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# COOSA VALLEY VOCATIONAL TECHNICAL SCHOOL

BULLETIN AND CATALOG

Volume I

1969

Rome, Georgia

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Floyd County Campus**

**BULLETIN OF  
COOSA VALLEY VOCATIONAL  
TECHNICAL SCHOOL  
Rome, Georgia**

For all information pertaining to admission to the Coosa Valley Vocational-Technical School, address:

DIRECTOR OF ADMISSIONS  
COOSA VALLEY VOCATIONAL-TECHNICAL SCHOOL  
112 HEMLOCK STREET  
ROME, GEORGIA 30161

PHONE: 234-7146

Coosa Valley Vocational-Technical School reserves the right to make changes in the regulations and offerings announced in this bulletin as circumstances may require.

## Board of Trustees



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Coosa Valley Tech operates under a Board of Trustees; three appointed by Floyd County Board of Commissioners, one by Floyd County Board of Education, one by Rome City Board of Education. The Superintendents of Floyd County Board of Education and Rome City Board of Education are members by virtue of their position.



C. M. CULBERSON

DIRECTOR

COOSA VALLEY  
VOCATIONAL TECHNICAL  
SCHOOL

TELEPHONE  
234-7146

112 HEMLOCK AVENUE  
ROME, GEORGIA

Dear Student:

This catalog is the most important document issued by Coosa Valley Vocational-Technical School. To some of you, this will be your first and best introduction to our faculty, our programs, and our campus. When you enroll, it will be your guide to life at Coosa Valley Tech. Many of you are high school graduates, and we want you to know that a warm welcome awaits you at Coosa Valley Tech, a school whose prime interest is the student's welfare.

The major purpose of education is to prepare for future work and living. With this in mind, we at Coosa Valley Tech have designed our courses in trade, technical, business, and health occupations to fill the needs of youth and adults alike.

We have attempted to encompass within these pages all the information you may need; therefore, let me suggest that you read this catalog from cover to cover. Review the pertinent passages, and make your decisions wisely. I hope this catalog may answer your questions, whether they are concerned with the high quality of our program or the mechanics of admissions.

Sincerely,

C. M. Culberson  
Director

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## ADMINISTRATIVE STAFF

Clifton M. Culberson, M.Ed. .... Director  
James D. Powell, B.S. .... Coordinator, Day School  
George E. Creek, B.S. .... Coordinator, Evening School  
Charles L. Rice, M.A. .... Coordinator,  
Student Personnel Services  
Chesley P. Parker ..... Coordinator, Industrial Training

## SECRETARIAL

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Mrs. H. D. Casey, Jr. .... Secretary, Director  
Mrs. Inga Cobb ..... Clerk-Typist  
Mrs. Joan Milhollin ..... Clerk-Typist  
Mrs. Bobbie Smith ..... Accounting Clerk  
Miss Susan Spradley ..... Stenographer  
Mrs. Judy Sorrow ..... Clerk-Typist

## FACULTY

Allister R. Ballantine ..... Mechanical Engineering Technology  
B.I.E., University of Florida; A.A., St. Petersburg Junior Col-  
lege; University of Georgia.  
Frank B. Bankson ..... Heating & Air Conditioning  
University of Georgia.  
Mrs. Diane Poole Blair ..... Business Education  
B.A., Berry College.  
Irvin J. Blalock ..... Data Processing Technology  
University of Georgia.  
Mrs. Vivian S. Carney ..... Business Education  
B.S., Berry College.  
Mrs. Frances I. Clements ..... Practical Nursing  
R.N., Fort Sanders Presbyterian Hospital School of Nursing;  
University of Georgia.  
Mrs. Jean S. Dotson ..... Business Education  
B.S., Berry College.  
Jack M. Dye ..... Heating & Air Conditioning  
University of Georgia.  
H. J. Forbes, Sr. .... Electrical Technology  
B.S.E.E., Mississippi A & M.  
Mrs. Kay Shearin Ford ..... Business Education  
B.S., Berry College; East Carolina University, Mary Hardin-  
Baylor College.

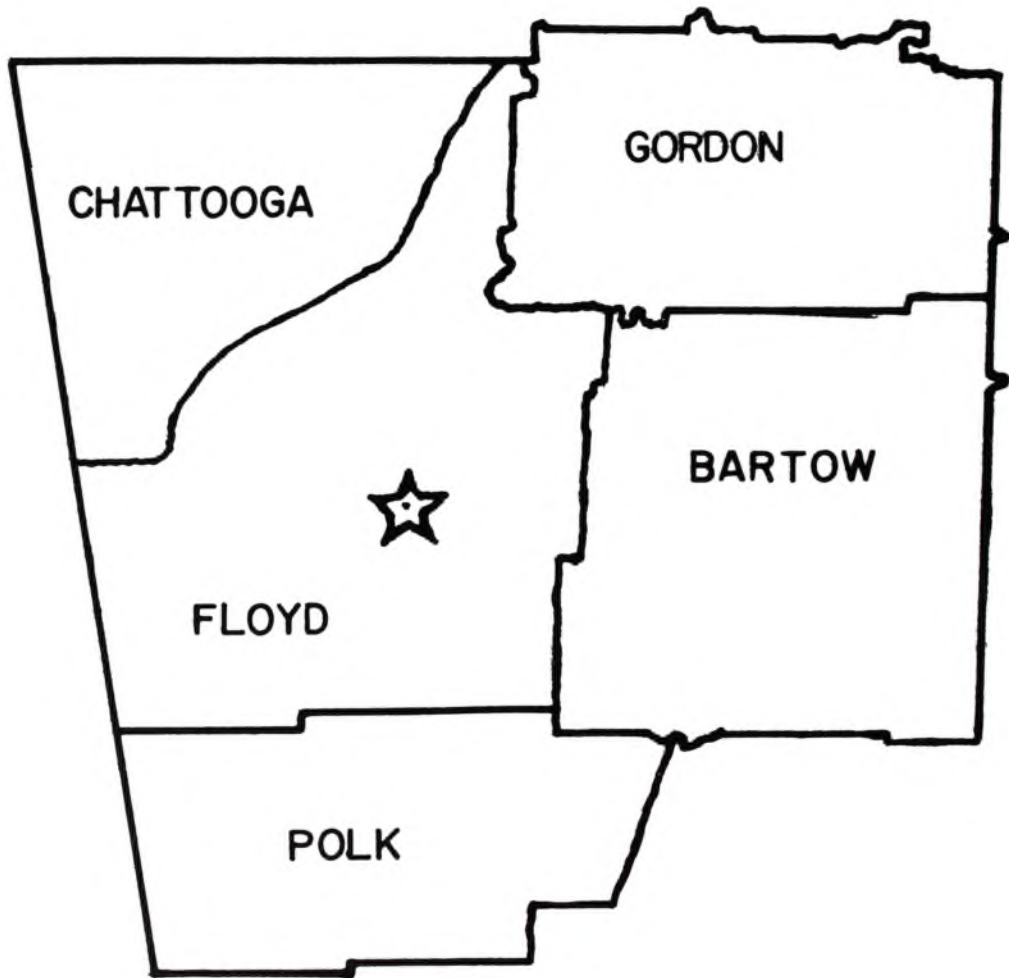
- Jimmie N. Frady ..... Machine Shop  
Journeyman Toolmaker, Pontiac Motor Apprentice School;  
Vocational Technical Teachers Institute, University of Ten-  
nessee.
- Mrs. Kay D. Gaines ..... Business Education  
B.S., University of Georgia.
- Hugh E. Green ..... Welding  
University of Georgia.
- J. B. Isbell, Jr. .... Automotive Mechanics  
University of Georgia.
- J. P. Nicholson ..... Electrical Appliance Servicing  
University of Georgia.
- Mrs. Milbry M. Pass ..... Practical Nursing  
R.N., Grady Hospital School Nursing; University of Georgia.
- Mrs. Fannie R. Pooley ..... Practical Nursing  
B.S.N. Duke University; R.N., Duke University School of Nur-  
sing; University of Georgia.
- Webster R. Read ..... Electronic Technology  
University of Georgia.
- Mrs. Mary Helen Repsher ..... Medical Office Assistant  
R.N., Methodist Hospital of Brooklyn, New York.
- Robert A. L. Starr ..... Electronic Technology  
Georgia Institute of Technology; University of Georgia.
- Gene G. Schwettman ..... Radio & Television Servicing  
University of Georgia.
- Mrs. Louise C. Sutton ..... Business Data Processing  
B.S., Tennessee Tech; M.A., George Peabody College for Teach-  
ers; Ed.S., George Peabody College for Teachers; Graduate  
Study, University of Georgia.
- George H. Wallace, Jr. .... Accounting  
B. S., Valdosta State College; University of Georgia.
- E. Leon Wheeler ..... Physics, Math  
B. A., Berry College.
- H. W. Williamson ..... Drafting and Design Technology  
Copiah-Lincoln Jr. College.
- Howard F. Yarnell ..... Machine Shop  
Journeyman Die Maker; Arsenal Technical School, Division of  
Ford Motor Company.



