete information.

# PARAMEDIC TECHNOLOGY CURRICULUM

Required Courses Cre		Credit Hour	
ENG	101	English	5
MAT	100	Basic Math	3
<b>EMS</b>	103	Introduction to the Paramedic Profession	5
<b>EMS</b>	105	Fluids, Electrolytes and Shock	2
<b>EMS</b>	106	General Pharmacology	2
<b>EMS</b>	107	Respiratory Function and Management	4
<b>EMS</b>	108	Cardiology	9
<b>EMS</b>	109	Trauma	5
<b>EMS</b>	111	Medical Emergencies I	3
<b>EMS</b>	112	Medical Emergencies II	3
<b>EMS</b>	113	Obstetrics/Gynecology	1
<b>EMS</b>	114	Pediatrics	2
<b>EMS</b>	116	Behavioral Emergencies	1
<b>EMS</b>	118	Clinical Applications of Advanced Emergency Care	12
XXX	XXX	Occupational Electives	3
		Credits required for graduation:	58

### PRACTICAL NURSING

## **Program Description**

The Practical Nursing program is designed to prepare students to write the State Board Examination in Georgia for licensure as practical nurses. It consists of a series of theory courses and supervised clinical experiences; some of which are conducted in local health care centers. The goal of the Practical Nursing program is to prepare graduates to give safe and competent nursing care.

### **Employment Opportunities**

Graduates find employment in hospitals, clinics, nursing homes, and other health care centers.

### **Program Length**

A full-time student can complete the 94 credits required for a diploma in 5 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

## **Entrance Requirements**

The requirements for regular admission to the program are:

Education: High school diploma or equivalent (GED) documentation

Tests: Appropriate placement test scores for program admission

Age: 17 years and older

Other: Physical and dental report, Two personal references

#### **Transfer Students**

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

#### **Associate Degree Opportunity**

Graduates of the Practical Nursing program are given advanced standing in the Associate of Science in Nursing degree program at Floyd College upon completion of one year of successful employment and passing an advanced placement examination.

# PRACTICAL NURSING CURRICULUM

Required Courses	Credit Hours
ENG 101 English	5
MAT 101 General Mathematics	5
PSY 101 Psychology	5
AHS 101 Anatomy and Physiology	5
AHS 102 Drug Calculation and Administration	3
AHS 103 Nutrition and Diet Therapy	2
NPT 112 Nursing Process II (Practicum)	8
NPT 113 Nursing Process III (Practicum)	8
NPT 214 Nursing Process IV (Practicum)	5
NPT 215 Nursing Process V (Practicum)	3
NSG 111 Nursing Process I	12
NSG 112 Nursing Process II	9
NSG 113 Nursing Process III	9
NSG 214 Nursing Process IV	10
NSG 215 Nursing Process V	2
AHS 109 Elective: Medical Terminology for Allied Health	3
Credits required for graduation:	94

### RADIOLOGIC TECHNOLOGY

## **Program Description**

Radiologic technologist perform an important function in this rapidly growing branch of medicine. Radiologic technologists (radiographers) assist radiologists, physicians who specialize in the use of ionizing radiation, to help diagnose and treat disease and injury. As a radiographer, you will apply knowledge of anatomy, positioning, and radiographic techniques to accurately demonstrate anatomical structures on a radiograph. You will also use mobile radiographic equipment at a patient's bedside or in surgery.

## **Employment Opportunities**

Most radiologic technologists are usually employed in hospitals, but employment may also be found in a physician's office, industry, government, education, and with the armed forces. Experts say that job outlook is good for those professionals who are skilled and capable. Advancement opportunities for certified radiologic technologists are numerous. With additional training, such opportunities include: nuclear medicine, ultrasound, radiation therapy, CAT scanning, special procedures, MRI, administration, and education.

## **Program Length**

A full-time student can complete the 126 credits required for a diploma in 8 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall entry is possible; however, limits on class size make early application advisable.

#### **Entrance Requirements**

The requirements for regular admission to the program are:

Education: High school diploma or equivalent (GED) documentation

Tests: Appropriate placement test scores for program admission

Age: 17 years and older

Other: Physical and dental report. Two personal references

#### Transfer Students

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

# **Associate Degree Opportunity**

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 45 to 50 quarter hours of academic course work at Floyd College. See page 92 for complete information.

# RADIOLOGIC TECHNOLOGY CURRICULUM

Requ	ired	Courses	Credit Hours
ENG	101	English	5
		Algebraic Concepts	5
		Interpersonal Relations	3
		Anatomy and Physiology	5
		Medical Terminology for Allied Health	3
		Introduction to Radiography	6
		Radiographic Procedures I	3
		Radiographic Procedures II	3
		Principles of Radiographic Exposure I	4
		Radiographic Procedures III	3
		Radiologic Science I	5
		Radiographic Procedures IV	5 2 2
RAD	114	Radiologic Science II	2
RAD	116	Principles of Radiographic Exposure II	3
		Radiographic Imaging Equipment	4
RAD	118	Special Radiologic Procedures I	3
RAD	119	Radiographic Pathology	3
RAD	120	Principles of Radiation Biology & Protection	5
		Radiologic Technology Review	4
RAD	132	Introduction to Clinical Radiography I	4
RAD	133	Introduction to Clinical Radiography II	7
		Intermediate Clinical Radiography	7
		Intermediate Clinical Radiography II	7
		Intermediate Clinical Radiography III	7
		Advanced Clinical Radiography I	9
		Advanced Clinical Radiography II	9
		Elective: Advanced Anatomy and Physiology	5
DIS	150	Directed Individual Study	1
		Credits required for graduation:	126

## RESIDENTIAL/COMMERCIAL WIRING

### **Program Description**

The Residential/Commercial Wiring program consists of classroom and lab training in electrical wiring, motor controls and control systems, electrical code requirements, and the maintenance of electrical equipment. Special emphasis is placed on the installation, programming, and use of programmable logic controllers

## **Employment Opportunities**

Graduates find employment with electrical contractors, the maintenance departments of area industries, with government agencies, and with various businesses that install electrical devices.

### Program Length

A full-time student can complete the 73 credits required for a diploma in 4 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible; however, limits on class size make early application advisable.

## **Entrance Requirements**

The requirements for regular admission to the program are:

Education: High school diploma or equivalent is not required for admis-

sion; however, students will not be allowed to graduate and receive a diploma until they have first earned a high school

diploma or GED certificate

Tests: Appropriate placement test scores for program admission

Age: 16 years and older

Provisional admission is afforded to applicants who do not meet program admission standards. Provisionally admitted students may take certain developmental studies courses and/or occupational courses as designated by standards governing the program. The requirements for provisional admission are:

Education: The same as for regular admission status

Tests: Appropriate placement test scores for provisional admission

or recommendation by program faculty and designated admissions personnel based upon interview and assessment of

student potential

Age: 16 years and older

#### **Transfer Students**

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

## **Associate Degree Opportunity**

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 36 to 41 quarter hours of academic course work at Floyd College. See page 92 for complete information.

## RESIDENTIAL/COMMERCIAL WIRING CURRICULUM

Required Courses		Credit Hours	
ENG	101	English	5
		General Mathematics	5
PSY	100	Interpersonal Relations	3
		Safety	2
ELT	102	Electricity Principles	9
		Residential Wiring I	4
		Residential Wiring II	4
ELT	105	Residential Wiring III	3
ELT	106	Electrical Prints, Schematics, Symbols	3
		Commercial Wiring I	4
		Commercial Wiring II	4
	109	Commercial Wiring III	4
		Single Phase and Three Phase Motors	5
	112	Variable Speed Controls	7
		Programmable Logic Control I	4
ELT		Electrical Controls	7
		Credits required for graduation:	73

## RESPIRATORY THERAPY TECHNOLOGY

## **Program Description**

Respiratory Therapy Technology provides students with instruction in the diagnostic and treatment procedures used for patients with respiratory conditions. The program includes mechanical ventilation, CPR, chest physical therapy, oxygen and humidity therapy, and pulmonary function testing.

## **Employment Opportunities**

Graduates find employment in general hospitals, VA hospitals, and clinics.

## **Program Length**

A full-time student can complete the 93 credits required for a diploma in 5 quarters. Actual program length will depend upon the credit hours earned per quarter.

#### **Entrance Date**

Fall entry is possible; however, limits on class size make early application advisable.

### **Entrance Requirements**

The requirements for regular admission to the program are:

Education: High school diploma or equivalent (GED) documentation

Tests: Appropriate placement test scores for program admission

Age: 17 years and older

Other: Documentation of a physician's examination, submission of an

immunization record, and completion of application and related

procedures.

#### **Transfer Students**

Transfer students who were regularly admitted and who were in good standing in a regionally accredited diploma or degree institution may be admitted upon proper completion of application and related procedures.

#### Associate Degree Opportunity

The Associate In Applied Science Degree may be earned by persons in this program who complete an additional 45 to 50 quarter hours of academic course work at Floyd College. See page 92 for complete information.

# RESPIRATORY THERAPY TECHNOLOGY CURRICULUM

Credit Hour
5
5
5
5
5
5
5
5
2
2
2 2 3
3
6
4
3
1
3
1
2
2
2
2
5
10
th 3
93

# TECHNICAL CERTIFICATES



#### **Certificate Curriculums**

A Technical Certificate of Credit is a complete body of study that: 1) does not lead by itself to a diploma; 2) normally requires no more than one year of study; and 3) is composed of courses that are related to an area of specialized study. The credentials that the student will receive after successfully completing a certificate curriculum will acknowledge training specialization in that field. The institution will also maintain records reflecting the course work attempted and grades earned. A transcript of such course work will be made available upon request by the student.

## When Courses/Programs Are Taught

Courses offered for certificate credit are typically the same as those offered for diploma credit and may be scheduled on a space-available basis during the hours 8:00 am - 2:30 pm and/or between 6:00 - 10:30 pm on Monday, Tuesday, Wednesday, or Thursday.

#### **Entrance Date**

Fall, Winter, Spring, and Summer entry is possible. The schedule for certificate programs will be published on a quarterly basis.

## Credit Awarded Upon Course Completion

Course work is designed to award diploma credit to applicants successfully completing the institution's admissions requirements. Certain certificate curriculums may include course work that can be applied only to certificates.

#### **Entrance Requirements**

The requirements for admission to a technical certificate curriculum are:

Education: High school diploma or equivalent is not required for admission;

however, students will not be allowed to graduate and receive a diploma until they have first earned a high school diploma or

**GED** certificate

Tests: Appropriate placement test scores for credit program admission

Age: 16 years and older

NOTE: Requirements may not be the same for all technical certificate curriculums.

## **Application Process**

- Check with the Student Services office for a schedule of courses and information on admission testing.
- Submit application, pay non-refundable application fee, and take admissions test

All applicants will receive notification of test results, advisement, and registration prior to the beginning of the term.

## Fees and Expenses

Tuition and fees are the same as that listed for diploma credit course work. Book costs vary but often equal the cost of tuition. Financial aid through Georgia's HOPE Grant is available to Georgia residents.

## **TECHNICAL CERTIFICATE CURRICULUMS**

Not all programs will be offered every quarter

Certificate curriculums include course work that can be applied as either certificate or diploma credit. Students may take one course or more courses per term from the following technical certificate curriculums:

#### Health/Medical

Basic EMT

Certified Nursing Assistant

Phlebotomy Technician
Paramedic/Respiratory Therapy Bridge

#### **Business/Computer**

P.C. Operations Legal Office Assistant

Computer Accounting Applications

Medical Receptionist

Medical Transcriptionist Business Computer Applications

Word Processing Applications

## **Management Services**

Supervisory Development Small Business Management

#### Skilled Trades

Auto Tune-up Specialist

Auto Front-end Alignment/Brake Specialist

Auto Body Repair Assisting

Small Engine Repair Motor Control Technician

Heating & Air Conditioning Assistant

Applied Industrial Electricity
Basic Electrical Fundamentals

Plumbing

**CAD Operator Training** 

Cabinet Making

**Production Welding** 

CNC Technician

Machine Shop Assistant

#### Personal Services

Child Care Worker Nail Technician

A list of the course work required for a technical certificate in any of the above curriculums is available from Coosa Valley Technical Institute (706) 235-1142

Coosa Valley Technical Institute will operate Technical Certificate curriculums on a regular schedule to enable those desiring such training to plan their schedules in advance. All curriculums are designed to provide completers with basic occupational skills.

**Note:** Whereas most certificate curriculums require no previous training, some do require previous training and/or work experience prior to admission.

# JOINT PROGRAMS WITH FLOYD COLLEGE



# Associate Degree Joint Programs With Floyd College

Joint programs leading to the Associate of Applied Science degree have been established by Coosa Valley Technical Institute and Floyd College. Students participating in joint programs may begin their studies at either institution, be enrolled in both institutions simultaneously, or complete the requirement at one institution before beginning studies at the other. Joint programs with Floyd College are open to presently enrolled and graduated Coosa Valley Technical Institute students who also meet the college's admission requirements for career programs.

Four joint programs leading to the Associate of Applied Science degree have been developed specifically for students in certain diploma programs at Coosa Valley Technical Institute. The four fields in which joint program leading to the associate degree have been developed are: Business, Allied Health Sciences, Technology, and Technical Studies.

Students take the required courses for a diploma or certificate at Coosa Valley Technical Institute and the quarter hour credits specified for each degree by Floyd College

# BUSINESS Associate In Applied Science Degree Program

This joint program requires completion of one of the following programs at Coosa Valley Technical Institution and 36 to 41 quarter hours at Floyd College. When students satisfactorily complete all course requirements at both schools, they will have earned a diploma from Coosa Valley Technical Institute and the Associate of Applied Science degree from Floyd College.

The program is intended for students who have completed or who are presently enrolled in one of the following programs at Coosa Valley Technical Institute:

Accounting
Business and Office Technology
Computer Programming
Information and Office Technology

Marketing Management Medical Assisting Microcomputer Specialist

# Courses required by Floyd College:

Course Number and Title	Credit Hours
*ENG 101 Composition I	
and *ENG 102 Composition II	
or *ENG 251 Technical, Profession	nal & Business Communication
or *BA 208 Business, Profession	al & Technical Communication
or *SPC 208 Fundamentals of Spe	ech
or ENG 171 Fundamental English	
and *SPC 208 Fundamentals of Spe	eech 10
*MAT 105 Principles of Mathematics	
or *MAT 111 College Algebra or M	AT 171 Mathematics I 5
HIS 100 U.S. & Georgia History	5
or *POL 101 American Government	
and *HIS 251 American History I or	*HIS 252 American History II #(10)
BA 200 Introduction to Business	5
ECO 202 Principles of Economics	5
PED 101 Concepts in Physical Educa	tion 2
PED 102 Concepts in Health Education	on 2
PED 106 Standard First Aid	2
Total Required Hours Fron	n Floyd College 36-41

Part of the UGA Core Curriculum which is transferrable to four-year institutions in the UGA system and most private colleges. Courses not preceded by an asterisk may not transfer.

NOTE: Students may take Accounting at Floyd College or Coosa Valley Technical Institute.

<sup>#</sup> Those planning transfer to a four-year program may take POL 101 together with HIS 251 or HIS 252 for HIS 100. This will add 5 credit hours to the 36 required by Floyd College

# HEALTH OCCUPATIONS Associate in Applied Science Degree Program

This joint program requires completion of one of the following programs at Coosa Valley Technical Institution and 49 to 54 quarter hours at Floyd College. When students satisfactorily complete all course requirements at both schools, they will have earned a diploma from Coosa Valley Technical Institute and the Associate of Applied Science degree from Floyd College.

The program is intended for students who have completed or who are presently enrolled in one of the following programs at Coosa Valley Technical Institute:

Paramedic Technology Radiologic Technology Respiratory Therapy Technology

# Courses required by Floyd College:

Course Number and Title	Credit Hours	
*ENG 101 Composition I or ENG 171 Fundamental English Skills	5	
*MAT 111 College Algebra or *MAT 105 Principles of Mathematics or MAT 171 Mathematics I or MAT 175 Algebra	5	
HIS 100 U.S. & Georgia History or *POL101 American Government and *HIS251 American History I or *HIS 252 American History II #(10)	5	
*PSY 201 General Psychology  *BIO 212 Human Anatomy and Physiology I  *BIO 213 Human Anatomy and Physiology II  *BIO 261 Introduction to Medical Microbiology	5 15	
PED 101 Concepts in Physical Education PED 106 Standard First Aid	2 2	
*CHE 101 Elementary Chemistry  *PSC 101 Physical Science (Physics)  Total Required Hours From Floyd College	5 5 <b>49-54</b>	

Part of the UGA Core Curriculum which is transferrable to four-year institutions in the UGA system and most private colleges. Courses not preceded by an asterisk may not transfer.

<sup>#</sup> Those planning transfer to a four-year program may take POL 101 together with HIS 251 or HIS 252 for HIS 100. This will add 5 credit hours to the 49 required by Floyd College

# SERVICES Associate in Applied Science Degree Program

This joint program requires completion of one of the following programs at Coosa Valley Technical Institution and 36 to 41 quarter hours at Floyd College. When students satisfactorily complete all course requirements at both schools, they will have earned a diploma from Coosa Valley Technical Institute and the Associate of Applied Science degree from Floyd College.