# GENERAL INFORMATION



# SERVICE AREA FOR COOSA VALLEY VOCATIONAL TECHNICAL SCHOOL



## OBJECTIVES

The objectives of Coosa Valley Vocational-Technical School have clearly been influenced by the community it serves, its historical evolution, its student body, and the vocational-technical school movement throughout the nation. To use its facilities efficiently and to meet the demands of business, industry, and the growing number of students seeking an opportunity for training, the school offers its programs on a day and evening basis twelve months a year. The school belongs to and is a part of the Rome-Floyd County area and thus, is prepared, within the framework of its purpose, to design programs to meet the new educational needs of the area.

The school provides one and two year, occupationally oriented programs in Business, Skilled Trades, Technical and Health Occupations. It provides a variety of adult and evening community programs including off campus training at various industries in the Coosa Valley Area.

Coosa Valley Vocational-Technical School offers educational opportunities for all residents of its service area and its presence encourages the enrollment of individuals who might not otherwise attend a post high school training institution. It is located in order that a majority of students in this geographic area can explore a vocational choice and develop occupational experience at a very small cost while living at home.

The major functions of Coosa Valley Tech in service to the community are:

1. To offer personal, vocational, and academic counseling to our students.
2. To provide technical, and semi-professional training programs for students and employees of the area.
3. To provide evening education for adults.
4. To respond to community needs by offering special courses in cooperation with business and industry either in-plant or on campus.
5. To prepare the student to make a contribution to the economic and social life of his community.

## HISTORY

The Coosa Valley Vocational-Technical School was established in 1962 by the Floyd County Board of Education, the City of Rome, and the State Department of Vocational Education to serve the educational needs of the young people and adults of the Northwest Georgia area by providing skilled training and related technical instruction in trade and technical occupational areas.

The original facility, designed for 250 students, was expanded in 1967 to accommodate an ever increasing enrollment and to meet the demands of the area for skilled employees. Additional expansion is expected with the continuing growth of the Coosa Valley Area.

The Vocational-Technical School is a part of the public school system of Georgia. The school is of functional and flexible design and is one of the State's best equipped training centers.

## LOCATION

The Coosa-Valley Vocational-Technical School is located in Rome, Georgia, pivot of the great Coosa Valley waterways. This growing industrial district in Northwest Georgia, set in the foothills of the mountains, offers many opportunities to the young man or woman who trains for the future.

## FACILITIES

The campus contains three interconnected buildings of the latest design which house the administrative offices, classrooms, and laboratories for fourteen programs of study. All classrooms are air-conditioned and furnished with the finest teaching equipment. Laboratories are equipped with modern tools and machinery to insure the best in up-to-date training for all students.

Having been constructed as an area school, dormitories are not provided and all students are encouraged to commute to and from school. When necessary, students may rent apartments in the Rome area. With construction of additional facilities in 1967, Coosa Valley Tech added a snack bar serving hot lunches to those wishing to eat meals on campus.

## ADVISORY COMMITTEES

Standards of training are closely supervised through the assistance of advisory committees which are set up by the school for each program taught at Coosa Valley Tech. The committees are composed of leaders in each field of training taught by the school and many are from the leading industries of the area. Committee members meet periodically and review training activities, discuss purchasing new equipment, advise the instructor, and make recommendations for the improvement of the school's programs in line with recognized practices of industry.

## FACULTY

Each program of study has one and often several instructors that are skilled in all phases of instruction. Each instructor has had experience in industry and is familiar with the latest training methods. In addition, each instructor is, by professional preparation, a State certified teacher.

## ADMINISTRATION

The administrative staff of Coosa Valley Vocational-Technical School have the following duties and responsibilities:

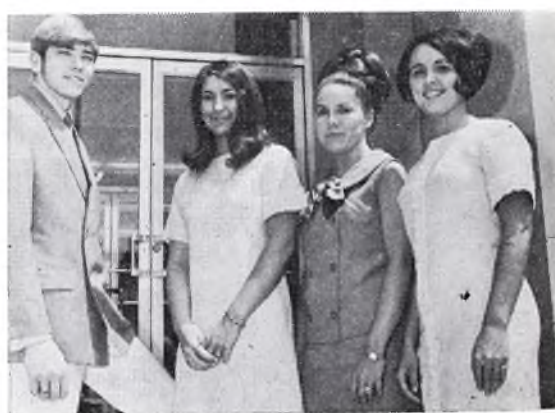
The Director is responsible for the operation of the entire school and may delegate to others the duties associated with this responsibility.

The Assistant Director is responsible for coordinating the instructional programs of the school, procurement of needed equipment, attendance, and discipline.

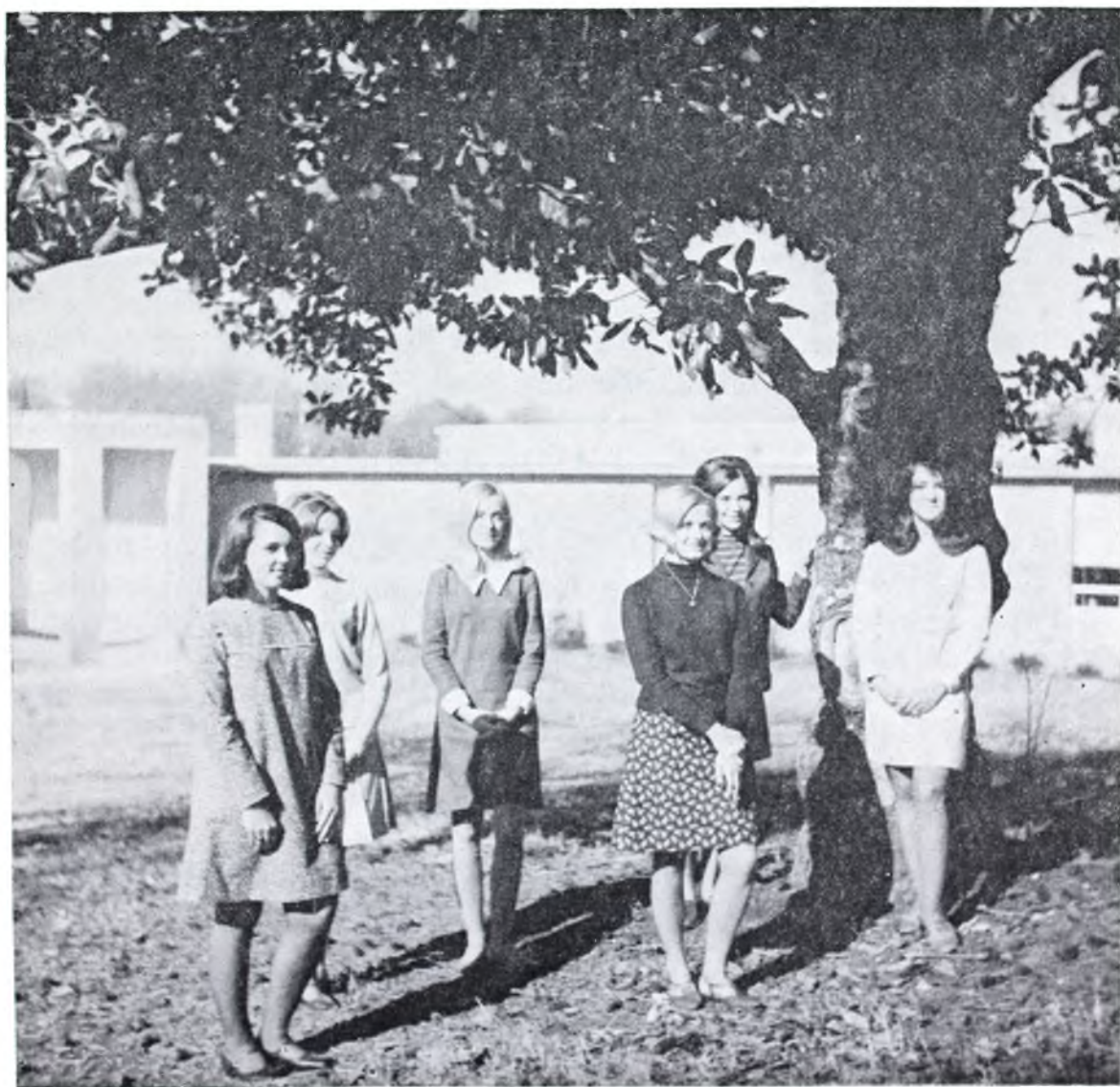
The Coordinator of Student Personnel Services is responsible for enrollment, publicity, testing, counseling and guidance for the entire school.

The Bookkeeper is responsible for all financial records, federal reports, state and federal programs of financial assistance, and for reports associated with finance.

# STUDENT INFORMATION



MISS COOSA VALLEY TECH CANDIDATES



## ENTRANCE REQUIREMENTS

All persons seeking entrance to full time day programs at Coosa Valley Vocational Technical School must be 16 years of age or older, make satisfactory scores on the school's entrance examination (GATB), and submit a copy of their high school record or GED Test results to the office of admissions. Persons seeking to enter technical, business, or Medical Office Assistant programs must be high school graduates.

Persons seeking to enter Automobile Mechanics, Electrical Appliance Servicing, Welding, Machine Shop, Radio & Television Servicing or Heating and Air Conditioning are not required to be high school graduates.

Persons seeking to enter Practical Nursing must have completed the 10th grade or better or have passed the GED test. There will be two classes of Nurses each year; one beginning in September and another at the beginning of the third quarter.