The program is intended for students who have completed or who are presently enrolled in one of the following programs at Coosa Valley Technical Institute:

Air Conditioning Technology Automotive Collision Repair Tech. Automotive Technology Carpentry

Cosmetology Industrial Electrical Technology Welding & Joining Technology

# Courses required by Floyd College:

Course Number and Title	Credit Hours
*ENG 101 Composition I and *ENG 102 Composition II or *ENG 251 Technical, Professional & Business Commu or *BA 208 Business, Professional & Technical Commun or *SPC 208 Fundamentals of Speech	
or ENG 171 Fundamental English Skills and *SPC 208 Fundamentals of Speech	10
*MAT 105 Principles of Mathematics or *MAT 111 College Algebra or MAT 171 Mathematics I or *MAT 175 Algebra	5
HIS100 U.S. & Georgia History or *POL 101 American Government and *HIS 251 American History I or *HIS 252 American History II #(10)	5
*BA 200 Introduction to Business *BA 254 Small Business Management *PED 101 Concepts in Physical Education *PED 102 Concepts in Health Education *PED 106 Standard First Aid	5 5 2 2 2
Total Required Hours From Floyd College	36-41

Part of the UGA Core Curriculum which is transferrable to four-year institutions in the UGA system and most private colleges. Courses not preceded by an asterisk may not transfer.

<sup>#</sup> Those planning transfer to a four-year program may take POL 101 together with HIS 251 or HIS 252 for HIS 100. This will add 5 credit hours to the 36 required by Floyd College

# TECHNOLOGY Associate in Applied Science Degree Program

This joint program requires completion of one of the following programs at Coosa Valley Technical Institution and 36 to 41 quarter hours at Floyd College. When students satisfactorily complete all course requirements at both schools, they will have earned a diploma from Coosa Valley Technical Institute and the Associate of Applied Science degree from Floyd College.

The program is intended for students who have completed or who are presently enrolled in one of the following programs at Coosa Valley Technical Institute:

Drafting Electronics Technology Industrial Maintenance Machine Tool Technology

# Courses required by Floyd College:

Course Number and Title	Credit Hours
*ENG 101 Composition I	
and *ENG	102
Composition II	
or *ENG 251 Technical, Professional & Busines or *BA 208 Business, Professional & Technical or *SPC 208 Fundamentals of Speech or ENG 171 Fundamental English Skills	al Communication
and *SPC 208 Fundamentals of Speech	10
*+MAT 111 College Algebra or *MAT 175 Algebra	5
*+MAT 112 Trigonometry or MAT 176 Right Angle Trigonometry	5
HIS 100 U.S. & Georgia History or *POL 101 American Government and *HIS 25 History I or *HIS 252 American History II #(10)	5 1American
*PHY 127 Introductory Physics or *PHY 117 Physics	5
PED 101 Concepts in Physical Education PED 102 Concepts in Health Education PED 106 Standard First Aid	2 2 2
Total Required Hours From Floyd College	36-41

- + Required for Electronics Technology
- Part of the UGA Core Curriculum which is transferrable to four-year institutions in the UGA system and most private colleges. Courses not preceded by an asterisk may not transfer.
- # Those planning transfer to a four-year program may take POL 101 together with HIS 251 or HIS 252 for HIS 100. This will add 5 credit hours to the 36 required by Floyd College

# **DEVELOPMENTAL STUDIES**



# **Developmental Studies**

The Developmental Studies Program at Coosa Valley Technical Institute serves students who are in need of special counseling or academic assistance. It includes developmental courses designed to improve students' basic abilities in the areas of English composition, mathematics, and reading skills. These courses carry institutional credit and may be taken prior to enrollment in diploma credit courses or in combination with diploma credit courses.

#### Admission

Persons whose English, math, and/or reading achievement levels do not meet statewide program-specific admission requirements are eligible for placement into developmental studies. After overcoming skills deficits, developmental studies students are eligible for admission to diploma programs on a regular or provisional basis.

### **Program Length**

Developmental Studies courses at Coosa Valley Technical Institute are taught utilizing instructional methods designed to allow individuals to progress at their own rate of study. The length of a course will depend upon the degree of deficiency to be overcome and the effectiveness of the student's approach to skills mastery

It is possible for some individuals to overcome a reading, English, or mathematics deficiency in as little as a week. Ordinarily, several weeks or as much as one quarter will be required to improve a student's skills in 097 level coursework. Persons in 095 and 096 level courses usually require at least one quarter and sometime more to remediate skills.

#### **Curriculum Description**

Developmental Studies is a series of courses designed to assist students in attaining regular program admission by providing them the opportunity to correct deficiencies and/or improve their skills in the areas of reading, English,

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and mathematics. The ultimate aim of Developmental Studies is to prepare students for successful participation in occupational/technical programs.

## Requirements for Completion

Achievement of the academic admission requirements for the program which student plans to enter.

## READING

Devel	opme	ntal Courses	Institutional Credit 5 I.C.
RDG	095	Reading I	
RDG	096	Reading II	5 I.C.
RDG	097	Reading III	5 I.C.
RDG	098	Reading IV	5 I.C.

## **ENGLISH**

Devel	opme	ntal Courses	Institutional Credit	
<b>ENG</b>	095	English I	5 I.C.	
<b>ENG</b>	096	English II	5 I.C.	
<b>ENG</b>	097	English III	5 I.C.	
<b>ENG</b>	098	English IV	5 I.C.	

### **MATHEMATICS**

Devel	opme	ntal Courses	Institutional Credit	
MAT	095	Math I	5 I.C.	
MAT	096	Math II	5 I.C.	
MAT	097	Math III	5 I.C.	
MAT	098	Pre-Algebra	5 I.C.	

Developmental Studies course descriptions are provided beginning on page 152 of this publication.

# **COURSE DESCRIPTIONS**



The following descriptions are written to provide the reader with a basic understanding of the material to be covered by those who are enrolled. For a more complete description of the content of a particular course, contact the Office of Instructional Services at Coosa Valley Technical Institute.

To the right of each course title are class, lab, and credit hours. For example: 2-6-5 indicates 2 hours/week of class and 6 hours/week of lab resulting in 5 hours of diploma credit.

# ACC 101 Principles of Accounting I

2-6-5

Prerequisite: Provisional Admission

Introduces the basic concepts of the complete accounting cycle and provides the student with the necessary skills to maintain a set of books for a sole proprietorship.

# ACC 102 Principles of Accounting II

2-6-5

Prerequisite: Program admission: ACC 101

Applies the basic principles of accounting to account classifications and subsidiary record accounting. Topics: partnerships, inventory, receivables and payables, payroll, notes, and plant assets.

# **ACC 103 Principles of Accounting III**

2-6-5

Prerequisite: ACC 102

Provides a fundamental understanding of corporate and cost accounting. Topics: job order/process, departmental accounting, accounting for a corporation, stocks and dividends, and budgeting.

# ACC 104 Computerized Accounting

0-6-3

Prerequisite: ACC 102, BUS 101 or CIS 101

Covers the conversion from manual to computerized accounting systems and the operation thereof. Topics: equipment use, payroll, general ledger, receivables and payables, posting, financial reports, and inventory and depreciation.

# ACC 105 Accounting Database Fundamentals

1-4-3

Prerequisite: ACC 101, BUS 101, BUS 104

The use of database management software packages for accounting/financial applications is covered. Topics: database creation, file management, and use of financial data to make management decisions.

## **ACC 106 Accounting Spreadsheet Fundamentals**

1-4-3

Prerequisite: ACC 101, BUS 101, BUS 104

The use of electronic spreadsheet software packages for accounting/financial applications is covered. Topics: spreadsheet creation, file management, automatic computations, and generation of reports.

### ACC 107 Full-time Accounting Internship

0-36-12

Prerequisite: All non-elective courses for program completion

Provides on-the-job experience during which the student utilizes accounting and employability skills acquired in the classroom. Requires: written training plans, performance evaluation, required weekly seminars, and a required student project.

# ACC 108 Half-time Accounting Internship

0-18-6

Prerequisite: All non-elective courses for program completion

Provides on-the-job experience during which the student utilizes accounting and employability skills acquired in the classroom. Requires: written training plans, performance evaluation, and two required seminars.

# **ACC 150 Advanced Cost Accounting**

2-6-5

Prerequisite: ACC 103

Provides a through understanding of cost concepts, cost behavior, and cost accounting techniques as they are applied to manufacturing cost systems. Topics: job order, cost accounting, process cost accounting, and standard cost accounting.

# ACR 100 Safety

1-0-1

Prerequisite: Provisional admission

Procedures and practices necessary for safe operation of automotive collision repair facilities. Topics: safety devices, work facility safety and cleanliness, fire prevention, and environmental safety.

# ACR 101 Automobile Components Identification

3-1-3

Prerequisite/Corequisite: Provisional admission, ACR 100

The configuration and identification of the structural members of various automotive unibodies and frames are covered. Topics: frame types, unibodies, stub frame types, body panels, and components.

# ACR 102 Equipment and Hand Tools Identification

1-1-1

Prerequisite/Corequisite: Provisional admission, ACR 100

Introduces equipment and hand tools used in automotive collision repair. Topics: safety, hand tool identification, power hand tools, air supply systems and hydraulic systems.

### ACR 104 Mechanical and Electrical Systems

1-3-2

Prerequisite/Corequisite: Program admission, ACR 100, 101, 102 Mechanical and electrical systems that might incur damage through automotive collisions are studied. Topics: lighting systems, engine wiring, air conditioning systems, emission control systems, engine accessory systems, braking systems, and steering columns.

ACR 105 Body Fiberglass, Plastic, Rubber Repair Techniques 1-5-3
Prerequisite/Corequisite: Program admission, ACR 100, 101, 102
Instruction in non-metallic auto body repair techniques. Topics: cracked/splintered areas, bonded agent repairs, plastic/fiberglass body parts, plastic/rubber bumper covers, plastic/rubber welding, and plastic identification.

## **ACR 106 Welding and Cutting**

1-5-3

Prerequisite/Corequisite: ACR 100, ACR 107 Instruction in welding and cutting procedures for auto collision repair with emphasis on MIG welding techniques. Topics: safety, MIG and oxyfuel welding, metal cutting, resistance welding, and weld removal techniques.

## ACR 107 Trim, Accessories, and Glass

1-3-2

Prerequisite/Corequisite: Provisional admission, ACR 100 Removal and replacement methods for a variety of non-structural, cosmetic, and safety features of automobiles are covered. Topics: interior/exterior trim, mirrors, weather stripping, stationary and non-stationary glass, interior components, fasteners, and safety.

## ACR 109 Damage Identification and Assessment

2-2-3

Prerequisite: Program admission, MAT 101, ENG 101, ACR 101, 102; 106, 107, 110 The procedures and resources used in the identification and assessment of auto collision damages are studied. Topics: collision estimation, damage analysis, assessment plan, use of service manual, and computerized estimation.

# **ACR 110 Minor Collision Repair**

1-5-2

Prerequisite/Corequisite: Provisional admission, ACR 100 Materials and operations used in the repair of minor collision damage are studied. Topics: body repair materials; disc grinder procedures; use of body fillers; and pull rod and slide hammer usage.

# **ACR 120 Conventional Frame Repair**

1-4-2

Prerequisite: ACR 109

Diagnosis, straightening, measurement, and alignment of conventional auto-

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mobile and truck frames are studied. Topics: damage diagnosis, tram and centering gauge systems, straightening and alignment techniques, equipment types, and safety precautions.

# ACR 121 Unibody Identification/Damage Analysis

1-4-2

Prerequisite: ACR 109

Various forms of unibody damage are identified and analyzed. Topics include: collapse or buckle damage; sag, sideways, twist, and secondary damage; and lift equipment usage and safety.

# ACR 122 Unibody Measuring and Fixturing Systems

1-4-2

Prerequisite/Corequisite: ACR 121

Instruction in the use of a variety of alignment measuring and fixturing systems. Topics: universal mechanical system, universal laser system, dedicated fixture system, upper body panel measurement, and English/metric tape alignment measurement.

# ACR 123 Unibody Straightening Systems/Techniques

1-9-4

Prerequisite: ACR 122, ACR 127

Introduces unibody straightening systems and techniques. Topics: equipment types and usage, safety; primary/rough and secondary damage pull, single and multiple pull correction, and impact or pull stress relief.

# **ACR 124 Unibody Welding Techniques**

1-6-3

Prerequisite: ACR 122

Instruction in specific welding applications. Topics: MIG welder panel welding, plug weld, butt weld, lap weld, and safety.

# ACR 125 Unibody Structural Panel Repair/Replacement

1-8-4

Prerequisite/Corequisite: ACR 122, ACR 124

A study of techniques used in the repair and replacement of structural panels. Topics: primary structure, rear cross member, apron and rails, trans X members, rockers, w/s posts, floor pans, hinge pillars, center pillars, panel sectional cuts, spot weld removal, and damaged panel removal and replacement.

# ACR 126 Conventional Body Structural Panel Repair

1-4-2

Prerequisite/Corequisite: ACR 120

Introduces conventional body structural panel repair, Topics: partial or complete quarter panel removal or replacement, rocker panel removal and replacement, and center pillar post removal and replacement.

# ACR 127 Unibody Suspension and Steering Systems

1-2-1

Prerequisite/Corequisite: ACR 122

A study of unibody suspension and steering system damage analysis and repair. Topics: suspension parts removal and replacement, rack and pinion steering system removal and replacement, front end suspension equipment,

damage analysis, and safety procedures.

# ACR 128 Bolt-on Body Panel Removal/Replacement

2-6-3

Prerequisite: Provisional admission

Instruction in the removal and replacement of bolt-on automobile body panels. Topics: hoods, header panels, headlamp and filler panels, grills, and headlamp adjustment.

## ACR 130 Sanding, Painting, and Paint Preparation

2-8-4

Prerequisite/Corequisite: Provisional admission, ACR 100

A study of the materials and procedures involved in preparing automobile bodies for refinishing. Topics: feather edging, masking, surface preparation, corrosion prevention, primers, sealers, spray gun operation and maintenance, and safety.

## **ACR 131 Acrylic Lacquer Refinishing Application**

1-9-5

Prerequisite: ACR 109

The equipment, material, and techniques used in applying acrylic lacquer paint are studied. Topics: safety; paint identification; metals preparation and priming; base coat and clear coat application; color application of solid and metallic finishes; original finish sealing; panel and spot repair and blending; thinners, reducers, and additives; and polishing and compounding procedures.

# **ACR 132 Special Refinishing Applications**

1-9-4

Prerequisite: ACR 109

The equipment, material, and techniques used in the application of special paints are studied. Topics: safety; paint identification; preparation and priming; color applications; original finish sealing, panel and spot repair and blending; thinners, reducers, and additives; interior/exterior panel refinishing; and retexturing and refinishing of fiberglass, plastics, and rubber.

# **ACR 133 Acrylic Enamels Refinishing Applications**

1-9-5

Prerequisite: ACR 109

The equipment, material, and techniques used in the application of acrylic enamels paint are studied. Topics: safety; paint identification; metals preparation and priming; base coat and clear coat application; color application of solid and metallic finishes; original finish sealing; panel and spot repair and blending; thinners, reducers, and additives; and polishing and compounding procedures.

# ACR 134 Urethane Enamels Refinishing Applications

1-9-5

Prerequisite: ACR 109

The equipment, material, and techniques used in the application of urethane enamels paint are studied. Topics: safety; paint identification; metals preparation and priming; base coat and clear coat application; color application of solid and metallic finishes; original finish sealing; panel and spot repair and blending; thinners, reducers, and additives; and polishing and compounding procedures.

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#### **ACR 135 Tint and Match Colors**

2-8-6

Prerequisite: ACR 130, ACR 132, ACR 133, or ACR 134

Methods and techniques used in the process of color matching and production are studied. Topics: tinting methods, gun techniques, variables adjustment, color flip-flop (light reflection angle variance), and reduction procedures.

## **ACT 100 Refrigeration Fundamentals**

3-2-4

Prerequisite: Provisional admission

Introduces basic concepts and theories of refrigeration. Topics: laws of thermodynamics, pressure and temperature relationships, heat transfer, the refrigeration cycle, and safety.

# ACT 101 Principles & Practices of Refrigeration

4-6-7

Prerequisite/Corequisite: ACT 100

Refrigeration tools, materials, and procedures needed to install, repair, and service refrigeration systems are studied. Topics: refrigeration tools, piping, service valves, leak testing, evacuation, charging, and safety.

# ACT 102 Refrigeration Systems Components

4-6-7

Prerequisite/Corequisite: ACT 100, ACT 101

Provides the skills and knowledge needed to install, test, and service major components of a refrigeration system. Topics: compressors, condensers, evaporators, metering devices, service procedures, refrigeration systems, and safety.

# **ACT 103 Electrical Fundamentals**

7-3-8

Prerequisite: Provisional admission

An introduction to fundamental electrical concepts and theories as they apply to the air conditioning industry. Topics: AC and DC theory, meters, electrical diagrams, distribution systems, electrical panels, voltage, code requirements, and safety.

#### **ACT 104 Electric Motors**

2-3-3

Prerequisite/Corequisite: ACT 103

Develops the skills and knowledge necessary for application and service of electric motors common to the refrigeration and air conditioning industry. Topics: capacitors, installation procedures, types of electric motors, diagnostic techniques, and servicing.

# **ACT 105 Electrical Components**

2-6-5

Prerequisite/Corequisite: ACT 103, ACT 104

Instruction in how to identify, install, and test commonly used electrical components in an air conditioning system. Topics: pressure switches, overload devices, transformers, magnetic starters, and commonly used controls.

## **ACT 106 Electric Control Systems & Installation**

2-5-4

Prerequisite/Corequisite: ACT 105

Develops the skills necessary to wire various types of air conditioning systems. Topics: servicing procedures, solid state controls, system wiring, circuit controls, and safety.

## **ACT 107 Air Conditioning Principles**

5-3-6

Prerequisite/Corequisite: ACT 102, 106, MAT 101

Covers the theory and techniques needed to identify major components and functions of air conditioning systems. Topics: types of AC systems, heat-load calculation, properties of air, psychometrics, duct design, air filtration, and safety.

## ACT 108 Air Conditioning Systems & Installation

2-3-3

Prerequisite/Corequisite: ACT 107

Installation and servicing residential air conditioning systems is studied. Topics: installation procedures, service, split-systems, add-on systems, packaged systems, and safety.

# ACT 109 Trouble-Shooting Air Conditioning Systems

3-9-7

Prerequisite/Corequisite: ACT 108, ENG 101

Techniques for trouble shooting and repairing major components of a residential air conditioning system. Topics: trouble shooting techniques, electrical controls, air flow, and the refrigeration cycle.

# **ACT 110 Gas Heating Systems**

2-6-5

Prerequisite: ACT 102, ACT 106, ACT 101

Introduces principles of combustion and service requirements for gas heating systems. Topics: service procedures, electrical controls, piping, gas valves, venting, code requirements, and safety.

# **ACT 111 Electric Heating Systems**

2-3-3

Prerequisite/Corequisite: ACT 110

The operation, installation, and servicing of electric heating systems are studied. Topics: servicing procedures, electrical controls trouble shooting, code requirements, and safety.

# **ACT 112 Heat Pumps**

2-3-3

Prerequisite/Corequisite: ACT 110, ACT 111

Covers the principles of, applications of, and operation of a residential heat pump system. Topics: installation procedures, servicing, electrical components, valves, and safety.

# AHS 101 Anatomy and Physiology

5-0-5

Prerequisite: Program admission

A study of the basic normal structure and function of the human body. Topics:

an overview of body systems, how systems coordinate to maintain a balanced state, recognizing deviations from the normal, and medical terminology (including basic word structure) and terms related to body structure and function.

# AHS 102 Drug Calculation and Administration

2-2-3

Prerequisite: MAT 101

Basic concepts of mathematics and basic drug administration are studied. Topics: resource materials, systems of measurement, abbreviations, drug calculations, and the administration of medications in a simulated clinical environment.

## AHS 103 Nutrition and Diet Therapy

2-0-2

Prerequisite: Provisional admission

The nutritional need of the individual are studied. Topics: basic nutrients, food sources, the role nutrition plays in the maintenance of health, and the use of diet to treat certain pathologic conditions.

# **AHS 109 Medical Terminology**

3-0-3

Prerequisite: Provisional admission

Introduces the elements of medical terminology. Emphasis is placed on building a medical vocabulary through knowledge of roots, prefixes, and suffixes. Topics: origins, word building, abbreviations and symbols, terminology related to anatomy, trading medical orders and reports, and terminology specific to the student's field of study.

# AHS 152 Advanced Anatomy and Physiology

5-0-5

Prerequisite/Corequisite:

Provides additional information on the normal structure and function of the human body as presented in AHS 101. Emphasis is on anatomical and physiological processes and includes a discussion of diseases associated with body systems.

# **AUT 100 Introduction to Automotive Technology**

3-2-3

Prerequisite: Provisional admission

The basic concepts for safe and effective automotive shop operation are studied. Topics: safety regulations and procedures; legal and ethical responsibilities; shop organization, management, and work flow systems; measurement concepts; instruments, and techniques; machining operations and procedures, and use of hand tools.

# **AUT 101 Engine Diagnosis I**

4-6-6

Prerequisite/Corequisite: Provisional admission, AUT 100

Introduces automotive engine theory and repair. Topics: general diagnosis of engines; inspection, diagnosis, and repair of: blocks, cylinder head; valve trains, and lubrication and cooling systems.

## **AUT 102 Brake Systems**

4-6-6

Prerequisite/Corequisite: Provisional admission, AUT 100

Fundamental hydraulic braking system theory and its application to automotive drum, disc, and power assist units are studied. Topics: theory, diagnosis, and repair of hydraulic systems; and drum, disc, and power assist break units.

## AUT 103 Suspension and Steering

5-10-8

Prerequisite/Corequisite: Provisional admission, AUT 100

The basic principles, diagnosis, adjustment and repair of automotive suspension and steering systems are studied. Topics: wheel alignment, steering systems, suspension systems, and wheel and tire service.

## **AUT 104 Automatic Transmissions/Transaxle I**

2-3-3

Prerequisite/Corequisite: Program admission, AUT 100

Basic transmission/transaxle theory, inspection, and service procedures are studied. Focus on minor in-car adjustments, replacements, and repairs.

# **AUT 105 Clutch Diagnosis and Repair**

2-3-3

Prerequisite/Corequisite: Program admission, AUT 100 Introduces fundamental principles of clutch operations, diagnosis of malfunctions, testing procedures, and repair techniques.

## **AUT 106 Introduction to Automotive Electrical Systems**

4-6-6

Prerequisite/Corequisite: Program admission, AUT 100

Electrical theory and its application to automotive systems is studied. Topics: electromagnetic theory, electrical components, power sources, use of meters, and application of Ohm's law.

# **AUT 107 Starting and Charging Systems**

3-7-5

Prerequisite/Corequisite: AUT 106

The service/repair of batteries, starting system components, alternators, and regulators is studied. Topics: inspection, diagnostic testing, current and voltage tests, testing and repair/replacement of regulator, alternator, and other starting system components.

# **AUT 108 Ignition Systems**

4-6-6

Prerequisite: AUT 101, AUT 106

The theory, diagnosis, repair, and service of conventional and electronic automotive ignition systems is covered in this course. Topics: operational theory, diagnostic procedures, repair/replacement procedures, and total system performance analysis.

## AUT 109 Electrical/Electronic Instrumentation

6-4-7

Prerequisite: AUT 106

Introduces automotive electrical/electronic accessories, safety systems, and electronic devices. Topics: lighting systems, gages, warning devices, driver

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information system, horn, windshield wiper/ washer system, and other accessories.

# **AUT 110 Engine Diagnosis II**

3-7-5

Prerequisite: AUT 101, AUT 108

Continues the study of automotive engine theory with emphasis on inspection, testing, and diagnostic techniques. Topics: general diagnosis of engines; inspection, diagnosis, and repair of engine block and timing mechanism.

# **AUT 111 Fuel and Exhaust Systems**

2-3-3

Prerequisite: AUT 106

A study of various fuel and exhaust systems. Includes safety; diagnosis, repair, and service for carburetion and fuel injection; inspection procedures, and diesel service.

## **AUT 112 Emissions Control Systems**

8-12-12

Prerequisite: AUT 106

The operation of systems related to the control of automotive emissions is studied. Topics: component testing, positive crankcase ventilation, spark timing control, sensors and electronic controls, and exhaust gas re-circulation and treatment.

## **AUT 202 Automatic Transmission/Transaxle II**

10-10-13

Prerequisite/Corequisite: Program admission, AUT 104

Automatic transmission/transaxle theory, fundamental hydraulic circuitry, testing, diagnostic techniques, and overhaul procedures are covered in this course.

### **AUT 203 Manual Transmission/Transaxle**

2-3-3

Prerequisite/Corequisite: Program admissions, AUT 105

Manual transmission/transaxle operation, diagnostic techniques, and repair/ replacement measures are covered in this course.

#### **AUT 204 Drivelines**

2-3-3

Prerequisite: Program admission, AUT 100

The theory, diagnosis, service, and repair of universal joints; differentials; final drives; and shafts are studied. Topics: rear wheel drive, front wheel drive, universal and constant-velocity joints, and differentials (emphasis on limited-slip differentials.)

## **AUT 205 Four-Wheel Drive Components**

2-3-3

Prerequisite: Program admission, AUT 100

A study of four-wheel drive operation, malfunctions, and repair techniques. Topics: four-wheel drive components, inspection and diagnosis procedures, and repair of transfer case and locking hubs.

# **AUT 206 Heating and Air Conditioning Systems**

4-6-6

Prerequisite: AUT 106

The theory, operation, servicing, and repair of automotive heating and air conditioning systems is studied. Topics: heating and engine cooling systems, refrigeration components, evaporator, and control systems.

## **AUT 208 Automotive Technician Internship**

0-36-12

Prerequisite: All non-elective courses required for program completion. (Those enrolled in AUT 208 exempt PSY 100.)

Provides student work experience in the occupational environment. This course requires the use of a written individualized training plan, written performance evaluation, and integrative experiences.

## **BUS 101 Keyboarding/Typewriting**

1-9-5

Prerequisite: Provisional Admission

Introduces the touch system of typewriting with emphasis on correct techniques and simple business correspondence. Students attain a minimum typing speed of 25 words per minute with a maximum of three errors on a three minute timed typing test.

# **BUS 102 Intermediate Typewriting**

1-9-5

Prerequisite: BUS 101

Continues the development of keyboarding speed and accuracy with further mastery of correct typing techniques. Students attain a minimum typing speed of 40 words per minute with a maximum of five errors on a five minute timed typing test.

# **BUS 103 Advanced Typewriting**

1-9-5

Prerequisite: BUS 102, ENG 111

Development of increased keyboarding speed and accuracy with mastery of complex document production. Students attain a minimum typing speed of 50 words per minute with a maximum of five errors on a five minute timed typewriting test.

# **BUS 104 Microcomputer Fundamentals**

2-6-5

Prerequisite/Corequisite: BUS 101

A variety of software is employed to introduce fundamental concepts needed for business-related computer applications. Topics: terminology, input/output, database, spreadsheet, word processing, and equipment care and operation.

### **BUS 105 Database Fundamentals**

1-4-3

Prerequisite: Program admission; BUS 104

Use of database management software to access, manipulate, and create file data.

#### COOSA VALLEY TECHNICAL INSTITUTE

#### **BUS 106 Office Procedures**

1-4-3

Prerequisite: Program admission, Prerequisite/Corequisite BUS 101 Topics include: office protocol, prioritizing, time management, telephone techniques, office equipment, mail services, reference materials, filing, correspondence, and travel/meeting arrangements.

# **BUS 107 Machine Transcription**

1-4-3

Prerequisite: BUS 102, BUS 104, ENG 111

Transcribing from recordings using a typewriter or word processor to produce mailable documents. Includes development of speed and accuracy, transcription techniques, and related skills.

## **BUS 108 Word Processing**

1-9-5

Prerequisite: Program admission, BUS 101

Use of word processing equipment to create and revise mailable documents or reports. Topics: equipment usage, work area management, competency in one or more software packages, and productivity.

## **BUS 201 Advanced Word Processing**

1-4-3

Prerequisite: BUS 108, ENG 111

Topics include advanced word processing concepts and the production of business correspondence and documents.

## **BUS 202 Spreadsheet Fundamentals**

1-4-3

Prerequisite: BUS 104, MAT 111

Instruction in the use of electronic spreadsheet software for business applications. Topics: entering alpha and numeric data in row/column relationships, editing and deleting, making computations, and creation of spreadsheets.

## **BUS 203 Office Management**

4-0-4

Prerequisite: BUS 106, PSY 100

An overview of management concepts, styles, and skills. Topics: business ethics, ergonomics/workflow, communication channels, job performance evaluation techniques, and supervisory techniques.

#### **BUS 204 Information Processing Specialist Internship**

0 - 18 - 6

Prerequisite: Successful completion of all required course work

Provides work experience in the occupational environment. Students will be under the supervision of the Information and Office Technology program faculty and/or persons designated to coordinate work experience arrangements.

# **BUS 208 Office Accounting**

3-2-4

Prerequisite: MAT 111

Introduces the fundamental concepts of accounting. Topics: debits, credits, and journalizing; posting and proving the general ledger; accounts receivable ledger, accounts payable ledger; and payroll.

## **BUS 211 Medical Terminology**

3-2-4

Prerequisite: Program admission

The spelling, pronunciation, and use of medical terms as related to anatomy, treatment, surgery, and drugs. Topics: medical prefixes, roots, suffixes, word elements, meaning of terms, and spelling.

## **BUS 212 Anatomy and Terminology**

5-0-5

Prerequisite: BUS 211

The structure and function of the human body including medical terminology. Topics: spelling, pronunciation, medical terminology; definitions and anatomical terms; and the location, identification, and function of body parts and systems.

## **BUS 213 Medical Transcription I**

1-4-3

Prerequisite: BUS 102, BUS 211, ENG 111

Transcribing from recorded medical reports using a typewriter or word processor. Topics: spelling, definitions, development of speed and accuracy, punctuation, and use of reference books.

# **BUS 214 Medical Transcription II**

1-4-3

Prerequisite: BUS 212, BUS 213

Continues the development of speed and accuracy in the transcription of medical reports.

# **BUS 215 Medical Secretary Internship**

0-36-12

Prerequisite: Completion of all required course work

Work experience in an off-campus medical environment. Students will be under the supervision of the Business and Office Technology program faculty and/or persons designated to coordinate work experience arrangements.

# **BUS 221 Secretarial Internship**

0-18-6

Prerequisite: Successful completion of all required course work

Provides work experience in an off-campus environment. Students will be under the supervision of the Information and Office Technology program faculty and/or other persons designated to coordinate work experience arrangements.

## **BUS 225 Office Simulation**

0-24-8

Prerequisite: Successful completion of all required course work in a B&OT specialization area.

Provides realistic patterns of office activities in a simulated office environment. Topics: integrating, developing, and applying a wide range of occupational knowledge and skills; cooperatively interacting with co-workers; and listening and following directions.

## CAB 101 Cabinet Design and Layout

2-3-2

Prerequisite: MAT 100, CAR 105

Instruction in the planning, design, and layout of cabinet units. Topics: parts identification, cabinet styles and floor arrangements, estimation procedures, cabinet layout, and working sketches.

## CAB 102 Cabinet Assembly I

1-9-5

Prerequisite: MAT 100, CAR 105

Instruction in the layout and fabrication of cabinet units. Topics: clamping devices, safe us of tools, cabinet base assembly, wall unit assembly, and face frame assembly

## CAR 101 Safe Use of Hand and Power Tools

3-7-5

Prerequisite: Provisional admission

Instruction in the proper use of hand and power tools. Topics: layout and measuring tools, sawing tools, shaping and cutting tools, fastening tools, drilling and boring tools, and finishing tools.

#### **CAR 103 Materials**

5-0-5

Prerequisite: Provisional admission

Various building materials used in residential and commercial construction are studied. Topics: fasteners, wood products, finishing materials, and manufactured products.

## **CAR 105 Print Reading**

5-0-5

Prerequisite: Provisional admission

The reading and interpretation of prints and architectural drawings is the focus of this course. Topics: types of plans scaling terminology, lines, symbols, specifications, conventions, and schedules.

# CAR 107 Site Layouts, Footings, and Foundations

2-8-4

Prerequisite: CAR 105

Concepts and production methods associated with building foundations are studied. Basic site layout and footing construction utilizing layout equipment for on-site laboratory practice are introduced. Topics: estimating material, types of foundations, forms, water proofing, and soil testing and excavation; zoning restrictions and codes, batter boards, builders levels, squaring methods, types of footings, and plot plans interpretation.

## **CAR 110 Floor Framing**

2-3-3

Prerequisite: CAR 101, CAR 103, CAR 105

A study of material and installation procedures used for floor and sill framing. Topics: safety procedures, joists, sills, openings, bridging, sub floors, load conditions, and material estimations.

## **CAR 111 Wall Framing**

2-3-3

Prerequisite: CAR 101, CAR 103, CAR 105

A study of material and installation procedures used for wall and partition framing. Topics: safety; layout; cutting of studs, trimmers, cripples, headers, corners and T's; and installation of wall sheathing.

## **CAR 112 Ceiling and Roof Framing**

4-6-6

Prerequisite: CAR 101, CAR 103, CAR 105

A study of materials and installation procedures used for roof framing and ceiling installation. Topics: types of roof systems, terminology, estimation, layout and installation, decking, ladder safety, vent systems, types of ceiling systems, estimation of material, layout and installation of components, and scaffolding safety.

## **CAR 114 Roof Covering**

1-2-1

Prerequisite: CAR 101, CAR 103

A study of the materials and installation procedures used to install roof coverings. Topics: materials, estimation, layout procedures, installation, and safety precautions.