## ADMISSIONS

To become officially enrolled at Coosa Valley Vocational-Technical School, a student must complete the following:

1. File directly with the admissions office an application for admission form, which requires a \$5.00 fee.
2. Request that a transcript of grades from his high school be forwarded to Coosa Valley Vocational-Technical School or provide a copy of the G.E.D. certificate.
3. Request that an official transcript from all other vocational technical schools, colleges, or universities in which he has been enrolled be sent to the admissions office.
4. Report for placement testing at the time requested by the admissions office. Upon completion of testing he may be given an appointment with a counselor who will discuss his educational and vocational goals.



Special and transfer students, who have been accepted for admission, should enroll when notified by the admissions office.

Registration periods are set for August, November, and March as indicated in the school calendar. Students will register during these periods according to published instructions.

### **LATE REGISTRATION**

A student registering late will be required to make up the work he has missed. After the first week in any quarter, he may not be permitted to enroll for a full time class schedule. An ADDITIONAL \$5.00 is charged those students who register after the official registration period.

### **AUDITING A COURSE**

A student who wishes to attend classes regularly, but does not wish to take final examinations or receive grades or credit, may register and audit a course. A record will be kept of classes attended. Credit for such courses cannot be established at a later date. An auditor in a class cannot change his status to that of a credit student in that class. Neither can a credit student in a class change his status to that of an auditor in that class.

### **CHANGE OF COURSE**

During the first two weeks of a term, a student may make changes in his schedule without academic penalty by obtaining the proper form from the admissions office. After the first two weeks he may not add courses for credit.

A student may withdraw from a course before the end of the fourth week without academic penalty. If he withdraws after that time and is passing the course at the time of withdrawal a WP will appear on his record. If he withdraws after that time and is failing in the course at the time of withdrawal, a WF will appear on his record.

### **WITHDRAWAL FROM SCHOOL**

If a student finds it necessary to withdraw from school he should contact the Coordinator of Student Personnel Services in the admissions office without delay and fill out a form to make his withdrawal official. A statement of official withdrawal will then be prepared, if at the time of withdrawal all his financial obligations to the school have been met and his conduct and scholarship are such as to allow him to re-enter at a later date.

## REFUNDS OF FEES

NO REFUNDS OF PRE-REGISTRATION FEES WILL BE MADE IF LEFT WITH THE SCHOOL FOR TWO WEEKS FOLLOWING REGISTRATION.

Refunds of supply fees will be made only during the first ten days of the quarter in which the fees are paid.

Refunds of monies paid for textbooks and instruments may be made at the discretion of the administration after examination of the books or instruments and only during the first ten days of the quarter in which they are paid. The school is in no way obligated to refund monies for any reason after they have been paid and goods or services have been furnished regardless of the period of time.

## STUDENT COUNCIL

At the beginning of each school year an election is held to elect student council representatives from each department in the school. The student council supervises an election to elect a student body president, vice president, treasurer, secretary, annual editor, and school newspaper editor. The student council plans the activities during the year for students as well as work with the administration in promoting Coosa Valley Tech.

## CREDITS

The regular school year is divided into four quarters of approximately 56 days. In general, a class meets one hour each day: somewhat more time is required for courses with laboratory work. Full time day classes meet for six hours a day, five days a week. Evening classes meet, as a general rule, four hours a night or twelve hours a week.

Credits are given at the end of each quarter for both day and evening students. Students are allowed to take partial loads during both day and evening school; however, full time students are preferred.

## SUMMER PRE-TECH CLASSES

The Summer quarter is devoted to prep courses for students planning to enter as regular students in September. In general, classes in basic mathematics, physical science, and English are taught to students entering Business Education, Nursing, and the

Skilled Trades. Courses in Algebra, English, and Physics are taught for those entering the Technical courses. The Summer program is approximately six weeks long and classes meet on a full time day schedule.

### **TRANSFER OF CREDITS**

Credits may be given for courses transferred from accredited institutions. The credit value of each of these courses will be determined by Coosa Valley Vocational-Technical School. Official transcripts of a Coosa Valley Vocational-Technical School student's record will be mailed to another institution at the request of the student.

### **DIRECTOR'S LIST**

At the end of each grading period, a list of all students maintaining a cumulative average of 90 or better is compiled and made public. Those with academic excellence should be recognized for their achievement and this is Coosa Valley's way of acknowledging superior progress. Those with the highest academic average at the time of their graduation are seated on the stage during the graduation exercises and are singled out for outstanding achievement at that time.

### **SELECTIVE SERVICE DEFERMENT**

All male students subject to the draft may obtain forms and assistance for the purpose of requesting deferment at the time he becomes subject to the Selective Service Law or at the time of registration. The responsibility for obtaining deferment forms is with the student. Final determination of a student's status is at the discretion of his local Selective Service Board.

### **SYSTEM OF GRADES**

The following is the system of grading at Coosa Valley Vocational-Technical School:

91 to 100 .....	A	
81 to 90 .....	B	
70 to 80 .....	C	
60 to 69 .....	D	Failing
Withdrew Passing .....	WP	
Withdrew Failing .....	WF	
Incomplete .....	INC.	

## **REPORTING OF GRADES**

A report of grades is mailed to parents or guardians at the end of each quarter during the regular school year. Unsatisfactory work is also reported to the local Selective Service Boards at the end of the grading period.

## **ACADEMIC PROBATION**

Students failing to maintain an average of sixty or better in any quarter will be placed on academic probation until such time as grades improve. Academic probation status constitutes a warning to students that unless definite improvement in grades takes place the student may be asked to withdraw from classes.

## **ATTENDANCE REQUIREMENTS**

A student is allowed to be absent ten percent of the school days in each quarter. Students are cautioned to conserve their allowed absences to cover periods of illness or accidents. Should it be necessary for a student to miss more than 10% of any one quarter arrangements must be made with the instructor for make-up work and approved by the Student Counselor or the student will receive an incomplete grade for that subject.

Acceptable excuses should be submitted to the office as an absent occurs. **EXCUSED ABSENCES** are granted only in cases of death in the immediate family or illness which is substantiated by a note from a medical doctor or dentist, or when military service in the reserves is substantiated by a note from the commanding officer.

**NOTIFICATION** of excessive absences occurs upon accumulation of three unexcused absences. This constitutes a warning to the student of possible disciplinary action.

**GRADUATION** from Coosa Valley Vocational-Technical School requires that a student must have been in attendance a minimum of 90% of the required school days in each year, exclusive of excused absences.

## **GRADUATION REQUIREMENTS**

To graduate from Coosa Valley Vocational-Technical School a student must:

1. Complete the one or two year courses of study in which he is enrolled and have conformed to the regulations pertaining to graduation as set forth by the school.

2. Have maintained a minimum grade average of 70 or better.
3. Have attended a minimum of 90% of the enrollment period.
4. Have no outstanding debts to the school.
5. Be in attendance at the graduation exercises of his class unless approval of absence is granted by the Assistant Director.

### EXPENSES

NOTE: Fees may change due to Board action. Cost listed below are those in effect at the date of publication. All fees are to be paid at the time of registration.

#### FIRST QUARTER

Registration Fee	\$ 5.00
Supply Fee*	10.00
Total	\$15.00

#### SECOND QUARTER

Supply Fee	\$15.00
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#### THIRD QUARTER

Supply Fee*	\$15.00
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#### FOURTH QUARTER

Supply Fee*	\$15.00
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Total fees for First Year are \$60.00.

\*Supply Fee for Welding is \$20 per quarter.

### BOOKS AND INSTRUMENTS

The students are required to purchase all books and instruments needed for the quarter in which they enter. Books and instruments must be purchased at the school on registration day or at the beginning of any quarter. The cost of books and any required instruments differs from course to course. Students should be prepared to purchase books at registration. The approximate cost of books is \$30.00 to \$40.00 for the first quarter and substantially less for each remaining quarter.

## FINANCIAL AID

An increasing amount of financial aid is available to qualified students enrolled at Coosa Valley Vocational-Technical School. The student may receive information and make application for financial aid through the office of the Coordinator of Student Personnel Services.

G. I. BILL	Eligibility determined by military service. Full time benefits for day students, half time benefits for evening technical students.
WORK STUDY PROGRAM	Students 16-20 years of age who have financial need. Pays up to \$30.00 per month for 24 months of work. All work supervised by the school. Payment not to exceed \$350.00 per year.
GUARANTEED LOANS	As much as \$500.00 per year to qualified students accepted in Nursing, Business, Trade or Technical programs on a full time basis.
STATE SCHOLARSHIPS	Covers tuition cost in Practical Nursing. Repayment not necessary if employed in a State approved site.
NATIONAL VOCATIONAL LOAN ACT 1965	Guaranteed loans up to \$1,000.00 to accepted students in any program. Not funded at time of publication.
VOCATIONAL REHABILITATION	Students above age 16 with certain physical handicaps which might hinder employment. Tuition, books and supplies.
WAR ORPHANS	Eligible for benefits from the veterans service officer in your locality under Public Law 634.
SOCIAL SECURITY	Available to students whose father is disabled or deceased. Student must be single. For additional information call Social Security Office.
DISABLED VETERAN	Eligible for benefits under Public Law 815.