# CAR 115 Insulation and Interior Wall and Ceiling Coverings 3-3-4

Prerequisite: Program admission; CAR 101, CAR 103, CAR 105

A study of the various types of materials and installation procedures used to construct interior walls, insulate buildings, and cover ceilings. Topics: types of paneling, types of gypsum board, acoustical ceiling tile, types of ceilings, fire wall applications, and finishing methods., insulation materials, R values, methods of application, and thermal and sound control.

#### **CAR 117 Interior Trim**

1-4-2

Prerequisite: Program admission, CAR 101, CAR 103, CAR 105
Procedures for the identification, estimation, and installation of interior trim are studied. Topics: types and sizes of trim, estimation of materials, and methods of installation.

#### CAR 118 Exterior Finishes and Trim

2-8-5

Prerequisite: Program admission, CAR 101, CAR 103, CAR 105 A study of exterior finish and trim materials, including window and door units. Topics: doors and windows, types of siding, estimation of materials, and installation procedures.

#### **CAR 121 Cornice and Soffit**

1-2-1

Prerequisite: Program admission, CAR 101, CAR 103, CAR 105 Instruction in the types, styles, and installation of cornice and soffit in residential carpentry. Topics: vents, types and styles identification, estimation of materials, installation, and safety.

#### **CAR 123 Finish Floors**

2-3-3

Prerequisite: Program admission, CAR 101, CAR 103, CAR 105 Introduces finish floor coverings for residential construction projects. Topics: material identification and estimation, and installation procedures.

#### **CAR 125 Interior Doors**

1-4-2

Prerequisite: Program admission, CAR 101, CAR 103; CAR 105 A study of the various interior door units, locks, trim, and installation procedures. Topics: types, classification, and parts of interior doors: standard sizes:

finishes; and installation.

# CAR 126 Stairs 2-3-3

Prerequisite: Program admission; CAR 101, CAR 103, CAR 105 A study of the layout, construction, and installation of various stair types. Topics: stair components, riser and tread measurements, layout of stringers, and fabrication and installation of stair components.

## CIS 101 Keyboarding

1-4-3

Prerequisite: Provisional admission

An introduction to the effective and efficient use of electronic machine keyboards. Topics: touch typing skills, text formatting and manipulation, and usage of function keys.

# **CIS 102 Introduction to Computers**

5-2-6

Prerequisite: Provisional admission

An overview of computers and information processing. Topics: terminology, historical perspective, data representation, computer number systems, processing capabilities, hardware, software, program development, system development, and software applications.

# **CIS 103 Operating Systems Concepts**

3-2-4

Prerequisite/Corequisite: CIS 102

An overview of operating systems functions and commands necessary in a micro/mainframe computer working environment. Topics: multi-programming, multi-user systems, data communications, utilities, task control languages, allocation of system resources, and networking.

# CIS 105 Program Design and Development

5-0-5

Prerequisite/Corequisite: CIS 102

A study of the methods used to identify business problems and provide solutions through computer programming. Topics: problem solving process, structured programming, program development, file and report structure, and business application structure.

## CIS 112 Systems Analysis and Design

3-2-4

Prerequisite/Corequisite: Program admission, CIS 105, programming language preferred

A review and application of systems life cycle development methodologies implemented by project teams. Topics: initial investigation and feasibility study, systems analysis, systems design, technical design, program specification, and implementation planning.

#### CIS 113 COBOL I

6-4-8

Prerequisite/Corequisite: Program admission, CIS 105 preferred A study of the COBOL programming language. Topics: divisions, input/output, arithmetic operations, conditional control, editing of input, and single level control breaks.

#### CIS 114 COBOL II

6-4-8

Prerequisite: CIS 113

Reinforces and extends concepts and applications introduced in CIS 113 - COBOL I. Topics: multi-level control breaks, sequential file processing and updating, debugging techniques, elementary table processing, and elementary sorting.

## CIS 122 Microcomputer Installation/Maintenance

2-3-3

Prerequisite: CIS 102 and CIS 103 or CIS 261

An introduction to procedures for installing and maintaining microcomputers. Topics: system components and their functions, safety, installing internal options, installing printers and T-switches, troubleshooting techniques, resolving minor system problems and, preventive maintenance.

# **CIS 123 Microcomputer Productivity Tools**

6-4-8

Prerequisite: Program admission; CIS 102

A study of microcomputer based productivity tools. Topics: operating system fundamentals, macros, and file command programming.

# CIS 124 Microcomputer Database Programming

6-4-8

Prerequisite/Corequisite: CIS 123

A study of database programming using microcomputer database management systems (DBMS) software packages. Topics: implementation of systems development, structured programming techniques, screen design, data editing, debugging, and printing customized reports.

# CIS 125 Advanced Microcomputer Productivity Tools

6-4-8

Prerequisite: CIS 123

This course continues the study of microcomputer based productivity tools. Topics: spreadsheet fundamentals, advanced spreadsheet concepts, macros, business graphics, Windows, and introduction to desk-top publishing.

## CIS 214 Database Management

4-4-6

Prerequisite: CIS 114

An overview of the skills and knowledge of the database application systems used in business, government, and industry. Topics: physical and applied data structures; database design; on-line systems; and hierarchical, network, and related data models.

#### CIS 215 COBOL III

6-4-8

Prerequisite: CIS 114

Reinforces and extends concepts and applications provided in CIS 114 - COBOL II. Topics: random file processing, advanced table processing, and advanced sorting.

#### CIS 216 COBOL IV

6-4-8

Prerequisite CIS 215, Prerequisite/Corequisite: CIS 214

Provides skills development in more advanced techniques of COBOL programming utilizing disk files. Topics: interactive processing and database processing.

## CIS 250 RPG Programming I

6-4-8

Prerequisite: CIS 105

Introduces programming business applications using the RPG programming language. Topics: input/output processing, arithmetic operations, edit codes, comparing, control breaks, multiple control breaks, field-record relations, multiple record types, and exception output.

# CIS 251 RPG Programming II

6-4-8

Prerequisite: CIS 250

Continues the study and development of programming for business applications using the RPG programming language.

# CIS 253 BASIC Programming I

6-4-8

Prerequisite: Departmental approval

A study of the BASIC programming language as used on microcomputers to solve business applications. Topics: data definition, calculations, decisions, data validation, multi-page report formatting, array processing, sorting, string manipulation, and interactive processing.

# CIS 254 BASIC Programming II

6-4-8

Prerequisite: CIS 253

Emphasizes structured BASIC programming using advanced programming techniques. Topics: control breaks; sequential and direct file processing and maintenance; functions; screen formatting; error reporting and audit trails; modular program construction; and debugging techniques.

## CMP 101 Introduction to Microcomputers

1-4-3

Prerequisite: Provisional admission

A study of the concepts and operational systems associated with microcomputers. Topics: terminology; operating systems; data storage; file management; and introduction to word processing, database, and spreadsheet applications.

## COS 100 Introduction to Cosmetology Theory

5-0-5

Prerequisite: Provisional admission

An introduction to the cosmetology profession with emphasis on professional practices and safety. Topics: state and local laws; rules and regulations; hygiene and grooming; personality development; ethics; sterilization, sanitation, and bacteriology; basic chemistry, and Hazardous Duty Standards Act compliance.

## COS 101 Introduction to Permanent Waving/Relaxing

1-2-2

Prerequisite/Corequisite: COS 100

The chemistry and chemical reactions associated with permanent wave solutions and relaxers are studied. Topics: permanent wave techniques, safety, chemical relaxer techniques, and the use of permanent wave and chemical relaxer solutions on mannequins.

#### COS 102 Introduction to Hair Color

4-1-4

Prerequisite/Corequisite: COS 100

Introduces students to hair color theory, predisposition tests, color selection, and color application. Topics: basic color concepts, skin reactions, the color wheel, and the selection and application of color.

# COS 103 Introduction to Skin, Scalp, and Hair

2-1-2

Prerequisite/Corequisite: COS 100

Introduces students to products and procedures used in the care and treatment of the skin, scalp, and hair. Topics: anatomy, treatment theory, basic corrective hair and scalp treatments, plain facials, and diseases and disorders.

# COS 104 Introduction to Manicuring & Pedicuring

1-1-1

Prerequisite/Corequisite: COS 100

Students are introduced to products and procedures used in the care of nails and cuticles. Topics: treatment theory, hand and foot anatomy, nail care implements and supplies, plain manicure, and care of cuticles.

# COS 105 Introduction to Shampooing & Styling

2-4-3

Prerequisite/Corequisite: COS 100

Develops knowledge and skills needed to shampoo and create shapings, pincurls, fingerwaves, roller placement, and do comb-outs. Includes 20 hours on mannequins and 25 hours on live models without compensation. Topics: shampoo chemistry and techniques, styling, pincurls, roller placement, fingerwaves, skipwaves, ridgecurls, and comb-outs.

## COS 106 Introduction to Haircutting

1-2-2

Prerequisite/Corequisite: COS 100

The skills needed to apply haircutting techniques are developed. Topics: haircutting terminology, safety and sanitation, cutting implements, and haircutting techniques.

# COS 107 Haircutting Techniques

1-2-2

Prerequisite/Corequisite: COS 106

Continues the development of haircutting skills in the salon setting. Topics: client consultation, head and body analysis, hair analysis, and haircutting techniques.

## COS 108 Permanent Waving and Relaxing

2-3-3

Prerequisite: COS 101

Presents precautions and difficulties involved in applying permanent waves and relaxers. Topics: timed permanent wave, timed relaxer application, Hazardous Duty Standards Act compliance.

#### COS 109 Hair Color

1-2-2

Prerequisite: COS 102

The application of temporary, semi-permanent, and permanent hair coloring is presented. Topics: lash and brow tints, coloring products, safety precautions and tests, mixing procedures, color selection, and application techniques.

# COS 110 Skin, Scalp, and Hair

1-2-2

Prerequisite: COS 103

Treatment of the skin, scalp, and hair is studied as students practice approved techniques on live models. Topics: implements, products and supplies, diseases and disorders, corrective hair and scalp treatments, and facial procedures and manipulations.

#### COS 111 Styling

1-4-3

Prerequisite: COS 105

Hairstyling theory and applications are continued as thermal techniques are introduced. Topics: blow-dry styling; thermal curling, pressing, waving, and braiding; safety; and the cleaning and styling of wigs and hairpieces.

# COS 112 Manicuring and Pedicuring

1-2-1

Prerequisite: COS 104

Manicuring and pedicuring techniques are practiced on live models. Topics: implements, products and supplies, diseases and disorders, manicure techniques, and plain pedicure.

#### COS 113 Practicum I

0 - 12 - 4

Prerequisites: COS 108, 109, 110, 111, 112; Prerequisite/Corequisite: ENG 101, MAT 100, PSY 100

A skills-development course in which students become competent in the various phases of cosmetology. The time allocated to each phase is prescribed by the Georgia State Board of Cosmetology. Topics: permanent waves and relaxers; hair color and bleaching; skin, scalp, and hair; haircutting; styling; dispensary; manicure/pedicure; reception; safety; and compliance with the Hazardous Duty Standard Act.

#### COS 114 Practicum II

5-10-8

Prerequisite/Corequisite: COS 113

The topics begun in COS 113 are continued in this course. Students develop competencies in the various phases of including advanced styling and shaping, industry concepts, and surviving in the salon cosmetology. Time allocated to each phase is prescribed by the Georgia State Board of Cosmetology.

## COS 115 Practicum/Internship I

0-12-4

Prerequisite: COS 113, COS 114

Professional development and the skills necessary for completion of state licensure requirements are provided by this course. The requirements of the course may be satisfied by on-campus instruction or at an approved internship facility. Topics: permanent waves and relaxers; hair color and bleaching; skin, scalp, and hair; haircutting; styling; dispensary; manicure/pedicure; reception; safety; and compliance with the Hazardous Duty Standard Act.

## COS 116 Practicum/Internship II

1-12-5

Prerequisite: COS 113, COS 114; Prerequisite/Corequisite: COS 115
Professional development and the skills necessary for completion of state licensure requirements are continued by this course. The requirements of the course may be satisfied by on-campus instruction or at an approved internship facility.

# COS 117 Salon/Shop Management

3-2-4

Prerequisite: COS 100, Program admission

The steps involved in opening and operating a privately owned cosmetology salon are examined. Topics: planning a salon, business management, retailing, public relations, sales skills, and client retention.

# DDF 101 Introduction to Drafting

2-8-6

Prerequisite: Provisional admission

Emphasizes the development of fundamental drafting techniques. Topics: terminology, care and use of equipment, lettering, line relationships, and geometric construction.

# DDF 102 Size and Shape Description I

1-9-5

Prerequisite/Corequisite: DDF 101, MAT 103

Provides multiview and dimensioning techniques necessary to develop views that completely describe machine parts for manufacture. Topics: multiview

drawing and sketching in pencil and/or ink, precision measurement, tolerances and fits, and basic dimensioning.

## DDF 103 Size and Shape Description II

1-9-5

Prerequisite/Corequisite: DDF 101, DDF 102

Continues the development of dimensioning skills and introduces sectional views. Topics: advanced dimensioning practices; and sectional views in pencil and/or ink.

#### **DDF 104 Pictorial Drawing**

1-4-3

Prerequisite: DDF 103, MAT 104

The use of technical sketching and pictorial drawing is introduced. Topics: axonometric and oblique drawings in pencil and/or ink; and general pictorial sketching techniques.

#### **DDF 105 Auxiliary Views**

1-4-3

Prerequisite/Corequisite: DDF 103, MAT 104

The techniques necessary for auxiliary view drawings are introduced. Topics: primary and secondary auxiliary views in pencil and/or ink.

#### **DDF 106 Fasteners**

1-4-3

Prerequisite/Corequisite: DDF 105

Provides the knowledge and skills necessary to draw and specify fasteners. Topics: drawing of threads, drawing of fasteners, use of technical reference sources, and use of welding symbols.

#### **DDF 107 Introduction to CAD**

2-8-5

Prerequisite/Corequisite: CMP 101, DDF 103, MAT 104

The concepts, terminology, and techniques for CAD applications are introduced. Topics: terminology, care and use of hardware/software, CAD commands, basic entities, and basic drafting applications.

#### **DDF 108 Intersections and Developments**

1-9-5

Prerequisite/Corequisite: DDF 103, MAT 104

The graphic description of objects represented by the intersection of geometric components is introduced. Topics: surface development; establishment of true length; and intersections of lines, planes, prisms, pyramids, curved surfaces, cylinders, and cones.

## DDF 109 Assembly Drawings I

1-9-5

Prerequisite/Corequisite: DDF 104, DDF 107

Provides the knowledge and skills necessary to produce working drawings. Topics: use of technical reference sources, detail drawings, and pictorial assembly drawings executed using drafting board and/or CAD equipment.

# DDF 110 Assembly Drawings II

1-9-5

Prerequisite/Corequisite: DDF 109

Continues the development of assembly drawing skills. Topics: in-depth detail drawings, orthographic assembly drawings, and pictorial assembly drawings executed using drafting board and/or CAD equipment.

#### **DDS 202 Advanced CAD**

2-8-6

Prerequisite: DDF 107, MAT 104

Development of CAD utilization skills in discipline specific applications. Topics: DOS usage, advanced CAD commands, list P-line, advanced 3-D, discipline oriented CAD applications, macro utilization, and application customization.

#### DDS 205 Residential Architectural Drawing I

2-8-6

Prerequisite: DDF 110, DDS 201, ENG 101, MAT 104

Introduces architectural drawing skills necessary to produce a complete set of construction drawings. Topics: floor, footing, and foundation plans; interior and exterior elevations; sections and details; window, door, and finish schedules; site plans; and specifications.

## DDS 208 Residential Architectural Drawing II

2-8-6

Prerequisite/Corequisite: DDS 205, DDS 207

A continuation of in-depth architectural drawing practice and development of design skills. Topics: floor, footing, and foundation plans; interior and exterior elevations; sections and details; window, door, and finish schedules; site plans; specifications; mechanical and electrical systems.

# **ELC 104 Soldering Technology I**

1-1-1

Prerequisite: Provisional admission

Soldering techniques used with electronic circuits and when repairing printed circuit boards are developed. Topics: soldering and de-soldering procedures, grounding, surface mount techniques, and repair of printed circuit boards.

#### **ELC 106 Direct Current Circuits I**

3-2-4

Prerequisite/Corequisite: ELT 103, ELT 104, MAT 103

Introduces the following topics: electrical principles and laws; direct current test equipment; series, parallel, and combination circuits; basic lab procedures; and safety practices.

#### **ELC 108 Direct Current Circuits II**

4-6-7

Prerequisite/Corequisite: ELC 103, ELC 104, ELC 106, MAT 103 Continues the study of DC concepts and applications. Topics: DC theorems, RL/RC time constants, lab procedures, and safety.

## ELC 109 Alternating Current I

4-6-7

Prerequisite/Corequisite: ELC 108, and MAT 104

A study of varying sine wave voltages and current. Topics: AC wave generation factors; frequency and phase relationship in resistive, RL, RC, and ALC circuits; and impedance, admittance, and conductance power factors calculated from

given and/or measured data.