## HIGH SCHOOL SENIOR COOPERATIVE PROGRAM

The full time senior co-op program is designed to help those high school students who do not plan to go to college. Coosa Valley Tech proposes to follow the regulations and procedures set forth by the State Board of Education in enrolling high school seniors. Under the co-op program a student may earn four units of credit at the Area school his senior year. He will be allowed to return to his high school and graduate with his graduating class. The following requirements and limitations are placed upon the student entering the co-op program.

1. Students must have earned minimum credits as follows:

COURSE	UNITS
English .....	3
Social Studies .....	3
Science .....	1
Math .....	1
Math or Science .....	1
Electives .....	9*

\*This includes four elective units to be earned during the senior year at Coosa Valley Tech.

2. Applicants must meet the same entrance requirements as other Coosa Valley Tech applicants.
3. Student must be recommended by the high school principal.
4. Student and parents must be interviewed by the Admission Officer of Coosa Valley Tech.
5. Student must identify his occupational objective.
6. Admission of students will be based on interest, high school record, aptitude test, maturity and responsibility.
7. Students must accept responsibility for completing the training program at Coosa Valley Tech.
8. Students will be required to pay supply fees and purchase books used in the training program.

## **STUDENT PERSONNEL SERVICES**

### **Counseling Services**

Student personnel services extend to the student the professional assistance that might be needed in matters of curriculum choice, program planning, occupational choice and planning, and matters which threaten to interfere with the educational progress of the student.

### **Testing Services**

An aptitude test is administered to each incoming student. It is helpful if the student requests an interpretation of the results of this test. Test schedules are published each year and are available to high school students through their counselor.

### **Placement Services**

Coosa Valley Vocational-Technical School does not maintain an organized placement office. The school participates in State wide programs of placement called Tech Days and will arrange interview dates for companies desiring to employ prospective graduates.

### **Permanent Student Records**

Records of a student's academic performance are kept on file in the office of the Student Personnel Coordinator and are available to students and employers desiring to evaluate the student's training.

## **CURRICULUM**

Both day and evening programs are offered at Coosa Valley Tech. There are two basic types of programs.

1. **Preparatory Programs**

Preparatory programs are pre-employment courses which are designed to prepare the student to enter the work force with little or no additional training. Preparatory programs are offered both day and evening.

2. **Extension Programs**

These classes are designed to extend the knowledge of employed students in their related work areas. These courses are offered to meet the community and area training needs.



## **DAY CURRICULUM**

### **Technical**

Electronic Engineering Technology  
Electrical Engineering Technology  
Mechanical Engineering Technology  
Data Processing Technology  
Drafting and Design Technology

### **Skilled Trades**

Electrical Appliance Servicing  
Automobile Mechanics  
Heating & Air Conditioning  
Machine Shop  
Welding  
Radio and Television Servicing

### **Business Education**

Accounting  
Clerical  
Secretarial Science  
Unit Record Data Processing

### **Health Occupations**

Practical Nursing  
Medical Office Assistant

## **EVENING CURRICULUM**

### **Technical**

Electronic Engineering Technology  
Electrical Engineering Technology  
Mechanical Engineering Technology  
Data Processing Technology  
Drafting & Design Technology

### **Skilled Trades**

Electrical Appliance Servicing  
Automobile Mechanics  
Heating & Air Conditioning  
Machine Shop

Radio & Television Servicing  
Welding

**Business Education**

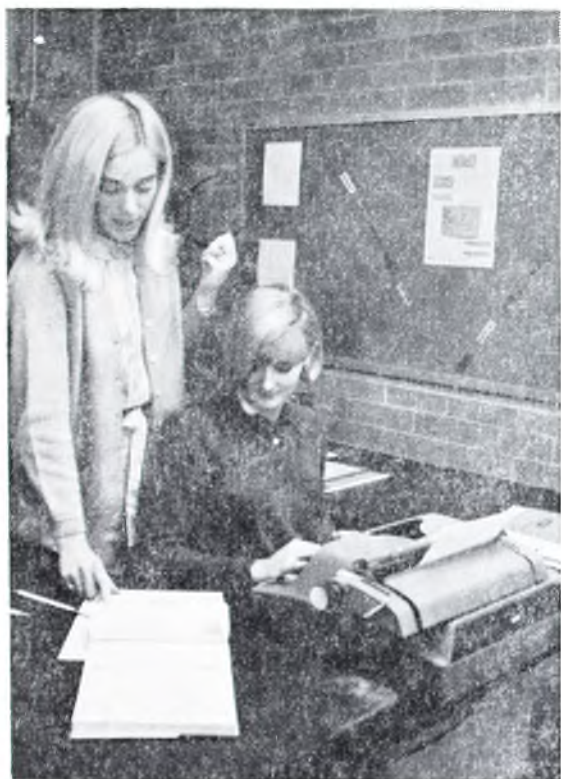
Accounting  
Typwriting  
Shorthand  
Office Machines  
Business Law  
Business Math

**Extension**

Punch Card Equipment      Basic Electricity      Blueprint Reading

Courses not listed are offered as the need arises. Courses are offered at the request of industries, businesses, or any group.

# PROGRAMS OF STUDY



# DEPARTMENT OF BUSINESS

The objective of the Business Department is to develop occupational competence in the various areas of office work, such as: typist, clerk-typist, general office clerk, stenographer, secretary, data processing assistant, bookkeeper, and accounting clerk. The program is designed for beginning and advanced business education students.

A student may select one of four curriculums in Business Education: Accounting, Clerical, Secretarial Science, Unit Record Data Processing. Students who successfully complete the required courses in a particular curriculum will receive a certificate.

## ACCOUNTING

Accounting is termed "the language of business." Individuals at every level find that they have a constant need of reports and information which only an accounting office can produce.

This one-year course prepares the student to analyze records which indicate the financial position of a concern at a given time. The program will familiarize a student with office machines and practices, business law, typing, and general accounting.

The positions available to a graduate range from private accounting work for a small business and industry to firms that retain groups of specialized accountants. A substantial number of workers may find related employment with federal, state or local governmental agencies. The majority of all accountants work in large metropolitan areas.

### Accounting Curriculum

#### Instructional Units

<b>First Quarter</b>	<b>(336 Hours)</b>
ACC 101 Accounting I and Lab	
BUS 101 Typewriting I	
MTH 101 Business Mathematics I	
BUS 111 Business Machines I	
ENG 101 Business English I	
<b>Second Quarter</b>	<b>(336 Hours)</b>
ACC 201 Accounting II and Lab	
BUS 201 Typewriting II	
MTH 213 Business Mathematics II	
ENG 201 Business English II	
<b>Third Quarter</b>	<b>(336 Hours)</b>
ACC 301 Accounting III and Lab	
BUS 117 Business Law	
BUS 119 Psychology	
DPT 111 Punch Card DP and Lab	
<b>Fourth Quarter</b>	<b>(336 Hours)</b>
ACC 401 Cost Accounting and Lab	
DPT 121 Introduction to Data Processing	
BUS 115 Office Procedures	
BUS 181 Introduction to Business	
BUS 112 Income Tax Procedure	

## CLERICAL

Almost eleven million people were employed in clerical or related fields in 1965. These men and women are occupied with the vast amount of record keeping and tabulating required in an automated and technological society. Students who have received additional business instruction in accounting, typing, office machines, and office procedures are regarded by most companies as particularly qualified for the many opportunities available.

Each year the clerical positions opened up by new mechanical systems far outnumber the qualified personnel available. It is estimated that 300,000 new types of clerical jobs will be available in 1970 alone, above and beyond normal requirements.

Some typical clerical positions for men and women are typists, bookkeepers, receptionists, bank tellers, office machine operators, cashiers, file clerks, and credit and adjustment clerks.

### Clerical Curriculum

#### Instructional Units

#### First Quarter (336 Hours)

BUS 101 Typewriting I  
ENG 101 Business English I  
MTH 101 Business Mathematics I  
BUS 113 Personal Appearance and Personality Development

#### Second Quarter (336 Hours)

BUS 201 Typewriting II and Lab  
ENG 201 Business English II  
MTH 213 Business Mathematics II  
BUS 111 Business Machines I  
BUS 115 Office Procedures I

#### Third Quarter (336 Hours)

BUS 301 Typewriting III  
ENG 301 Business English III  
BUS 141 Filing Systems and Procedures  
BUS 211 Business Machines II  
BUS 151 Clerical Records and Control I

#### Fourth Quarter (336 Hours)

BUS 401 Typewriting IV  
BUS 251 Clerical Records and Control II  
BUS 215 Office Procedures II  
BUS 119 Business Psychology  
BUS 171 Civil Service Training

## SECRETARIAL SCIENCE

A secretary is a skilled, professional office worker who, in addition to competency in shorthand and typing, understands business procedures, office machines, and the importance of efficiency. She must have a pleasant phone manner and must be able to meet people. Judgment, initiative, tact, and a respect for confidential matters are essential to the secretary.

Opportunities for men and women graduates of this curriculum exist in businesses, civil service, and private industry. Specialized positions exist in the medical, legal, and scientific fields.

Conscientious study of this one-year program will lay the foundation for entering an exciting and rewarding career. Advancement will be prompt and continuous for individuals desiring to get ahead.

### Secretarial Curriculum Instructional Units

#### **First Quarter (336 Hours)**

BUS 131 Shorthand I  
BUS 101 Typewriting I  
ENG 101 Business English I  
BUS 119 Psychology  
MTH 101 Business Mathematics I

#### **Second Quarter (336 Hours)**

BUS 232 Shorthand II and Lab  
BUS 201 Typewriting II and Lab  
ENG 201 Business English II  
MTH 213 Business Mathematics II

#### **Third Quarter (336 Hours)**

BUS 333 Shorthand III and Lab  
BUS 301 Typewriting III  
BUS 115 Office Procedures  
BUS 111 Business Machines I  
ACC 501 Secretarial Accounting

#### **Fourth Quarter (336 Hours)**

BUS 404 Shorthand IV and Lab  
BUS 401 Typewriting IV  
BUS 117 Business Law  
BUS 141 Filing Systems and Procedures  
BUS 113 Personal Appearance and Personality Development

## UNIT RECORD DATA PROCESSING

The purpose of this one year program is to prepare the student, who plans on a data processing career, for employment in a unit record installation, as an operator, project planner or lower staff member. The student will take related courses in Accounting, Mathematics, and Data Processing. A course in Business and its relationship to the prospective Data Processor is part of the curriculum as is a course in Business Psychology.

The Unit Record equipment and the role it plays is, of course, the heart of this one year program. The machines which are included in the course of instruction are the Key punch, the Sorter, the Col-lator, the Reproducing Punch, and the Accounting Machine.

### Unit Record Data Processing Curriculum

#### Instructional Units

#### First Quarter (336 Hours)

ACC 101 Accounting I and Lab  
MTH 101 Business Mathematics I  
BUS 181 Introduction to Business  
DPT 111 Punch Card Data Processing and Lab

#### Second Quarter (336 Hours)

ACC 201 Accounting II and Lab  
MTH 213 Business Mathematics II  
ENG 101 Business English I  
PCD 101 Punch Card Systems I and Lab

#### Third Quarter (336 Hours)

ACC 301 Accounting III and Lab  
BUS 119 Business Psychology  
ENG 342 Technical Report Writing  
PCD 202 Punch Card System II and Lab

#### Fourth Quarter (336 Hours)

PCD IV Punch Card Systems and Procedures  
PCD 402 Punch Card Field Project  
DPT 121 Introduction to Data Processing



## BUSINESS EDUCATION

### Description of Courses

ACC 101 Accounting I and Lab (56 Class Hours and 56 Lab Hours)

The student is introduced to principles of accounting, collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises. The practical application of these principles through use of proper techniques is stressed. This unit also includes a study of notes, deferrals, and accruals.

ACC 201 Accounting II and Lab (56 Class Hours and 56 Lab Hours)

A continuation of Accounting I covering receivables, inventory, plant assets, and a study of systems and controls, payroll taxes, and the concepts and principles involved with partnership and corporate accounting.

ACC 301 Accounting III and Lab (56 Class Hours and 56 Lab Hours)

The third course in accounting theory is designed to give the accounting student a deeper insight and understanding of the various methods and procedures in accounting for manufacturing enterprises. It also illustrates the use of accounting principles to develop financial information for management.

ACC 401 Cost Accounting and Lab (56 Class Hours and 56 Lab Hours)

The cost accounting course is designed to provide the accounting student with a general knowledge of the purpose of cost accounting. The course demonstrates the basic concept that cost flow matches the flow of goods as the goods go through the manufacturing process.

ACC 501 Secretarial Accounting (56 Class Hours)

This is an introductory course in accounting prepared especially for students working toward a secretarial science diploma. The basic principles of record keeping applies to the professional practice of a doctor or lawyer, and to the records maintained by a large manufacturing corporation.

BUS 101 Typewriting I (56 Class Hours)

The beginning typing course emphasizes mastery of the keyboard, accuracy, current typing techniques, continuity of movement, and the development of speed. Centering, simple letter writing, tabulation, business forms, rough drafts, and the mechanics and adjustments of the typewriter are taught.

BUS 111 Business Machines I (56 Class Hours)  
The objective of this course is to develop skill in the operation of the most commonly used office machines, namely: ten-key and full-key adding machines, calculators, duplicating and copying machines, and other commonly used office machines.

BUS 112 Income Tax Procedure (56 Class Hours)  
An introductory course in all procedures pertaining to Federal and State income tax regulations. Students gain experience in actual computation of payroll, individual, and corporate income taxes.

BUS 113 Personal Appearance and Personality Development (56 Class Hours)  
This course is designed to help the career student make the most of his abilities in order to achieve success and happiness in both business and personal life. It helps the student develop the tasteful appearance, the attractive personality, and the social polish that are as necessary as good office skills.

BUS 115 Office Machines I (56 Class Hours)  
This course is intended to develop a high degree of competency and a broad knowledge of skills as they relate to general office procedures. The curriculum recognizes that skill is only one of the important factors for success in the business office, the course gives attention to the development of proper attitudes and personality and improvement of work habits.

BUS 117 Business Law (56 Class Hours)  
The following areas as related to business are presented in detail: contracts, sales, bailment, negotiable instruments, agency and employment, partnerships, corporations, and property. Actual cases are studied and discussed in class. Students are asked to give their own solutions to cases before actual court decisions are disclosed.

BUS 119 Business Psychology (56 Class Hours)  
In order to experience successful personal and interpersonal relationships, a student needs to know and to understand himself. Business psychology is designed to aid students in applying the knowledge and understanding of himself to his business surroundings.

BUS 131 Shorthand I (56 Class Hours)  
A presentation and introduction to the complete theory of shorthand placing emphasis on brief forms, phrases, word beginnings and endings, principles, spelling and punctuation, business vocabulary building, and grammar check-ups. Familiar dictation materials are used in this course.

BUS 141 Filing Systems and Procedures (56 Class Hours)  
This course is a thorough study of the types of systematic control of all daily business occurrences and transactions. It includes an extensive course in filing, covering the four basic methods.

BUS 151 Clerical Records and Control I (56 Class Hours)  
Specialized training in payroll accounting, cash control and banking records, credit instruments, and tax returns is given to increase the student's ability to handle a variety of record keeping duties.

BUS 171 Civil Service Training (56 Class Hours)  
This course is designed as an intensive pre-employment review of the knowledge and basic skills that are necessary for clerical positions in industry and government

BUS 181 Introduction to Business (56 Class Hours)  
A survey of the business world, this course gives particular attention to the structure of the various types of business organizations, methods of financing, internal organization, and management.

BUS 201 Typewriting II (56 Class Hours and 56 Lab Hours)  
Speed and accuracy in straight-copy typing is stressed through the development of proper typewriting techniques. Emphasis is placed on accuracy in typing various types of business correspondence and tabulations.

BUS 211 Business Machines II (56 Class Hours)  
This course is a skill building course on the rotary calculator, key driven calculator, full and ten-key adding machines, printing calculator, electronic calculator, and other business machines. The objective is to develop a high degree of proficiency for specific problem situations.

BUS 215 Office Procedures (56 Class Hours)  
This course is designed to develop skills in office procedures through supervised practice in completing problems under actual business office conditions.

BUS 232 Shorthand II and Lab (56 Class Hours and 56 Lab Hours)  
A review of the complete theory of Shorthand I with the primary objectives being to provide adequate materials and effective practice procedures for the development of advanced dictation skills.

BUS 251 Clerical Records and Control II (56 Class Hours)  
The second course in records and control places emphasis on supervised practice in completing problems for the development of skill in recording data for business.

BUS 301 Typewriting III (56 Class Hours)  
The student is encouraged to develop to his highest potential in straight-copy typing. Instruction and practice in the correct procedures for typing various types of documents, tabulated financial problems, manuscripts, centering, heading, footnotes, enumerations, and bibliographies are given.

BUS 333 Shorthand III and Lab (56 Class Hours and 56 Lab Hours)

The purpose of this course is primarily that of building speed and developing ability to transcribe dictated material efficiently, accurately, and rapidly. This course also introduces to the student the more familiar terminology in various areas of business.

BUS 401 Typewriting IV (56 Class Hours)

This course is an intensive review of all typewriting skills and techniques. It is also designed to strengthen the skills to meet employment standards.

BUS 404 Shorthand IV and Lab (56 Class Hours and 56 Lab Hours)

The stenographer is responsible for a variety of tasks in the modern office. Dictation and transcription is an important part of this responsibility and is stressed in this course. The fourth quarter places emphasis on correct grammar, spelling, and the ability to communicate with others.

DPT 111 Punch Card Data Processing and Lab (56 Class Hours and 56 Lab Hours)

This course is divided into seven sections and is designed to acquaint the student with each section by control panel wiring and programming of the various IBM machines. Experience on IBM sorters, card punch, reproducing punch, collator, and accounting machine are included in this area.

DPT 121 Introduction to Data Processing (56 Class Hours)

This data processing course is designed to introduce the accounting student to the importance of good internal systems communication and the procedures and applications of such systems as they relate to purchasing, receiving, materials control, production control, distribution, billing, collections, and payroll.

ENG 101 Business English I

The Business English course has as its primary objective to help the student solve effectively his communication problems. This includes improvement of communication habits and skills in reading, writing, speaking and listening, as well as positive planning for effective human relations.