## **ELC 110 Alternating Current II**

4-6-7

Prerequisite/Corequisite: ELC 109

Continues the study of AC concepts with emphasis on constructing, verifying, and trouble shooting reactive circuits using RLC analyzers and oscilloscopes. Topics: LR, RC, and LRC circuits; transformer theory; three phase AC circuit calculations; AC circuit resonance; non-sinusoidal wave forms; AC motor and generator theory; filter, impedance bridge, and test equipment.

## ELC 111 Electronics Microcomputer Applications I

1-4-3

Prerequisite: Program admission

Introduces concepts and operations related to electronics microcomputer applications. Topics: terminology, operating systems, data storage, file management, care and operation of equipment, electronics end-users software, and block diagrams.

## **ELC 112 Electronics Microcomputer Applications II**

1-4-3

Prerequisite: ELC 111

Continues the study of microcomputer applications with the introduction of flow chart concepts, problem solving using high level language, operation of enduser software, and structured programming.

#### **ELC 114 Solid State Devices I**

4-6-7

Prerequisite/Corequisite: ELC 110

The physical characteristics of solid state devices and their application is studied. Topics: semiconductor physics, PN diodes and power supply, bipolar junction transistors and amplifiers, and field effect transistors.

#### **ELC 115 Solid State Devices II**

3-2-4

Prerequisite/Corequisite: ELC 111

Continues the study of solid state devices with the introduction of special diodes, power control and switching devices, and display/optical devices.

# ELC 116 Soldering Technology II

1-1-1

Prerequisite/Corequisite: ELC 115

Continues the development of skill and speed in soldering and de-soldering electronic circuits. Introduces advanced repair/rework problems and construction techniques.

# **ELC 117 Linear Integrated Circuits**

4-6-7

Prerequisite/Corequisite: ELC 114

The following topics are introduced: operational amplifiers, active filters, voltage regulators, timers, and phase lock loops.

## **ELC 118 Digital Electronics I**

4-6-7

Prerequisite/Corequisite: ELC 108

The basic building blocks of digital circuits are presented. Topics: Bolean algebra and minimization concepts, digital test equipment, AND, OR, NOR, NAND gates, and truth tables.

# **ELC 119 Digital Electronics II**

5-5-7

Prerequisite/Corequisite: ELC 118

Advanced digital circuits and devices are studied. Topics: logic families, flip-flops, register counters, encoding and decoding, multiplexers and de-multiplexers, A to D and D to A, display drivers, and digital system applications.

#### **ELC 120 Microprocessor I**

5-5-7

Prerequisite/Corequisite: ELC 119

A course that focuses on current generation microprocessors. Topics: microprocessor architecture, machine language, assembler, addressing schemes, debugging, memory devices, and the use of diagnostic programs.

## **ELC 121 Microprocessor II**

3-2-4

Prerequisite/Corequisite: ELC 120

A continuation of the study of current microprocessors with emphasis on application and operation techniques.

# **ELC 122 Microprocessor Interfacing**

4-6-7

Prerequisite/Corequisite: ELC 121

Microprocessor interfacing with memory and programmable interface adapters is practiced. Topics: interfacing, memory configuration, input/output, and programmable peripheral interfaces.

# **ELC 123 Communications Electronics Survey**

4-6-7

Prerequisite/Corequisite: ELC 115

The devices and concepts associated with electronic communications are introduced in this course. Topics: transmission, propagation, antennae, modulation and detection, deterioration such as noise and attenuation, receivers, and transmitters.

# **ELC 124 Industrial Electronics Survey**

2-3-4

Prerequisite/Corequisite: ELC 120

Concepts and technologies utilized in industrial electronics applications are introduced. Topics: sensors, process controls, motor controls, programmed controls, mechanical devices, fluid power, and robotics.

# **ELC 200 Introduction to Computer Architecture**

3-2-4

Prerequisite: ELC 122

A study of the basic architecture and operation of small computers. Topics: programming, hardware components, system-level architecture, and bus ar-

chitecture.

## **ELC 201 Computer Peripherals**

3-3-4

Prerequisite/Corequisite: ELC 200

A study of system-level architecture and functional operation of computer peripherals. Topics: intelligent interfaces, printers, console writers, display terminals, and mass storage.

## ELC 202 Networking I

2-3-3

Prerequisite/Corequisite: ELC 201

The architecture and functional operation of computer networks are examined with emphasis on communicating technical information to non-technical individuals. Topics: protocols, terminology, operations, and components associated with networks.

## **ELC 203 Operating Systems I**

2-3-3

Prerequisite/Corequisite: ELC 202

A study of inter-relationships between hardware and software at the systems level and the functional operation and utilization of the operating system. Topics: system components, file structure and management, software applications, utilities, and commands.

## **ELC 204 Compiled High Level Language**

2-3-3

Prerequisite/Corequisite: ELC 112

Programming utilizing BASIC, Pascal, Fortran "C" or other high level language. Topics: flow charting, designing and coding, executing the program, and debugging procedures.

#### **ELC 205 Data Communications**

2-1-2

Prerequisite/Corequisite: ELC 203

The terminology, protocols, and applications of data communications are introduced. Topics: operations, functions, internal structure, and trouble shooting techniques of both synchronous and asynchronous interfaces and modems.

# ELC 206 Networking II

2-3-3

Prerequisite: ELC 202

Skill in applying and trouble shooting software characteristic to networking is developed. Topics: network utilities; network installation, management, and applications; interpreting and isolating network failures.

# **ELC 207 Operating Systems**

2-3-3

Prerequisite/Corequisite: ELC 203

Continues the study of operating systems and introduces assembly language, crash dump analysis, monitoring utilities, on-line diagnostics, and system fault isolation.

## **ELC 208 Computer System Trouble Shooting**

2-3-3

Prerequisite/Corequisite: ELC 207

Covers the use of diagnostics to isolate failures, how to replace a defective module or subsystem, and verify its proper operation.

#### **ELC 211 Process Control**

4-6-7

Prerequisite/Corequisite: ELC 124

Examines the use of industrial controls with emphasis on sensors and signal conditioning. Topics: symbology and drawing standards, control techniques, sensors, and signaling conditions, ISA and other relevant standards.

#### **ELC 212 Motor Controls**

4-6-7

Prerequisite/Corequisite: ELC 211

Introduces the following topics: AC/DC motors and drives, MCC and contactors, NEC and NEMA standards, ladder diagrams, and power sources.

#### **ELC 213 Programmed Controls**

4-6-7

Prerequisite/Corequisite: ELC 212

Skills and techniques used in industrial applications of programmable controls are taught. Topics: controller hardware, programming, PC applications, and trouble shooting.

#### **ELC 214 Industrial Electronics Mechanical Drives**

2-3-3

Prerequisite/Corequisite: MAT 105

A study of mechanical devices used in combination with electronic controls in industry. Topics: linkages, motion analysis, gear drives, and preventive maintenance.

#### **ELC 215 Fluid Power for Industrial Electronics**

2-3-3

Prerequisite/Corequisite: MAT 105

An overview of fluid power technology as applied to industrial electronics. Topics: safety, fluid dynamics, hydraulics, pneumatics, air logic, and electrical interfacing.

## **ELC 216 Industrial Robotics**

2-3-3

Prerequisite/Corequisite: ELC 213, ELC 214, ELC 215

A survey of robotic concepts, terminology, and basic application modes. Emphasis on programming in robotic language and robot/human interfacing safety practices.

## **ELC 220 AM and SSB Circuit Analysis**

4-6-7

Prerequisite/Corequisite: ELC 123

Review of communication system concepts with emphasis on amplitude modulation and detection methods. Topics: Communication concepts; AM/ SSB modulation, detection, transmitters, receivers; noise/band width considerations; and multiplexing/de-multiplexing.

#### **ELC 221 FM Circuit Analysis**

3-2-4

Prerequisite: ELC 220

Topics covered include: frequency modulation and detection methods, FM transmitters and receivers, basic telemetry concepts, and FM multiplexing/demultiplexing.

#### **ELC 222 Advanced Modulation Techniques**

3-2-4

Prerequisite: ELC 220, ELC 221

Continues the study of modulation and detection techniques. Topics: digital modulation techniques, pulse modulation techniques, and sampling techniques.

#### **ELC 223 Antennae and Transmission Lines**

4-6-7

Prerequisite/Corequisite: ELC 220

A study of transmission lines, wave guides, antenna types, antenna applications, and telephone transmission lines.

#### **ELC 224 Microwave Communications and Radar**

4-6-7

Prerequisite/Corequisite: ELC 220

An overview of microwave and radar fundamentals, microwave devices, wave guides, specialized antennas, radar systems, and communication systems.

## **ELC 225 Optical Communications Techniques**

4-6-7

Prerequisite/Corequisite: ELC 220

A survey of the major optical devices used for communications. Topics: light sources, fiber optics cable, coupling and fusing, light modulation, detection techniques, and system application of light devices.

#### **ELT 101 Safety**

2-1-2

Prerequisite: Provisional admission

An overview of the hazards related to the use of electricity, how electrical shock or electrocution occurs, and methods of prevention and treatment. Proper use of hand and power tools, first aid, and CPR are emphasized.

#### **ELT 102 Electricity Principles**

8-6-9

Prerequisite/Corequisite: MAT 101

An introductory course in electrical theory as it relates to residential, commercial, and industrial wiring applications. Topics: production of electricity, formulas, test equipment, transformers, and fundamentals of AC and DC circuits.

## **ELT 103 Residential Wiring I**

4-3-4

Prerequisites: ELT 101-102. Corequisite: ELT 106

Residential wiring practices and procedures are taught. Topics: residential circuits, print reading, National Electrical Code, and wiring materials.

## **ELT 104 Residential Wiring II**

3-5-4

Prerequisite: ELT 103

This course covers hand and power tools, National Electrical Code, wiring materials, installations, branch circuits/feeders, and residential single family load calculations.

## **ELT 105 Residential Wiring III**

2-5-3

Prerequisite/Corequisite: ELT 103, ELT 104

Students develop the ability to install all necessary aspects of a residential electrical system.

#### **ELT 106 Electrical Prints, Schematics, Symbols**

3-1-3

Prerequisite: ELT 101, ELT 102

Introduces electrical symbols and explains their use in construction blueprints, electrical schematics, and diagrams.

## **ELT 107 Commercial Wiring I**

4-3-4

Prerequisite: ELT 105, ELT 106

Commercial wiring practices and procedures, including the National Electrical Code and commercial load calculations, are introduced with emphasis on safety.

## **ELT 108 Commercial Wiring II**

4-3-4

Prerequisite: ELT 107

A study of three phase power systems, AC motor control, and basic transformer connections (single phase and three phase step down).

## **ELT 109 Commercial Wiring III**

4-3-4

Prerequisite/Corequisite: ELT 107, ELT 108

This course includes conduit installation (EMT, thin wall, and hand-bent), system design concepts, and safety procedures.

# **ELT 111 Single Phase and Three Phase Motors**

5-1-5

Prerequisite: ELT 109

This study of single phase and three phase motors includes motor theory, terminology, identification, National Electrical Manufacturers Association (NEMA) standards, motor efficiencies, maintenance, trouble shooting, and NEC requirements.

# **ELT 112 Variable Speed Controls**

6-3-7

Prerequisite/Corequisite: ELT 111

Introduces variable speed drives, industrial motors, and other applications of variable speed drives. Topics: air conditioning compressors, use of the oscilloscope, solid state devices, installation procedures, and AC and DC motors.

# ELT 113 Programmable Logic Control I

4-2-4

Prerequisite: ELT 111, ELT 112, ELT 118

An introduction to programmable logic controls. Topics: PLC programming, connections, field wiring/installation, start-up procedures, numbering systems, and relay programming logic.

## **ELT 114 Programmable Logic Control II**

1-5-2

Prerequisite/Corequisite: ELT 113

Stresses the development of operational skills using PLC equipment and peripheral devices. Topics: printers, other peripherals, PLC hard wiring, program writing, installation, and operation of PLC program.

## **ELT 115 Diagnostic Trouble-Shooting**

1-5-2

Prerequisite/Corequisite: ELT 114

Diagnostic techniques for electrical malfunction are taught in this course as students learn about advanced schematics, sequential trouble shooting procedures, and safety.

#### **ELT 116 Transformers**

4-2-4

Prerequisite: ELT 109

Instruction in the theory and operation of specific types of transformers. Emphasis on N.E.C. requirements related to the use of transformers. Topics: Transformer theory, types of transformers, National Electrical Code requirements, and safety precautions.

# **ELT 117 National Electrical Code Industrial Applications**

2-5-4

Prerequisite: ELT 109

Instruction in industrial applications of the National Electrical Code. Topics: rigid conduit installation, system design concepts, equipment installation (600 volts or less), and safety precautions.

#### **ELT 118 Electrical Controls**

6-6-7

Corequisite: ELT 111, ELT 112

Concepts of line voltage switching, low voltage switching, manual controls, automatic controls and devices, and circuit controls are introduced.

#### EMS 103 Introduction to the Paramedic Profession

5-1-5

Prerequisite: Provisional admission

Introduces the paramedic profession and emphasizes functions beyond the level of basic EMT. Includes topics in Division I, Sections 1,2,3,4, and 6 and Division II, Sections 1 and 2 of the national curriculum. Topics: role and responsibility of the paramedic, the emergency medical services system, medical/legal considerations, EMS communications, major incident response, medical terminology, anatomy and physiology, primary and secondary assessment, and early field management.

#### EMS 105 Fluids, Electrolytes, and Shock

2-1-2

Prerequisite: Program admission. Prerequisite/Corequisite: EMS 103
The functions and characteristics of body fluids and the pathophysiology of shock are examined. Topics: cardiovascular anatomy and physiology; fluid and electrolyte balance; and the classification, assessment, and management of shock. Includes topics in Div. II, Sect. 4 of the national curriculum.

#### **EMS 106 General Pharmacology**

2-1-2

Prerequisite: Program admission, Prerequisite/Corequisite: EMS 103, EMS 105, MAT 100

A study of the proper use and administration of pharmaceuticals in emergency medical care. Topics: drugs, dosage calculations, drug administration techniques, and drug safety. Includes topics in Div. II, Sect. 5 of the national curriculum.

## **EMS 107 Respiratory Function and Management**

4-1-4

Prerequisite: Program admission, EMS 103

An in-depth study of anatomical and physiological respiration and how to assess and manage respiratory pathophysiology and distress. Includes topics in Div. IV, Sect. 1 and Div. II, Sect. 3 of the national curriculum.

## **EMS 108 Cardiology**

8-2-9

Prerequisite: Program admission, EMS 103

Coverage of cardiovascular anatomy and physiology; electrocardiography principles and equipment operation; recognition of cardiac dysrhythmias; cardiovascular emergencies, and methods of emergency treatment such as pharmacologic intervention, defibrillation, and cardioversion; and ACLS skills. Includes topics in Div. IV, Sect. 2 of the national curriculum.

#### EMS 109 Trauma

4-2-5

Prerequisite/Corequisite: EMS 105

Introduces assessment and management of trauma patients. Topics: basic trauma life support (BTLS) and pre-hospital trauma life support (PHTLS); head injuries; spinal cord injuries; rescue; anatomy and physiology of the integumentary system, the musculoskeletal system, the major internal organs; soft tissue injuries, musculoskeletal injuries; and burns. Includes topics in Div. I, Sect. 5 and Div. III, Sect. 1 and 2 of the national curriculum.

# EMS 111 Medical Emergencies I

3-0-3

Prerequisite: EMS 105, EMS 107

Assessment and management of disorders of the endocrine, nervous, digestive, genitourinary, and immune systems; infectious disease; and anaphylaxis. Includes topics in Div. IV, Sects. 3, 4, 5, 6, and 8 of the national curriculum.

# **EMS 112 Medical Emergencies II**

Prerequisite/Corequisite: EMS 111

The etiology and pathophysiology and in-field management of immune system compromise, infectious disease, toxicologic, environmental, and gerontological emergencies. Topics: assessment and management of the patient, utilization of universal precautions, toxicology, alcoholism, and substance abuse disease process; management of environmentally related injury; and geriatrics/gerontology, Includes topics in Div. IV. Sects. 7, 9, and 10 of the national curriculum.

#### EMS 113 Obstetrics/Gynecology

1-1-1

Prerequisite: EMS 105

A study of the female reproductive system, birth process, and management of OB/GYN emergencies. Includes topics in Div. V, Sect. 1 of the national curriculum.

## **EMS 114 Pediatrics**

2-1-2

3-0-3

Prerequisites: EMS 105, EMS 107, EMS 108, EMS 109

A study of the growth, development, and specific diseases of the pediatric patient. Includes assessment and management of the ill or injured pediatric patient. Includes topics in Div. IV, Sect. 11 and DIV. V, Sect. 1 of the national curriculum.

## **EMS 116 Behavioral Emergencies**

1-0-1

Prerequisite: Program admission

An overview of assessment and management of behavioral emergencies prior to hospital care. Topics: communications and crisis intervention, adult and adolescent patients with behavioral emergencies, the violent patient, the suicidal patient, medical/legal considerations, and stress management. Includes topics in Div. VI, Sect. 1 and Div. I, Sect. 7 of the national curriculum.

#### EMS 118 Clinical Applications / Advanced Emergency Care 0-36-12

Prerequisite: Program admission. Prerequisite/Corequisite: EMS 103 Provides supervised experience that meets Georgia Department of Human Resources requirements for actual patient care in the hospital and advanced ambulance settings. Simulations in the classroom, experience on an advanced ambulance, and service in a hospital develop assessment and treatment skills. Includes clinical opportunities as follows: emergency department (100 hrs.), ICU/CCU (80 hrs.), OR/recovery (36 hrs.), IV team (24 hrs.), pediatrics (24 hrs.), nursery (10 hrs.), labor/delivery (24 hrs.), crisis intervention (8 hrs.), morque (4 hrs.), and advanced ambulance (40 hrs.).

# **ENG 100 English**

5-0-5

Prerequisite: ENG 096 and RDG 096 or program admission reading/English

The development and improvement of written and oral communication is emphasized. Topics: grammar; usage; vocabulary; idea development; spelling; sentence elements; paragraph development; reading and listening skills; and use of resource information.

#### **ENG 101 English**

5-0-5

Prerequisite: ENG 097 and RDG 097 or program admission English and reading competency

A course designed to develop and improve written and oral communication abilities. Topics: analyzing writing techniques used in selected readings, practice writing, editing, and proofreading, research skills, and oral presentation skills.

## **ENG 102 Technical Writing**

5-0-5

Prerequisite: ENG 101, ENG 098 and RDG 098 or program admission reading/ English competency

Topics covered include accepted methods of describing devices and processes by oral and written means; proper use of standards manuals, guides, specifications, and interpretations of data in the report format.

## **ENG 111 Business English**

5-0-5

Prerequisite: ENG 097 and RDG 097 or program admission English and reading competency

A functional and comprehensive review of English usage and oral communication skills. Topics: sentence and paragraph structure, spelling, grammar and punctuation, vocabulary development, and reference materials location and utilization.

# **ENG 112 Business Communications**

5-0-5

Prerequisite: BUS 101, ENG 111

The application of written and oral communication to business situations. Topics: planning, outlining and writing letters and reports from raw data; revising letters and reports; listening; reading; and speaking.

# IMT 101 Industrial Maintenance Safety Procedures

2-1-2

Prerequisite: Provisional admission

An in-depth study of health and safety practices associated with the maintenance of industrial production equipment. Topics: traffic, ladder, and fire safety; safe work in confined spaces; electrical safety, emergency procedures; OSHA regulations; MSDS Right-to-Know Law and hazardous materials safety.

#### IMT 108 Industrial Mechanics I

5-5-7

Prerequisite: Program admission math competency

Explores basic concepts of physics that can be applied to the mechanics of industrial production equipment, teaches basic industrial applications of mechanical principles with emphasis on power transmission. Topics: mechanical tools, fasteners, basic mechanics, lubrication, bearings, and packings and seals.

#### IMT 110 Industrial Mechanics II

3-7-6

Prerequisite: IMT 108

Continues the application of mechanical principles to industrial production equipment with emphasis on power transmission. Topics: mechanical drive systems, couplings and alignment, clutches and brakes, linkage and levers, mechanical trouble-shooting, and preventive maintenance.

## IMT 113 Hydraulics I

6-4-8

Prerequisite: Program admission math competency

Concepts and theories for the safe operation of hydraulic components and systems are explored. Topics: types of fluids, hydraulic theory, suction side of pumps, activators, valves, pump motors, accumulators, symbols and circuitry, preventative maintenance, and servicing safety.

#### IMT 115 Industrial Pneumatics I

3-2-4

Prerequisite/Corequisite: IMT 113

Concepts and theories for the safe operation of pneumatic components and systems are explored. Topics: pneumatic theory, preventative maintenance, compressors, regulators, pneumatic valves, actuators, and servicing safety.

#### IMT 118 DC and AC Motors

3-2-4

Prerequisite/Corequisite: ELC 106, ELC 109, MAT 103

The theories of and applications for single phase and three phase motors are introduced. Topics: motor theory, terminology, and identification; NEMA standards; AC motors; DC motors; preventative maintenance; trouble shooting; and Article 430 of the National Electrical Code.

#### IMT 119 Motor Controls I

3-2-4

Prerequisite/Corequisite: IMT 118

Concepts, principles, and devices associated with industrial motor control are studied. Topics: principles of motor control, and control devices.

# IMT 120 Magnetic Starters and Braking

3-2-4

Prerequisite/Corequisite: IMT 119

Manual motor controls are introduced with emphasis on motor contactors, relays, and magnetic starters with applicable sensing devices, ladder diagrams, and schematics. Topics: line voltage switching, low voltage switching, and manual controls.

## **IMT 121 Two-Wire Control Circuits**

2-3-3

Prerequisite/Corequisite: IMT 120

Provides instruction in automatic and circuit controls. Topics: automatic controls and devices, and control circuits.

#### **IMT 122 Advanced Motor Controls**

2-3-3

Prerequisite/Corequisite: IMT 121

Continues the study of motor control with emphasis on starters and reversing.

Topics: starters, electronic solid state starters, reduced voltage starters, and reversing.

## IMT 123 Variable Speed Motor Control

3-2-4

Prerequisite/Corequisite: IMT 122

Instruction in the fundamentals of variable speed drives, industrial motors, and other applications of variable speed drives. Topics: fundamentals of variable speed control, AC and DC motors, solid state controls, installation procedures, and ranges.

#### IMT 126 Programmable Logic Control Practicum

1-9-4

Prerequisite/Corequisite: ELT 114

Hands-on development of operational skills in the maintenance and troubleshooting of automated industrial machinery using advanced features of industrial PLC's. Topics: sequencers, file commands, analog I/O, block transfers, and trouble-shooting.

#### IMT 128 Pumps and Piping Systems

1-4-2

Prerequisite: Program level math competency

Topics covered include: Pump identification; pump operations; pump installation, maintenance and troubleshooting; piping systems; installation of piping systems.

# IMT 129 Industrial Wiring I

2-8-5

Prerequisites: ELC 106, ELC 109

Topics covered include: Wiring devices and materials; symbols and blueprint reading; branch and feeder circuits; switches, recepticals, and cord connectors; grounding; wire sizing; overcurrent protection, and NEC requirements.

# IMT 130 Industrial Wiring II

2-8-5

Prerequisite: IMT 129

Topics covered include: Raceway installation, three phase systems, transformers (single and 3-phase), industrial lighting systems, and NEC requirements.

#### IMT 131 Industrial Maintenance Mechanical Review

2-3-3

Provides a review of essential topics covered in course work leading to the Industrial Maintenance Mechanical Specialization diploma.

#### IMT 132 Industrial Maintenance Electrical Review

2-3-3

Provides a review of essential topics covered in course work leading to the Industrial Maintenance Electrical Specialization diploma.

## MAS 101 Medical Law and Ethics

2-0-2

Prerequisite: Provisional admission

Introduces the concept of medical assisting, its relationship to other health fields, and emphasizes medical ethics, the legal aspects of medicine, and the role of the medical assistant as an agent of the physician.

MAS 103 Pharmacology

5-0-5

Prerequisite: AHS 101, AHS 109, MAT 101

An introduction to drug therapy. Provides information on safety, classification of drugs, their actions, side effects, and/or adverse reactions. Offers instruction in mathematical concepts used in the administration of drugs.

#### MAS 104 Medical Administrative Procedures I

2-3-3

Prerequisite: Program admission, AHS 101, AHS 109, BUS 101

Develops essential administrative skills needed in a typical medical office. Topics: accounting procedures, insurance preparation and coding.

#### MAS 105 Medical Administrative Procedures II

2-8-5

Prerequisite: MAS 103, MAS 104

Develops essential administrative skills needed in a typical medical office. Topics: introduction to the computer, and medical transcription.

## MAS 108 Medical Assisting Skills I

2-8-5

Prerequisite: Program admission, AHS 101, AHS 109

Develops the skills necessary when assisting the physician with a complete history and physical examination. Includes skills needed when sterilizing instruments and equipment and setting up sterile trays. Explores theory and technique for electrocardiography. Other topics included are infection control and related OSHA Guidelines, and minor office surgical procedures.

# MAS 109 Medical Assisting Skills II

2-8-5

Prerequisite: MAS 103, MAS 108

Continues the development of medical skills with the introduction of techniques for specimen collection/examination of specimens and CLIA Regulations, venipuncture, administration of medications, first aid/CPR, physical therapy procedures, principles of radiology, and safety.

#### MAS 112 Human Diseases

5-0-5

Prerequisite: AHS 101, AHS 109

Provides clear, succinct, and basic information about common medical conditions. Topics: introduction to disease, body systems, nutritional implications, and pharmacological implications.

#### MAS 113 Maternal and Child Care

5-0-5

Prerequisite: AHS 101, AHS 109, MAS 103

Focuses on female and male reproductive systems, intrauterine development, prenatal care, labor and delivery, and stages of child development.

#### MAS 117 Medical Assisting Externship

0-20-6

Prerequisite: Completion of all required courses except MAS 118, Corequisite: MAS 118

This clinical Practicum places the student in a medical office job setting and allows for professional-level application of skills learned during the program.

#### MAS 118 Medical Assisting Seminar

4-0-4

Prerequisite: Completion of all required courses except MAS 117; Corequisite: MAS 117

This course focuses on preparation for employment, maintenance of skills, and review for the certification examination.

#### **MAT 100 Basic Mathematics**

3-0-3

Prerequisite: MAT 096 or program level math competency

Emphasizes basic mathematical concepts. Topics: whole numbers, fractions, decimals, percents, ratio/proportion, and measurement using English and metric units.

#### **MAT 101 General Mathematics**

5-0-5

Prerequisite: MAT 097 or program admission math competency

A study of mathematics that can be applied to the solution of occupational and technical problems. Topics: properties of numbers, fractions, decimals, percents, ratio/proportion, measurements and conversions, exponents, and geometric and technical formulas.

## MAT 103 Algebraic Concepts

5-0-5

Prerequisite: MAT 098 or program admission math competency Introduces concepts and operations which can be applied to the study of algebra. Topics: a review of arithmetic; signed numbers; order of operations; unknowns and variables; algebraic expressions; equations and formulas; and graphs.

# MAT 104 Geometry and Trigonometry

5-0-5

Prerequisite: MAT 103

Continues the development of algebraic concepts and introduces geometric and trigonometric concepts. Topics: exponents, algebraic fractions, higher order equations, functions, linear geometry, two dimensional geometry, three dimensional geometry, and trigonometric functions.

# **MAT 104 Trigonometry**

5-0-5

Prerequisite: MAT 103

Emphasizes trigonometric concepts. Introduces logarithms and exponential functions. Topics: geometric formulas, right triangle and unit circle trigonometric values, evaluation and graphing of trigonometric functions, laws of sines and cosines, vectors, complex numbers, logarithms, and logarithmic and exponential functions.

#### MAT 111 Business Math

5-0-5

Prerequisite: MAT 097 or program admission math competency Emphasizes mathematical concepts found in business. Topics: basic mathematical skills, solving business-related problems, problems using electronic calculators, and applications using graphs.

## MCA 201 Advanced Milling I

5-5-7

Prerequisite: MCH 115, MCH 116

Instruction in the advanced techniques of milling machine operation. Topics: vertical milling, horizontal milling, compound angles, and gear cutting.

## MCA 203 Advanced Milling II

3-7-6

Prerequisite/Corequisite: MCA 201

A continuation of instruction in advanced milling machine operation begun in MCA 201. Topics: indexing, rotary table, boring, facing, turning, and straddle milling.

## MCA 205 Advanced Lathe Operations I

5-5-7

Prerequisite: MCH 109, MCH 110

Provides instruction in advanced lathe operations and procedures. Topics: thread cutting, precision boring, precision knurling and tapers.

#### MCA 207 Advanced Lathe Operations II

3-7-6

Prerequisite: MCA 205

Continues instruction begun in MCA 205 by introducing further advanced lathe operations and procedures. Topics: special set-ups, eccentric turning, and tolerance turning.

## MCA 208 Advanced Grinding I

3-2-4

Prerequisite: MCH 112

Instruction and skill development practice utilizing advanced grinding operations and procedures. Topics: surface grinding, cylindrical grinding, tool and cutter grinding, and theory.

# MCA 209 Advanced Grinding II

2-3-3

Prerequisite: MCA 208

Provides instruction in advanced grinding techniques and procedures. Topics: grinding theory, abrasives, wheel preparation, and form grinding.

#### MCA 211 CNC Fundamentals

6-4-7

Prerequisite: MCH 118

A comprehensive introduction to computer numerical controlled (CNC) machine processes. Topics: math review, safety, jigs and fixtures, tooling and tool holders, reference points, tool offsets, program loading, and program ending.

# MCA 213 CNC Mill Manual Programming

6-4-7

Prerequisite/Corequisite: MCA 211

Instruction for the safe operation and manual programming of computer numerical controlled (CNC) milling machines. Topics: safety, command codes, program loading, machine set-up, process control, and practical application.

# MCA 215 CNC Lathe Manual Programming

6-4-7

Prerequisite/Corequisite: MCA 211

Instruction for the safe operation and manual programming of computer numerical controlled (CNC) lathes. Topics: machine safety, command codes, program loading, machine set-up, process control, and practical application.

#### MCA 217 CNC Practical Applications

4-6-6

Prerequisite/Corequisite: MCA 211, MCA 213, MCA 215

Instruction in specialty tooling and multi-axis machining. Topics: specialty tooling, EDM/ECM, multi-axis machining, process control, and laboratory practice.

# MCA 219 CAD/CAM Programming

5-5-6

Prerequisite/Corequisite: MCA 211

Develops programming skills needed for computer aided design (CAD) and computer aided manufacturing (CAM) operations. Students design and program parts to be machined on computer numerical controlled machines. Topics: hardware, software, digitizer, pen plotter, drawing manipulations, tool path generation, and program uploading and downloading.

#### MCA 220 Die Design I

5-5-7

Prerequisite: MCH 101, 107, 109, 110, 112, 115, 116

Instruction in the design, construction, selection, and safe use of dies required for mass production. Topics: die sets, die blocks, punches, types of dies, blanking, bending, types of presses, tool and die drafting, and related math.

#### MCA 221 Die Construction I

2-8-5

Prerequisite/Corequisite: MCA 220

Practical application of the theory and competencies covered in MCA 220. Includes the manufacture of punches and dies utilizing a variety of advance machines. Topics: jig bore, EDM, indexing, fixtures, and precision grinding.

# MCA 223 Die Design II

5-5-7

Prerequisite: MCA 221

A continuation of MCA 220 in which advanced theory and projects are introduced. Topics: related formulas, calculation of bends, draw die calculation, fasteners, and spring selection.

#### MCA 224 Die Construction II

2-8-5

Prerequisite/Corequisite: MCA 223

The practical application of the theory and competencies presented in MCA 223. Topics: application of related formulas, calculations and manufacture of bends, draw die manufacture, manufacture of fasteners, and spring selection.

# MCA 226 Machining Math III

5-0-5

Prerequisite: MCH 105

A continuation of advanced machining mathematics concepts. Topics: interpolation of compound angles, advanced algebraic equations, compound and complex geometric functions, and advanced trigonometry.

#### MCA 228 Characteristics of Metal/Heat Treatment II

4-1-4

Prerequisite: MCH 107

The proper selection of tool steel for specific tooling operations and heat treating procedures is studied. Topics: effects of alloy components in tool steel, identification of tool steel alloys, identification of tool steel by classification, and correct heat treating procedures.

#### MCH 101 Introduction To Machine Tool

2-8-6

Prerequisite: Provisional admission

Concepts and procedures necessary for the safe and efficient use of basic machine tools are studied. Topics: use of hand and bench tools and use of power tools.

#### MCH 102 Blueprint Reading For Machine Tool

5-0-5

Prerequisite: Provisional admission

Introduces concepts necessary to interpret drawings and produce sketches for the machine tool applications. Topics: interpretation of blueprints and sketches.

#### MCH 104 Machine Tool Math I

5-0-5

Prerequisite/Corequisite: MAT 101

Develops math competencies as applied to machine tool technology. This course emphasizes manipulation and use of machining formulas and the discussion of machining geometry. Topics: machining algebra and machining geometry.

## MCH 105 Machine Tool Math II

5-0-5

Prerequisite: MCH 104

Continues the development of math competencies as applied to machine tool technology. Emphasis on geometric and trigonometric principles in machining.

#### MCH 107 Characteristics of Metals/Heat Treatment

3-2-4

Prerequisite: Provisional admission

Introduces the properties of various metals, production methods and identification of ferrous and non-ferrous metals. Topics: metallurgy, and heat treatment.

#### MCH 109 Lathe Operations I

4-6-7

Prerequisite: Provisional admission

Provides opportunities to develop skills using bench grinders and lathes. Topics: lathes, bench grinders, lathe calculations, set-up, and operations; bench grinder operations.