ENG 201 Business English II (56 Class Hours)

Additional emphasis is placed on the skills introduced during the first quarter. New skills presented include the mechanics of writing such as: capitalization, punctuation, sentence and paragraph structure, and style. Special emphasis is given to the job application letter and personal data sheet.

ENG 301 Business English III (56 Class Hours)

The third quarter of this course includes a comprehensive coverage of the four important communication skills; speaking, listening, writing, and reading. Practical application of the skills are emphasized.

MTH 101 Business Mathematics I (56 Class Hours)

The primary objective of this course is to develop a workable knowledge of mathematical computations for business applications. This is an intensive review of all fundamental processes as well as a sustained application of these processes as they relate to computation of business data.

MTH 213 Business Mathematics II (56 Class Hours)

A continuation of Business Mathematics I which includes major areas of computation as they relate to: percentage, cash discount, trade discount, payroll, taxes, retail buying and selling, bank discounts, simple and compound interest, and other computational processes commonly performed in business transactions.

PCD 101 Punch Card Systems I and Lab (56 Class Hours and 56 Lab Hours)

This course is designed to acquaint the student with actual business data processing applications. The student learns through lecture and practical case studies to apply the data processing equipment to various applications in accounts payable and receivable.

PCD 202 Punch Card Systems II and Lab (56 Class Hours and 56 Lab Hours)

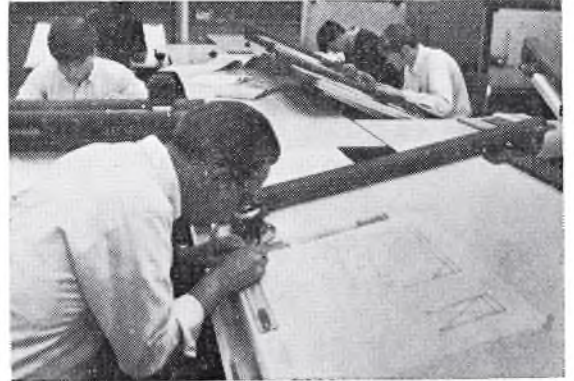
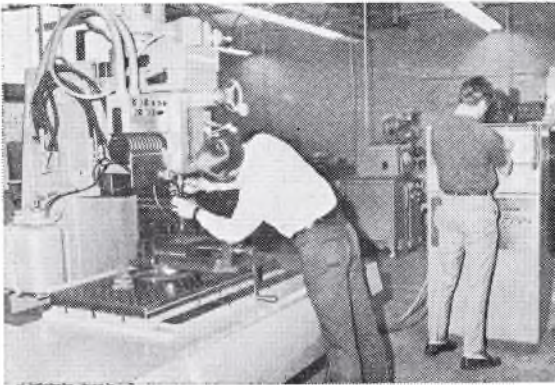
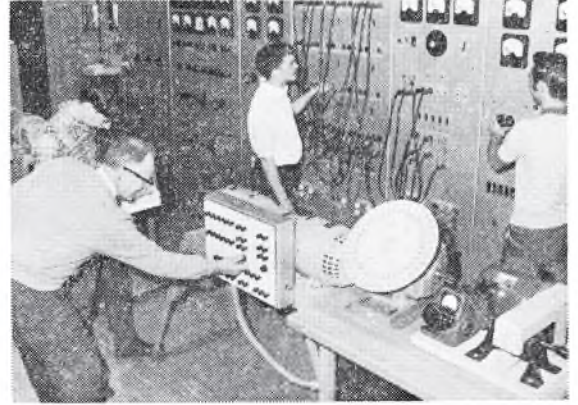
The student will gain an understanding of how machines and systems are combined and the theory and concepts of the application of Unit Record equipment and basic computing machines.

PCD 401 Punch Card Systems and Procedures (56 Class Hours and 56 Lab Hours)

The functions in a punched-card accounting system is analyzed. The operational principles of the machines are examined, their production rates discussed, and their functions analyzed. Flow charting and its effect on each department in a business is discussed.

PCD 402 Punch Card Field Project (168 Lab Hours)

Individual assignments are made to students whereby they set up an entire Unit Record Data Processing system. During this period students may visit local installations for ideas to incorporate in their project.



# DEPARTMENT OF ENGINEERING TECHNOLOGIES

## DEPARTMENTS

MECHANICAL ENGINEERING TECHNOLOGY

DRAFTING AND DESIGN TECHNOLOGY

ELECTRONIC ENGINEERING TECHNOLOGY

ELECTRICAL ENGINEERING TECHNOLOGY

## MECHANICAL ENGINEERING TECHNOLOGY

Mechanical Engineering Technology is a pre-employment two year course of study for high school graduates. This technology is that part of the engineering field which requires the application of scientific and engineering knowledge and methods combined with the technical skills in support of engineering activities; it lies in the occupational area between the craftsman and the engineer. The employment outlook for the Mechanical Engineering Technician is very promising. Engineering technicians are in great demand and short supply. These people are taking over many tasks engineers have been doing, releasing the engineers for more scientific levels of work. Increased automation in industry today requires more and better educated people to design, manufacture, install, and maintain complex equipment.

### Mechanical Engineering Technology

#### Instructional Units

#### First Year

#### First Quarter (336 Hours)

Pre-Tech Mathematics  
Pre-Tech Communication Skills  
Orientation\*

#### Second Quarter (336 Hours)

MTH 121 Technical Mathematics I and II (Two Hrs.)  
ENG 122 Communication Skills I  
DFT 121 Engineering Drawing I  
MET 121 Manufacturing Processes

#### Third Quarter (336 Hours)

MTH 133 Technical Mathematics III  
PHY 132 Mechanical Physics I  
DFT 131 Engineering Drawing II  
MET 131 Machine Shop I

#### Fourth Quarter (336 Hours)

MTH 144 Technical Mathematics IV  
PHY 143 Mechanical Physics II  
MET 142 Machine Shop II  
ENG 143 Communication Skills II  
MET 141 Applied Mechanics I



## Second Year

### First Quarter (336 Hours)

PHY 214 Heat, Light, and Sound  
MET 212 Applied Mechanics II  
MET 213 Numerical Control and EES  
MET 214 Strength of Materials  
MET 215 Statistics

### Second Quarter (336 Hours)

EET 221 Basic Electricity I  
MET 221 Methods Engineering  
MET 222 Production Management I  
MET 223 Engineering Materials  
MET 224 Industrial Organization

### Third Quarter (336 Hours)

EET 223 Basic Electricity II  
MET 231 Production Management II  
MET 233 Basic Metallurgy  
MET 234 Control Systems

### Fourth Quarter (336 Hours)

MET 241 Plant Layout Project  
SSC 241 Social Science  
EET 134 Basic Electronics  
MET 242 Mechanisms  
MET 243 Seminar

\*Students who have completed the First Year program may enroll in the Summer Quarter during Pre-Tech to make up courses failed or to take additional courses with second year students. All students will not be required to attend Pre-Tech program.

## DRAFTING AND DESIGN TECHNOLOGY

Engineering drawings are the language used by engineers. Drafting and Design Technology is the study of the preparation of drawings for design proposals, for experimental models, and items for production use. Drafting technicians perform many duties in a specialized field, such as the drawing of a sub-assembly, or a major component. They assist engineers and design from the engineers' original ideas and design concepts. They may also supervise and coordinate the preparation of working drawings.

# Drafting and Design Technology

## Instructional Units

### First Year

#### First Quarter (336 Hours)

Pre-Tech Mathematics  
Pre-Tech Communication Skills  
Orientation\*

#### Second Quarter (336 Hours)

MTH 121 Technical Mathematics I and II  
ENG 122 Communication Skills I  
DDT 122 Engineering Drafting I

#### Third Quarter (336 Hours)

MTH 133 Technical Mathematics III  
PHY 132 Mechanical Physics I  
GMY 131 Plane Geometry  
DDT 133 Engineering Drafting II

#### Fourth Quarter (336 Hours)

MTH 144 Technical Mathematics IV  
PHY 143 Mechanical Physics II  
GMY 142 Descriptive Geometry  
DDT 144 Engineering Drafting III

### Second Year

#### First Quarter (336 Hours)

MET 121 Manufacturing Processes  
ENG 143 Communication Skills  
DDT 215 Engineering Design I

#### Second Quarter (336 Hours)

MET 223 Engineering Materials  
MET 131 Machine Shop I  
DDT 226 Engineering Design II

#### Third Quarter (336 Hours)

EET 223 Basic Electricity II  
EET 221 Basic Electricity I  
MET 141 Applied Mechanics I  
DDT 237 Engineering Design III

**Fourth Quarter****(336 Hours)**

SSC 241 Social Science  
MET 214 Strength of Materials  
DDT 248 Engineering Design IV

\*Students who have completed the First Year program may enroll in the Summer Quarter during Pre-Tech to make up courses failed or to take additional courses with second year students.

**ELECTRONIC ENGINEERING TECHNOLOGY**

Electronic Engineering Technology is the study of the basic principles of electronics and the application of these principles in industrial electronic equipment. The curriculum of electronic technology is designed with the expectation that graduates will continue their training in industry where they will specialize in a branch of electronics.