# MCH 110 Lathe Operations II

2-8-6

Prerequisite: Provisional admission

Provides additional opportunities to develop skills using lathes. Topics: lathes, lathe calculations, set-up, and operations.

## MCH 112 Surface Grinder Operations

2-8-6

Prerequisite: Provisional admission

The set-up, operation, maintenance, and assembly operations of surface grinders are studied. Topics: surface grinders and their maintenance, surface grinder set-up and operations.

## MCH 114 Blueprint Reading II

5-0-5

Prerequisite: MCH 104

Continues the development of blueprint reading competencies as applied to machine tool technology. Topics: advanced sectioning, geometric dimensioning, geometric tolerancing, and assembly drawings.

#### MCH 115 Mill Operations I

4-6-7

Prerequisite: Provisional admission

Instruction in the calculations, set-up, and operations of milling machines. Topics: milling machines; calculations, set-ups, and operations.

#### MCH 116 Mill Operations II

2-8-6

Prerequisite: Provisional admission

Further instruction in the calculations, set-up, and operations of milling machines. Topics: vertical and horizontal mill calculations, set-ups, and operations.

## MCH 118 Computer/CNC Literacy

5-0-5

Prerequisite: Provisional admission

An introduction to microcomputers and the terminology associated with computer numerical controlled (CNC) equipment. Provides basic computer operation skills and covers the capabilities and limitations of CNC machinery. Topics: microcomputer concepts and basic operations, functions and sub-routines, machine tool applications, Cartesian coordinates, absolute and incremental programming, and the capabilities and limitations of CNC.

# MKT 100 Introduction to Marketing

5-0-5

Prerequisite: Provisional admission

The trends and dynamic forces affecting the market process are examined along with coordination of marketing functions. Topics: marketing strategies, marketing mix, marketing trends, and dynamic forces acting on the market.

# MKT 101 Principles of Management

5-0-5

Prerequisite: Provisional admission

Develops the skills and behaviors needed to supervise people and job responsibilities. Emphasis is on personnel management. Topics: management theories; employee moral; motivating, supervising, and evaluating employees; recruitment, screening, and selection of employees; supervision techniques, and functions of management.

#### MKT 103 Business Law

5-0-5

Prerequisite: Provisional admission

Introduces the student to contracts and other legal business obligations. Topics: creation and evolution of laws, the court decision process, sales contracts, commercial papers, risk-bearing devices, and the Uniform Commercial Code.

## MKT 104 Principles of Economics

5-0-5

Prerequisite: Program admission math competency

A study of micro and macro economic principles, policies, and applications. Topics: economic systems, supply and demand, money and the banking system, and the business cycle.

# MKT 106 Fundamentals of Selling

5-0-5

Prerequisite: Provisional admission

Sales strategy and techniques to assist in the sales process are taught. Topics: customer relations, professional image, product/service knowledge, selling techniques and procedures, and the ethics of selling.

# MKT 107 Buying

5-0-5

Prerequisite: Program admission math competency

Principles associated with buying merchandise and accounting for products and services are introduced. Topics: assortment planning; locating resources; ordering merchandise; pricing for profit; financial statements; ratios; and accounting vocabulary.

## MKT 108 Advertising

3-2-4

Prerequisite: Program admission

Introduces principles and practices associated with advertising activities. Topics: purposes of advertising and sales promotion techniques; advertising principles; budgeting; marketing/advertising plans; regulations and controls; media evaluation; target marketing; campaign planning; and advertising trends.

# MKT 109 Visual Merchandising

3-2-4

Prerequisite: Provisional admission

This course focuses on the effective use of visual presentation to market goods and services. Emphasis is on design, color, tools and materials, and installation of displays. Other topics included are props and fixtures, lighting and signing, store planning, and safety.

## MKT 110 Entrepreneurship

6-4-8

Prerequisite: Program admission math competency

An overview of activities common to planning, establishing, and managing a small business enterprise. Topics: planning, location analysis, financing, and development of business plan.

# MKT 125 Retail Operations Management

6-4-8

Prerequisite: Program admission

Emphasizes planning, organizing, and managing of retail firms. Topics: orga-

nizational development, strategic and short-term planning, human resource management, inventory control, profit and loss statements, balance sheets and entrepreneurship.

# MKT 130 Marketing Admin. Occupationally-Based Instruction I 0-10-3

Prerequisite: Program admission, ENG 111, MKT 101

Actual job placement or Practicum experience during which the student becomes acquainted with occupational responsibilities through realistic work situations. MKT 130 is implemented through the use of a written individualized training plan, a written performance evaluation, a required weekly seminar, and a required Practicum or on-the-job training.

#### MKT 131 Marketing Admin. Occupationally-Based Instruction II0-10-3 Prerequisite/Corequisite: MKT 130

Actual job placement or Practicum experience during which the student becomes acquainted with occupational responsibilities through realistic work situations. MKT 131 is implemented through the use of a written individualized training plan, a written performance evaluation, a required weekly seminar, and a required Practicum or on-the-job training.

# MKT 136 Retail Managemt. Occupationally-Based Instruction I 0-10-3

Prerequisite: Program admission, ENG 111, MKT 101

Actual job placement or Practicum experience introduces students to retail management and employability principles. MKT 136 is implemented through the use of a written individualized training plan, a written performance evaluation, a required weekly seminar, and a required Practicum or on-the-job training.

# MKT 137 Retail Managemt Occupationally-Based Instruction II 0-10-3 Prerequisite/Corequisite: MKT 136

Actual job placement or Practicum experience focuses on the application and reinforcement of retail management and employability principles. MKT 137 is implemented through the use of a written individualized training plan, a written performance evaluation, a required weekly seminar, and a required Practicum or on-the-job training.

# NPT 112 Medical Surgical Nursing I Practicum 0-24-8

Prerequisite: AHS 102, AHS 103, NSG 111; Corequisite: NSG 112 Practicum focuses on wellness and the prevention of illness in the cardiovascular system, care of the individual as a whole, and deviations from the normal state of health. Topics: wellness and prevention of illness, nursing care, treatments, drug and diet therapy related to patients with disorders of the cardiovascular, respiratory, endocrine, urinary, and gastrointestinal systems.

# NPT 113 Medical Surgical Nursing II Practicum 0-24-8 Prerequisite: AHS 102, AHS 103, NSG 111; Corequisite: NSG 113

Practicum focuses on wellness and the prevention of illness, care of the individual as a whole, and deviations from the normal state of health. Topics: wellness and prevention of illness, nursing care, treatments, drug and diet therapy related to patients with disorders of the musculoskeletal, neurological,

integumentary, and sensory systems; nursing care, treatments, drug and diet therapy related to patients with mental health disorders; and oncology.

#### NPT 214 Maternal-Child Nursing Practicum

0-15-5

Prerequisite: AHS 102, AHS 103, NSG 111, Corequisite: NSG 214

Practicum focuses on wellness and the prevention of illness, care of the individual as a whole, and deviations from the normal state of health. Topics: the reproductive system, obstetrics, pediatrics, and associated illness; diet therapy; pharmacology; and nursing procedures/techniques utilizing the nursing process.

#### NPT 215 Nursing Leadership Practicum

0-9-3

Prerequisite: AHS 102, AHS 103, NSG 111; Corequisite: NSG 215 Builds on the concepts presented in prior nursing courses and develops the skills necessary for successful performance in the job market. Topics: leadership skills, management skills, and employability skills.

#### NSG 111 Nursing Fundamentals

7-15-12

Prerequisite: AHS 101, ENG 101, MAT 101, PSY 101

An introduction to the nursing process. Topics: ethics and law, community health, infection control, patient care, application of therapeutic procedures and treatment, first aid, CPR, geriatrics, oncology, and utilizing the nursing process.

#### NSG 112 Medical Surgical Nursing I

9-0-9

Prerequisite: AHS 102, AHS 103, NSG 111. Corequisite: NPT 112 Focuses on wellness and the prevention of illness, care of the individual as a whole, and deviations from the normal state of health. Topics: cardiovascular, respiratory, endocrine, urinary, and gastrointestinal systems and associated illnesses; pharmacology; and nursing procedures/techniques; and utilizing the nursing process.

#### NSG 113 Medical Surgical Nursing II

9-0-9

Prerequisite: AHS 102, AHS 103, NSG 111. Corequisite: NPT 113 Focuses on wellness and the prevention of illness, care of the individual as a whole, and deviations from the normal state of health. Topics: musculoskeletal, neurological, integumentary, and sensory systems; mental health and associated illness; pharmacology; and nursing procedures/techniques; and utilizing the nursing process.

#### NSG 214 Maternal-Child Nursing

10-0-10

Prerequisite: AHS 102, AHS 103, NSG 111. Corequisite: NPT 214 Focuses on wellness and the prevention of illness, care of the individual as a whole, and deviations from the normal state of health. Topics: the reproductive system; obstetrics; maternal child, and associated illness; pharmacology; and nursing procedures/techniques; and utilizing the nursing process.

## NSG 215 Nursing Leadership

2-0-2

Prerequisite: AHS 102, AHS 103; NSG 111. Corequisite: NPT 215

Builds on the concepts presented in Nursing Process I-III and develops the skills necessary for successful performance in the job market. Topics: leadership skills, management skills, and employability skills.

#### PHY 221 Physics I

5-0-5

Prerequisite: ENG 101; MAT 104

The practical application of mechanics theory is introduced. Topics: measurements and systems of units; Newton's laws; linear motion; work, energy, power, and momentum; two dimensional motion; and equilibrium.

#### PHY 222 Physics II

5-0-5

Prerequisite: PHY 221

Continues the study of the practical applications of mechanics theory. Topics: heat, light, sound, statics, and fluid dynamics.

## **PSY 100 Interpersonal Relations**

3-0-3

Prerequisite: Provisional admission

A study of human relations and professional development designed to prepare the student for living and working in a complex society. Topics: understanding self and others, professional image, job acquisition skills, and desirable attitudes for job retention and advancement.

## **PSY 101 Psychology**

5-0-5

Prerequisite: Provisional admission

Provides the Practical Nursing student with a basic understanding of human psychology and group behavior. Topics: social environments, career development, communications and group processes, case problems, and typical relationships.

# RAD 101 Introduction to Radiography

5-2-6

Prerequisite: Program admission

An overview of radiography and patient care. *Topics:* ethics, medical/legal considerations, Right To Know Law, professionalism, basic principles of radiation protection, principles of exposure, equipment, hospital and department organization, and patient care with consideration for physical and psychological conditions.

# RAD 104 Radiographic Procedures I

2-3-3

Prerequisite/Corequisite: AHS 101, RAD 101

Introduces the knowledge required to perform radiographic procedures applicable to the human anatomy. Emphasis on production of quality radiographs. *Topics*: introduction to radiographic procedures; positioning terminology; positioning considerations; procedures; anatomy; and topographical anatomy related to body cavities, upper extremities, and the shoulder girdle.

## RAD 106 Radiographic Procedures II

2-3-3

Prerequisite: RAD 104

Continues the study of radiographic procedures. *Topics:* anatomy and routine projections of the lower extremities, pelvic girdle, spine, and bony thorax.

## RAD 107 Principles of Radiographic Exposure I

3-3-4

Prerequisite/Corequisite: RAD 101

A study of factors governing the production of radiographic images. *Topics:* radiographic density, radiographic contrast, recorded detail, distortion, characteristics, handling, and storage of film, artifacts, silver recovery, and state/federal regulations.

## RAD 109 Radiographic Procedures III

3-1-3

Prerequisite: RAD 106

Continues development of skills required prior to execution of radiographic procedures in clinical situations. *Topics:* gastrointestinal, genitourinary, and biliary system procedures.

#### RAD 111 Radiologic Science I

5-0-5

Prerequisite/Corequisite: MAT 103

Concepts of basic physics with emphasis on the fundamentals of x-ray generating equipment. *Topics:* units of measure, physical principles, atomic structure, the structure of matter, electrostatics, magnetism, and electromagnetism, electrodynamics, and control of high voltage and rectification.

# RAD 113 Radiographic Procedures IV

2-1-2

Prerequisite: RAD 104

Continues development of knowledge and skills required to perform radiographic procedures. *Topics:* anatomy and routine cranial and facial radiography.

# RAD 114 Radiologic Science II

2-0-2

Prerequisite: RAD 111

Continues concepts of basic physics as relate to x-ray equipment. *Topics:* x-ray tubes, x-ray circuits, and production and characteristics of radiation.

# RAD 116 Principles of Radiographic Exposure II

3-0-3

Prerequisite: RAD 107

Continues instruction related to production of the radiographic image on film. *Topics:* beam limiting devices, beam filtration, scattered/secondary radiation, control of the remnant beam, technique formation, and exposure calculations.

# RAD 117 Radiographic Imaging Equipment

3-3-4

Prerequisite: RAD 116

A survey of equipment used to produce diagnostic images. *Topics*: radiographic equipment, image intensified fluoroscopy, recording media, image

noise, computer literacy, monitoring and maintenance, state/federal regulations.

## RAD 118 Special Radiologic Procedures I

3-1-3

Prerequisite: RAD 113

Instruction in the more complicated special radiologic procedures. *Topics*: minor procedures, sterile technique, special equipment, introduction to angiographic and interventional procedures.

#### RAD 119 Radiographic Pathology

3-0-3

Prerequisite: AHS 101

Pathology and disease as related to radiographic procedures are discussed. *Topics:* pathology fundamentals, trauma/physical injury, systemic classifications of disease.

#### RAD 120 Principles of Radiation Biology & Protection

5-0-5

Prerequisite: Program Admission

Radiation effects on cells and factors affecting cell response are presented. Topics: radiation detection and measurement, patient protection, personnel protection, maximum permissible dose, agencies and regulations, introduction to radiation biology, cell anatomy, radiation/cell interaction, effects of radiation.

## RAD 126 Radiologic Technology Review

4-0-4

Prerequisite/Corequisite: RAD 134, RAD 138

A review of previous course work to help the student prepare for a national certification exam. *Topics:* radiographic exposure; radiographic procedures; anatomy, physiology, pathology, terminology; radiation protection; patient care techniques.

#### RAD 132 Introduction to Clinical Radiography I

0-14-4

Prerequisite: RAD 104; Prerequisite/Corequisite: RAD 106

Introduces the hospital clinical setting and the opportunity for students to participate in or observe radiographic procedures. *Topics:* orientation; participation in/observation of procedures related to body cavities, shoulder girdle, upper extremities, lower extremities, pelvic girdle, spine, and bony thorax.

#### RAD 133 Introduction to Clinical Radiography II

0-21-7

Prerequisite: RAD 106, RAD 132, Prerequisite/Corequisite: RAD 109 Continues clinical work experience. *Topics:* equipment utilization; participation in/observation of projections of the lower extremities, pelvic girdle, spine, bony thorax, gastrointestinal, genitourinary, and biliary systems.

#### RAD 134 Intermediate Clinical Radiography

0-21-7

Prerequisite: RAD 109, RAD 133, Prerequisite/Corequisite: RAD 113, 114 Continues clinical work experience *Topics:* participation in/observation of procedures related to gastrointestinal, genitourinary, and biliary systems procedures, and cranial/facial radiography.

## RAD 135 Intermediate Clinical Radiography II

0-21-7

Prerequisite: RAD 134; Prerequisite/Corequisite: RAD 118

Continues clinical work experience. *Topics:* sterile techniques; participation in/ observation of procedures related to genitourinary system, cranial, and facial radiography.

## RAD 136 Intermediate Clinical Radiography III

0-21-7

Prerequisite: RAD 118, RAD 135

Continues clinical work experience. *Topics*: advanced radiographic anatomy, equipment utilization, sterile techniques; participation in/observation of angiographic, interventional, genitourinary procedures, and special equipment.

## RAD 137 Advanced Clinical Radiography I

0-28-9

Prerequisite: RAD 136, Prerequisite/Corequisite: RAD 120

Continues clinical work experience. *Topics:* equipment, exposure techniques, routine and special radiographic procedures.

## RAD 138 Advanced Clinical Radiography II

0-28-9

Prerequisite: RAD 137

Culminates hospital work experience. *Topics:* equipment, exposure techniques, routine and special radiographic procedures.

## **RES 101 Introduction to Respiratory Therapy**

5-0-5

Prerequisite: Provisional admission

An overview of the respiratory therapy profession as it relates to issues in contemporary medical care. Topics: job acquisition, retention, and advancement; legal and ethical considerations; hospital and departmental organization; death and dying; safety; and professionalism.

# **RES 102 Foundations of Respiratory Therapy**

5-0-5

Prerequisite: Program admission

A basic study of gases and their medical applications. Topics: chemistry and physics of gases; process, storage and regulation of medical gases; indications, hazards, and contraindications of oxygen therapy, aerosol and humidity therapy, chest physiotherapy, and hyperinflation therapy.

# **RES 103 Respiratory Therapy Equipment**

3-5-5

Prerequisite/Corequisite: RES 101, RES 102

An overview of the basic equipment used in respiratory therapy. Emphasis is on equipment characteristics, assembly, disassembly, repair, and application to the patient. Topics include equipment used in oxygen therapy, aerosol and humidity therapy, chest physiotherapy, hyperinflation, oximetry, concentrations and compressors.

## RES 104 Cardiopulmonary Anatomy and Physiology

5-0-5

Prerequisite: AHS 101, RES 101

Provides in-depth knowledge of the gross and histologic structure of the heart, lungs, and kidney. The physiology will emphasize function of the cardiopulmonary and renal systems at the cellular and molecular level. Topics: cardiac, pulmonary, and renal anatomy; embryological cardiopulmonary development; hemodynamics; acid-base regulation; ventilation and its control; respiration; oxygen and carbon dioxide transport; and blood, blood cells, and blood gasses.

## **RES 106 Pharmacology**

5-0-5

Prerequisite/Corequisite: RES 104, MAT 103

Introduces the basic concepts, measurements, and practices required for use of drugs in respiratory and related therapies. Topics: units of measure, guidelines of pharmacology, central and peripheral nervous systems, respiratory drugs, and non-respiratory drugs.

#### **RES 107 Patient Assessment**

2-1-2

Prerequisite/Corequisite: RES 104

Introduces the fundamental concepts, knowledge, and data interpretation required to accurately determine the condition of the patient. Topics: physical exam of chest, ABG's (arterial blood gasses), lab data, and radiology.

## **RES 108 Patient Monitoring**

2-1-2

Prerequisite/Corequisite: RES 107

Utilizes information derived from patient assessment and introduces methods of monitoring the condition of the patient. Provides instruction appropriate to the needs of respiratory therapy technicians for the following topics: EKG (electrocardiographs), respiratory monitoring, and basic hemodynamic monitoring.

# **RES 109 Airway Management**

2-1-2

Prerequisite/Corequisite: RES 104

Techniques for emergency and long-term airway management are presented. Proper placement of core of artificial airways is emphasized. Topics: artificial airways, complications of artificial airways, principle of airway suctioning, and manual resuscitators.

# **RES 110 Microbiology**

3-0-3

Prerequisite: Program Admission, Prerequisite/Corequisite: AHS 101 Applies basic principles of microbiology to the field of respiratory therapy. Topics: microbial identification, microbial growth and transmission, host defense mechanisms, hospital infection control, aseptic techniques, and disinfection and sterilization.

## **RES 111 Pathophysiology**

6-0-6

Prerequisite/Corequisite: RES 108, RES 108, RES 110

Provides an essential theoretical basis for understanding respiratory therapy

methodologies through an investigation of the causes and effects of respiratory disease, failure, and trauma. Topics: obstructive pulmonary disease, restrictive neuromuscular disease, infections, and respiratory failure/trauma.

#### **RES 113 Mechanical Ventilation**

4-0-4

Prerequisite: RES 103, Prerequisite/Corequisite: RES 108, RES 109
The concepts of positive breathing and the principles of mechanical ventilator design and operation are studied. Topics: concepts of mechanical ventilation; classification of ventilators; indications; contraindications; and the hazards of mechanical ventilation, monitoring, and weaning.

#### **RES 114 Mechanical Ventilators**

0-6-3

Prerequisite/Corequisite: RES 113

Applies concepts covered in RES 113 to the monitoring and management of the patient/ventilator system. Topics: operation of adult ventilators, operation of neonatal/pediatric ventilators, and equipment maintenance and troubleshooting.

#### **RES 115 Introduction to Pulmonary Function Testing**

1-1-1

Prerequisite: RES 102, RES 111

The basic concepts and technology involved in pulmonary function testing are studied. Topics: value of pulmonary function testing, measurements, equipment, and interpretation.

## RES 116 Neonatal/Pediatric Respiratory Care

3-0-3

Prerequisite: RES 113

The basic modes of respiratory care for neonatal and pediatric patients is discussed. Topics: normal growth and development, transition to extrauterine life, normal anatomy and physiology, assessment of the newborn, common neonatal and pediatric diseases, and treatment methods.

# **RES 117 Pulmonary Rehabilitation**

1-1-1

Prerequisite: RES 114, RES 115

Presents techniques used in caring for the chronically ill and teaches skills needed for direct patient care in the home or rehabilitation setting. Topics: concepts, importance, and value of rehabilitation; patient and family education; psychological problems; disability levels; and therapeutic modalities.

#### **RES 120 Respiratory Therapy Seminar**

2-0-2

Prerequisite/Corequisite: All didactic and clinical courses to graduate Provides students with the opportunity to prepare for respiratory therapy technician certification examination. Topics: test-taking skills, and test content preparation.

# **RES 121 Respiratory Clinical Orientation**

0-8-2

Prerequisite: Program admission, RES 101

Prepares students for intense active participation during future clinical application courses. Orientation to hospital facilities, policies, and procedures. Topics: Cardiopulmonary resuscitation (CPR) certification, orientation to the hospital, and observation.

#### **RES 122 Respiratory Care I**

0-8-2

Prerequisite/Corequisite: RES 103, RES 107, RES 121

Provides hands-on clinical experience in the basics of respiratory therapy. Topics: clinical patient assessment, humidity/aerosol therapy, oxygen therapy, hyperinflation therapy, and bronchial hygiene.

#### **RES 123 Respiratory Care II**

0-8-2

Prerequisite/Corequisite: RES 106, RES 108, RES 122

Provides in-depth clinical exposure to diagnostic and therapeutic modalities. Topics: humidity/aerosol therapy, oxygen therapy, hyperinflation therapy, bronchial hygiene, patient assessment and monitoring, and pulmonary diagnostics.

#### RES 124 Respiratory Critical Care I

0-16-5

Prerequisite/Corequisite: RES 109, RES 111, RES 114, RES 123

Utilizes clinical opportunities to allow students to apply mechanical ventilation to patient care. Topics: ventilatory management, and basic hemodynamics.

#### **RES 125 Respiratory Critical Care II**

0-32-10

Prerequisite/Corequisite: All courses required to graduate except RES 120 Allows the student to continue working in the hospital and home care setting. Emphasis is placed on specialty rotations and ventilator management. Time will be set aside to ensure completion of all required clinical competencies. Topics: ventilator management, specialty rotations, and completion of clinical competencies.

# WLD 100 Introduction to Welding Technology

4-4-6

Prerequisite: Provisional admission

An introduction to welding technology with emphasis on basic welding laboratory principles and operating procedures. Topics: safety; hand tool and power machine operations; measurement; lab procedures; codes and standards; welding career potentials and certification eligibility; basic electricity and power sources; metals characteristics, preparation, and testing; and lab practice.

# WLD 101 Oxyfuel Cutting

2-6-4

Prerequisite/Corequisite: WLD 100

The principles, safety practices, equipment, and techniques necessary for metal heating and oxyfuel cutting are studied. Topics: metal heating and cutting principles, safety, use of oxyfuel cutting torch and flame cutting apparatus, metal heating and cutting techniques, cutting with manual and automatic cutting machines, oxyfuel pipe cutting, and lab practice.

# WLD 102 Oxyacetylene Welding

1-2-1

Prerequisite/Corequisite: WLD 100

The theory, safety practices, equipment, and techniques necessary to perform basic oxyacetylene welding operations are studied. Topics: theory; safety; proper use of gas cylinders; regulators; torches; tips and other oxyacetylene welding apparatus; welding without filler rods; running beads with filler rods; joint design and making butt lap and open butt joints; and brazing and soldering. Lab practice is provided.

## WLD 103 Blueprint Reading I

1-4-3

Prerequisite/Corequisite: MAT 100

Introduces the knowledge and skills needed for reading welding and related blueprints and sketches. Topics: basic lines, sketches, basic views, notes and specifications, dimensions, structural shapes, isometrics, sectional views, joint design, and detail and assembly prints.

## WLD 104 Shielded Metal Arc Welding I

3-7-6

Prerequisite/Corequisite: WLD 100

The theory, safety practices, equipment, and techniques required for shielded metal arc welding (SMAW) in the flat position are covered. Qualification tests (flat position) are used in the evaluation of student progress. Topics: SMAW safety and health practices; theory, basic electrical principles; equipment setup; identification of low hydrogen, mild steel, and other common electrodes; joint design; selection and preparation of materials; and production of beads and joints in the flat position.

# WLD 105 Shielded Metal Arc Welding II

3-7-6

Prerequisite: WLD 104

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the horizontal position. Qualification tests (horizontal position) are used in the evaluation of student progress. Topics: SMAW safety and health practices; production of welds of uniform width and height; manipulation of electrodes to produce specification welds; horizontal joints; and uses of low hydrogen, mild steel, and other common electrodes in horizontal position welding.

# WLD 106 Shielded Metal Arc Welding III

3-7-6

Prerequisite: WLD 104

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the vertical position. Qualification tests (vertical position) are used in the evaluation of student progress. Topics: SMAW safety and health practices; production of welds of uniform width and height; manipulation of electrodes to produce specification welds; vertical joints; and uses of low hydrogen, mild steel, and other common electrodes in vertical position welding.

## WLD 107 Shielded Metal Arc Welding IV

3-7-6

Prerequisite: WLD 104

Introduces the major theory, safety practices, and techniques required for shielded metal arc welding (SMAW) in the overhead position. Qualification tests (overhead position) are used in the evaluation of student progress. Topics: SMAW safety and health practices; production of welds of uniform width and height; manipulation of electrodes to produce specification welds; overhead joints; and uses of low hydrogen, mild steel, and other common electrodes in overhead position welding.

## WLD 108 Blueprint Reading II

1-4-3

Prerequisite: WLD 103

Welding symbols and definitions through which the engineer or designer communicated with the welder are studied. Topics: weld symbols and abbreviations; basic joints for fabrication welding; fillet welds; groove welds; back or backing and melt-thru welds; plug and slot welds; flash welds and upset welds; and flange, spot, projection, and seam welds.

## WLD 109 Gas Metal Arc Welding (GMAW/MIG)

3-7-6

Prerequisite: WLD 100

Provides knowledge of theory, safety practices, equipment, and techniques required for successful gas metal arc welding. Qualification tests (all positions) are used in the evaluation of student progress. Topics: GMAW safety and health practices; theory; machines and set-up; wire specifications; joint design; shielding gases; and production of GMAW beads, bead patterns, and joints.

# WLD 110 Gas Tungsten Arc Welding (GMAW/TIG)

2-5-4

Prerequisite: WLD 100

Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful gas tungsten arc welding. Qualification tests (all positions) are used in the evaluation of student progress. Topics: theory; safety and health practices; metals weldable using GTAW; shielding gases; metal cleaning procedures; GTAW machines and set-up; selection of filler rods; GTAW weld positions; and production of GTAW beads, bead patterns, and joints in all positions.

## WLD 112 Preparation for Industrial Qualification

2-6-4

Prerequisite: WLD 101, 102, 105, 106, 107; 108, 109, 110

Introduces industrial qualification methods, procedures, and requirements. Prepares students to meet qualification criteria of selected national welding codes and standards. Topics: qualification tests methods and procedures, codes and standards, fillet and groove weld test specimens, and national industrial student preparation for qualification and job entry.

#### WLD 133 Metal Welding and Cutting Techniques

2-3-4

Prerequisite: Provisional Admission

Instruction in the fundamentals of electric arc welding and the use of oxyacetylene cutting equipment. Topics: arc welding, flame cutting, safety practices, oxyfuel welding, and brazing.

#### **WLD 151 Fabrication Practices**

2-6-5

Prerequisite: Provisional Admission

Presents practices common in the welding and metal fabrication industry. *Topics:* ordering materials, special tools, handling and pricing special jobs, and specialized repair and fabrication techniques

#### WLD 152 Pipe Welding

2-6-5

Prerequisite: Provisional Admission

Provides opportunities to apply skills to pipe welding operations. *Topics*: fixed position welds on horizontal pipe, fixed position welds on vertical and 45 degree pipe, and laying out and cutting connections.

## WLD 153 Flux Cored Arc Welding

2-3-4

Prerequisite: Provisional Admission

Provides knowledge of theory, safety practices, equipment and techniques required for successful flux cored arc welding. *Topics:* FCAW safety and health practices, FCAW theory, machine set-up and operation, shielded gas selection, and FCAW joints in all positions.

# **DEVELOPMENTAL STUDIES COURSES OFFERED**

## **COURSE DESCRIPTIONS**

#### ENG 095 English I

1-8-5 IC

Prerequisite: Entrance scores in accordance with DTAE admission score levels.

Note: Lab may be substituted, as needed, for class hours on a 2 to 1 basis. A developmental studies course that reviews the basic rules of English grammar. Topics: basic vocabulary, sentence capitalization, end punctuation marks, primary word usage in simple sentences, and spelling.

## ENG 096 English II

5-0-5 IC

Prerequisite: ENG 095, or entrance English score in accordance with DTAE admission score levels.

Note: Lab may be substituted, as needed, for class hours on a 2 to 1 basis. A developmental studies course that reviews the standard rules of English grammar. Topics: basic capitalization rules, end punctuation marks, commas, apostrophes, word usage in simple sentences, identification of subjects and predicates, and spelling.

ENG 097 English III

5-0-5 IC

Prerequisite: ENG 096, or entrance English score in accordance with DTAE admission score levels.

Note: Lab may be substituted, as needed, for class hours on a 2 to 1 basis. A developmental studies course that emphasizes the rules of English grammar, punctuation, and spelling. Topics: basic grammar review, use of punctuation marks, use of capitalization, recognition of clauses and phrases, application of the rules of spelling, writing varied and complicated sentences, and writing simple paragraphs.

ENG 098 English IV

5-0-5 IC

Prerequisite: ENG 097, or entrance English score in accordance with DTAE admission score levels.

Note: Lab may be substituted, as needed, for class hours on a 2 to 1 basis. A developmental studies course that emphasizes the ability to communicate using oral and written methods. Topics: construction of basic paragraphs; proofreading to eliminate errors in mechanics, punctuation, and spelling; and presenting written and oral reports.

MAT 095 Math I

0-10-5IC

Prerequisite: Entrance arithmetic score in accordance with DTAE admission score levels.

Note: Lab may be substituted, as needed, for class hours on a 2 to 1 basis. A developmental studies course that introduces elementary arithmetic needed for advancement to the level of basic mathematics. Topics: number theory and operation of whole numbers.

MAT 096 Math II

5-0-5 IC

Prerequisite: MAT 095 or entrance arithmetic score in accordance with DTAE admission score levels.

Note: Lab may be substituted, as needed, for class hours on a 2 to 1 basis. A developmental studies course that teaches basic arithmetic skills needed for the study of math as presented in specific occupational programs. Topics: number theory, operation of whole numbers, fractions, decimals, introduction to measurements and word problems.

MAT 097 Math III

5-0-5 IC

Prerequisite: MAT 096 or entrance arithmetic score in accordance with DTAE admission score levels.

Note: Lab may be substituted, as needed, for class hours on a 2 to 1 basis. A developmental studies course that emphasizes in-depth arithmetic skills needed for the study of math as presented in specific occupational programs. Topics: number theory, fractions, decimals, ratio/proportion, percent, measurement/geometric formulas, and word problems.

MAT 098 Pre-Algebra

5-0-5 IC

Prerequisite: MAT 097 or entrance arithmetic score in accordance with DTAE admission score levels.

Note: Lab may be substituted, as needed, for class hours on a 2 to 1 basis. A developmental studies course that introduces pre-algebra concepts and operations that will be applied to the study of beginning algebra. Topics: number theory, arithmetic review, signed numbers, algebraic operations, and introduction to algebra word problems.

RDG 095 Reading I

0-10-5IC

Prerequisite: Entrance reading score in accordance with DTAE admission score levels.

Note: Lab may be substituted, as needed, for class hours on a 2 to 1 basis. A developmental studies course that provides for the development of reading readiness with emphasis on primary and practical reading skills for the adult learner. Topics: basic sight vocabulary, phonics, word parts, sentence meanings, and occupational survival reading.

RDG 096 Reading II

5-0-5 IC

Prerequisite: RDG 095 or entrance reading score in accordance with DTAE admission score levels.

Note: Lab may be substituted, as needed, for class hours on a 2 to 1 basis. A developmental studies course that strengthens fundamental reading competencies. Topics: word attack skills, spelling, dictionary skills, main ideas and supporting details, following directions, and survival reading.

RDG 097 Reading III

5-0-5 IC

Prerequisite: RDG 096 or entrance reading score in accordance with DTAE admission score levels.

Note: Lab may be substituted, as needed, for class hours on a 2 to 1 basis. A developmental studies course that emphasizes basic vocabulary and comprehension skill development. Topics: vocabulary development, phonics, and structural analysis, context clues, literal comprehension skills, inferential comprehension skills, study skills and test taking techniques, and introduction to occupational reading materials.

RDG 098 Reading IV

5-0-5 IC

Prerequisite: RDG 097 or entrance reading score in accordance with DTAE admission score levels.

Note: Lab may be substituted, as needed, for class hours on a 2 to 1 basis. A developmental studies course designed to improve vocabulary and comprehension skills with emphasis on occupational applications. Topics: contextual clues, structural analysis, literal and inferential comprehension, critical reading, reading graphic and tabular information, use of technical reading materials, and study skills.