**Electronic Engineering Technology  
Instructional Units****First Year****First Quarter****(336 Hours)**

Pre-Tech Mathematics  
Pre-Tech Communication Skills  
Orientation\*

**Second Quarter****(336 Hours)**

MTH 121 Technical Mathematics II  
EET 221 Basic Electricity I  
EET 121 Shop Practice  
EET 123 Basic Electronics

**Third Quarter****(336 Hours)**

MTH 133 Technical Mathematics III  
ENG 122 Communication Skills I  
EET 134 Basic Electronic Circuits  
EET 122 AC Fundamentals

**Fourth Quarter****(336 Hours)**

MTH 134 Electrical Mathematics III  
PHY 131 Physics I  
EED 122 Electronic Drafting I and II  
EET 131 Test Instruments

## Second Year

### First Quarter

PHY 242 Physics II  
EET 241 Pulse Circuits I  
ENG 143 Communication Skills II  
EET 247 Semi-conductor Circuit Analysis

### Second Quarter

(336 Hours)

PHY 253 Physics III  
EET 252 Pulse Circuits II  
EET 262 Communication Systems  
EET 250 Transmission Fundamentals  
ENG 342 Technical Report Writing

### Third Quarter

(336 Hours)

EET 251 Industrial Electronics I  
EET 372 Instruments and Measurements  
EEC 271 Computer Fundamentals  
EET 272 Microwave Fundamentals

### Fourth Quarter

(336 Hours)

EET 278 Electronic Research Project  
EET 273 Microwave Measurements  
EET 263 Industrial Electronics II

\*Students who have completed the First Year program may enroll in the Summer quarter during Pre-Tech to make up courses failed or to take additional courses with second year students. All students will not be required to attend Pre-Tech program.

## ELECTRICAL ENGINEERING TECHNOLOGY

The basis for nearly all of America's industrial growth has been the gigantic electrical power industry. This course is directed toward meeting the need of technically trained employees in the electric-power generation and distribution, communication, electrical construction, electrical testing and development, electrical design and other related fields. Upon completion of this course, graduates should be able to fill responsible positions as electrical laboratory technicians, engineering assistants, estimators, instrument technicians and junior engineers.

# Electrical Engineering Technology

## Instructional Units

### First Year

#### First Quarter (336 Hours)

Pre-Tech Mathematics  
Pre-Tech Communication Skills  
Orientation\*

#### Second Quarter (336 Hours)

MTH 111 Technical Mathematics I  
EED 121 Electrical Drafting I  
ENG 122 Communication Skills  
EET 221 Basic Electricity I

#### Third Quarter (336 Hours)

MTH 122 Technical Mathematics II  
EET 121 Shop Practices  
EET 123 Basic Electronic Devices  
EED 122 AC Fundamentals

#### Fourth Quarter (336 Hours)

MTH 134 Electrical Mathematics III  
PHY 131 Physics I  
EET 134 Basic Electronics I  
EET 131 Test Instruments

### Second Year

#### First Quarter (336 Hours)

PHY 242 Physics II  
EET 140 Engineering Economy  
EET 246 Circuit Analysis  
EET 245 DC Machines and Apparatus

#### Second Quarter (336 Hours)

ENG 143 Communication Skills II  
EET 201 Transmission and Distribution  
EET 204 Automatic Control Circuits  
EET 210 AC Circuits

**Third Quarter****(336 Hours)**

EET 225 New Devices  
EET 222 AC Machines and Distribution  
EET 247 Semi-Conductor Circuit Analysis  
SSC 241 Social Science

**Fourth Quarter****(336 Hours)**

EET 200 Special Problems  
EET 262 Electricity and Instrumentation  
EET 281 Installation and Planning

\*Students who have completed the First Year program may enroll in the Summer quarter during Pre-Tech to make up courses failed or to take additional course with second year students. All students will not be required to attend Pre-Tech program.

**ENGINEERING TECHNOLOGY****COURSE DESCRIPTIONS****DDT 122 Engineering Drafting I**

This is a beginning course for students who have had little or no previous experience in Drafting and for those students that are majoring in Drafting-Design Technology. Skills are developed in the basic elementary forms of graphic representation.

**DDT 133 Engineering Drafting II**

This course develops further skills in methods of graphic representation and provides a working knowledge of standards used in American industry. The students gain experience in learning pictorials, sections and multiview drawings of welded parts that require the use of welding symbols.

**DDT 144 Engineering Drafting III**

This course offers additional skills in drafting techniques and introduces more advanced knowledge in graphic representation. Commercial practices and economics currently being used by industry are emphasized to complete the background studies needed for second year design courses.

**DDT 215 Engineering Design I**

Engineering Design I is a study of basic design principles and procedures as related to the general field of graphic representation. Functional design is stressed paying particular attention to design of details as well as systems. A framework of problem solving techniques is developed into which future design problems may be placed.

#### DDT 226 Engineering Design II

This is a continuation of Design I which begins an introduction to several specialized fields of drafting with emphasis being placed on practices peculiar to a particular field. The student develops skills in civil and topographic, architectural, and structural designs.

#### DDT 237 Engineering Design III

An advanced designing course which gives the student experience in the specialized field of graphic representations that began in DDT 226. Major divisions of this course include experiences in designing tools and fixtures, Electrical and Electronic circuits, and heating and piping layouts.

#### DDT 248 Engineering Design IV

Products are carried through the complete manufacturing cycle under simulated working conditions. The student must complete each phase of the project from the original idea to the finished product.

#### DFT 121 Engineering Drawing I

A beginning course for students who are majoring in Mechanical Engineering Technology. The student will develop the ability to produce accurate and complete drawings, and gain experience in using handbooks and other resource material.

#### DFT 131 Engineering Drawing II

A continuation of DFT 121. It carries the Mechanical Technology student into practical applications of this means of communication in various fields of industry. The student completes ten assigned working drawings as well as a complete drawing of a project to be made in Machine Shop II.

#### EEC 271 Computer Fundamentals

A basic course covering the operation of modern digital computers. The course emphasizes the use of the computer in industry and covers logic design, storage and timing circuits, memory devices, computer organization, and basic programming methods.

#### EED 121 Electrical Drafting I

A beginning course for students having limited drafting experience. It consists of use of instruments, lettering, orthographic projections, use of pictorial drawing, and sketching.

#### EED 122 Electrical Drafting II

Drafting practices and skills required in the electronic field such as: block diagrams, conventional standards, schematic diagrams, printed circuits, wiring and connection diagrams and symbols for all electrical and electronic components are taught in this course.

### EET 121 Shop Practices

Emphasizes the proper use of the basic tools of the electronic and electrical technician. The course stresses safety precautions. Building projects are used to provide practice for the student in the use of hand tools and electronic and electrical assembly methods.

### EET 122 AC Fundamentals

This is a thorough coverage of AC fundamentals. Sufficient time is devoted to laboratory work to insure practical knowledge and skills in AC circuitry.

### EET 123 Basic Electronic Devices

The student studies electron tubes, amplifiers, semi-conductors and develops the ability to connect and test basic transistor and basic vacuum tube circuits.

### EET 131 Test Instruments

Provides a solid foundation in the theory behind basic electrical and electronic test instruments. Students gain laboratory experience using VOM's, VTVM's, oscilloscopes, signal generators, recording instruments, and other electrical instruments.

### EET 134 Basic Electronics I

A study of basic electronic circuits including topics on the application of vacuum tubes and transistor circuits. The student is taught the theory and application of circuits as well as power supplies and the use of oscillators.

### EET 140 Engineering Economy

A study of the economy of engineering proposals conducted with accounting, income taxes, etc. as discussion topics. This course is designed to give the student a fundamental knowledge of the basic concepts and techniques of statistical influence.

### EET 200 Special Problems

A course designed to give the student an opportunity to display his initiative in solving special problems in electronics and electricity.

### EET 201 Transmission and Distribution

This course gives the student an understanding of the fundamentals of electric power transmission and distribution. The theory and field work presented gives the student a background in the problems faced in this branch of the industry.

### EET 204 Automatic Control Circuits

This course gives the student an understanding of the methods of analyzing feedback control systems. The theory and laboratory work gives the student a better concept of the closed-loop system.



### EET 210 AC Circuits

This course is designed to give the student an understanding of three phase circuit characteristics, power measurement fundamentals of transmission and distribution, and the fundamental concepts of symmetrical components.

### EET 221 Basic Electricity I

Basic Electricity I presents fundamentals needed in the study of Electricity and Electronics. Beginning with the electron theory, the course progresses through magnetic fundamentals. Laboratory experiments are utilized to provide the student skills and knowledge in DC circuitry.

### EET 222 AC Machines and Applications

This course teaches the student the applications of alternating current machines and emphasizes AC machine control systems.

### EET 223 Basic Electricity II

A continuation of Basic Electricity. The student is introduced to alternating current circuits, generators, and motors. The student is taught to use test equipment by performing laboratory experiments on various circuits.

### EET 225 New Devices

The student is taught theory pertaining to the latest electrical devices being used in industry. Field trips are arranged to study new machines being used.

### EET 241 Pulse Circuits I

This is a study of principles of linear waveshaping, amplifiers, inverters, and multivibrators. Heavy emphasis is placed on laboratory work where the student gains knowledge by experimenting with pulse circuits.

### EET 245 DC Machines and Apparatus

Gives the student an understanding of the uses and applications of direct current and alternating current machines. The theories presented give the student the necessary understanding of the methods and techniques of operation and control of DC and AC machinery.

### EET 246 Circuit Analysis

Provides the student with a thorough review of DC and AC Circuit Methods covered in previous courses. It gives the student an introduction to the study of electrical networks from the so-called pole and zero approach.

### EET 247 Semi Conductor Circuit Analysis

A mathematical analysis of transistor circuits. Network theorems and equivalent circuits are used to evaluate total circuit perform-

ance and to design reliable circuits. Laboratory experience in measuring current leakage, gain, biasing, and stability are included.

#### EET 250 Transmission Fundamentals

Transmission Fundamentals bridges the gap that exists between the elementary and the advanced technical course pertaining to the generation and transmission of electrical energy at radio frequencies.

#### EET 251 Industrial Electronics I

A study of electronic circuits and devices used in modern industry. A detail study is made of servo-mechanisms, switching devices, time delay action devices, photo-electric devices and controls, and power supplies.

#### EET 252 Pulse Circuits II

A continuation of Pulse Circuits I. The course contains classroom and laboratory study of electronic circuits used extensively in computers, industrial controls, radar, and guided missiles.

#### EET 262 Communication Systems

This course presents an introduction to several related areas of electronic communications. The course helps to provide a broad basic knowledge dealing with television, multiplex, telemetering, microwave, and radar.

#### EET 263 Industrial Electronics II

A continuation of Industrial Electronics I into the areas of motors, generators, servo-mechanisms, and automatic control devices.

#### EET 272 Microwave Fundamentals

This is a study of microwave techniques applicable to communication and radar systems. This course includes devices, circuits, and systems.

#### EET 273 Microwave Measurements

This course follows Microwave Fundamentals and includes microwave system design and measurement.

#### EET 278 Electronic Research Project

This course provides time and opportunity for the student to work on the design, fabrication, assembly, and testing of some electronic device, circuit, unit or system of his choice. The purpose is to promote independent study to draw upon all of the students previous courses of study in order to arrive at satisfactory project completion.

### EET 281 Installation and Planning

The student learns to plan an electrical installation including making of installation drawings, estimate of materials to be used, and cost of installation.

### EET 372 Instruments and Measurements

In Instruments and Measurements students will analyze a number of electronic instruments to learn how they work, what they do and their limitations. The course includes new material on digital applications.

### ENG 122 Communication Skills I

This course places emphasis on developmental reading and on practical composition. Listening skills are developed along with the teaching of effective study habits.

### ENG 143 Communication Skills II

Utilizes the fundamentals of the first communication skills course to introduce the aspects of preparing reports and communicating within groups. Emphasis is placed on techniques for collecting and presenting technical data. Formal and informal methods and procedures in submitting written and spoken reports are studied.

### ENG 342 Technical Report Writing

The course utilizes the skills learned in the Communication Skills courses to introduce the aspects of preparing reports and communicating within groups. Emphasis is placed on techniques of collecting and presenting technical data.

### GMY 131 Plane Geometry

This course is designed for Drafting Design students. The course integrates plane geometry with arithmetic, algebra, numerical trigonometry, coordinate geometry, and simple logic.

### GMY 142 Descriptive Geometry

The student is introduced to the theory and practical approach to solutions of problems encountered in the field of drafting.

### MET 121 Manufacturing Processes

A survey of the basic manufacturing processes and materials used by industry with an introduction to the vocabulary of the machine trades and the functions and capabilities of the more common machine tools.

### MET 131 Machine Shop I

Introduces the student to the necessary techniques and knowledge involved in the use of common metal removing tools, both power and hand tools, and to familiarize him with the common measuring equipment used in modern industrial plants.

### MET 141 Applied Mechanics I

Mechanics I covers graphical and mathematical analysis of forces, laws of motion, mechanical power, and principles directly related to the technical field of specialization. Course work is practical in nature with emphasis on applied problems. Emphasis is placed on statistics in the area of mechanics.

### MET 142 Machine Shop II

This course provides the student with the practical application in the shop of the skills and knowledges attained in Machine Shop I. Industrial practices are utilized as the student produces parts from working drawings. Students will become acquainted with commercial milling practices.

### MET 212 Applied Mechanics II

This is a course in Dynamics and is concerned with motion and the effects of forces acting on rigid bodies in motion and presents all facets governing the use of dynamics in design. The student will be subjected to dynamics as a science and as a useful tool.

### MET 213 Numerical Control and Electrical Energy Systems

MET 213 is primarily for Mechanical Engineering Technology students. It gives the generalities of numerical control and the specifics applied to the machine available. During the applied instruction, each student makes the required drawings of the part, programs the part, prepares the machine tape on a flexowriter, sets up the machine, and produces the part. Instruction is also given in the fundamentals of electrical energy processes.

### MET 214 Strength of Materials

Strength of Materials supplements the subjects of Engineering Mechanics in order that the student gain the basic knowledge required for the design of machine parts and structural members, parts, and connections. Laboratory time will be spent in both testing materials and in solving problems that are typical of those found in industry.

### MET 215 Statistics

The purpose of this course is to give the students the fundamentals of variation, measures of variability and central tendency, and the normal distribution. The student will be able to apply these fundamentals to applications involving process and product control.

### MET 221 Methods Engineering

Methods Engineering teaches the student general design procedure so that he will be able to use it to solve a methods engineering problem. The student will also know the uses and when to apply stop-watch time study, work sampling, standard data and predetermined motion times. He will be aware of problems unbalance and

variation in manufacturing systems and will know that there are techniques available for solving such problems.

#### MET 222 Production Management I

The first of two courses making available to the student the procedures and techniques of production management. Both qualitative and quantitative methods of analysis are given with emphasis on the quantitative. The basic areas of production planning, production control, inventory control and wage incentives are covered.

#### MET 223 Basic Electricity II

A continuation of Basic Electricity I. The student is introduced to alternating current circuits, generators, and motors. The student is taught to use test equipment by performing laboratory experiments on various circuits.

#### MET 224 Industrial Organization

Industrial Organization is meant to provide general knowledge of the elements and characteristics of the business enterprises and its relationship to the American economy. The student is taught the framework of business, basic business functions, business operating techniques and controls, and business policies.

#### MET 231 Production Management II

Production Management II is a continuation of production Management I. The basic areas of production management covered are plant layout, materials handling, investment analysis, statistical quality control, and electronic data processing.

#### MET 233 Basic Metallurgy

Metallurgy is an introduction to the fundamentals of physical metallurgy which includes the study of the micro-structure and physical characteristics of metals. This includes experience in the methods of analysis and laboratory procedures employed in metallography.

#### MET 234 Control Systems

A broad introduction to the principles of operation of electrical-mechanical recording and control circuitry, including the study of hydraulic and pneumatic components and the combination of these systems utilized in process control.

#### MET 241 Plant Layout Project

This is a laboratory project of actually laying out a plant to produce a specific product. This project starts with the description of the product and ends with the complete plant layout and costs associated with manufacturing the product.

### MET 242 Mechanisms

Mechanisms presents the basic design approach for cams, belts, pulleys, and gears. Problems involving velocities and accelerations of machine parts are also studied using mathematical and drafting room techniques.

### MET 243 Seminar

Seminar is utilized to up-date the mechanical engineering technology students' knowledge of current trends in industry. This is accomplished through plant trips, speakers, and discussion sessions.

### MTH 111 Technical Mathematics I

A math course designed for students majoring in Electronic and Electrical Engineering Technology. The course begins with review of fundamental laws and progresses through simple trigonometry.

### MTH 121 Technical Mathematics I and II

The course begins with a review of fundamentals, laws, and purposes through simple trigonometry of right triangles. The student learns to use the slide rule and develop skills in more advanced algebra and related math forms.

### MTH 122 Technical Mathematics II

A continuation of MTH 111. Some special topics of algebra are covered along with an introduction to analytical geometry. The student develops skills in linear and quadratic equations and in the use of complex numbers.

### MTH 133 Technical Mathematics III

The concepts and processes of Technical Mathematics III are related to all technical specialities. This course provides a thorough coverage of trigonometry, complex numbers, the law of sines and cosines, and an introduction to differential calculus.

### MTH 134 Electrical Mathematics III

The concepts and processes of Technical Mathematics III are related to Electrical specialities. The course provides a thorough coverage of trigonometry, complex numbers, and analytic geometry. The student is also introduced to calculus.

### MTH 144 Technical Mathematics IV

The objective of this course is to develop an understanding of the mathematical techniques which a technician must gain to solve physical problems.

### PHY 131 Physics I

A basic course in physics with emphasis placed on the electron theory, light, and sound. Applications of fundamentals as they relate to the electronic and electrical problems are emphasized.

## PHY 143 Mechanical Physics II

Physics II is concerned with properties of matter, machines, and mechanics as applied to fluids. Emphasis is placed on applications of hydraulic and fluid systems. A thorough study of fluid machines is covered.

## PHY 214 Heat, Light, and Sound

This course places emphasis on the study of thermodynamics and heat transfer. Sound and light fundamentals are covered only to familiarize the student with the basic phenomena involved in the transmission of sound and light.

## PHY 242 Physics II

A continuation of Physics I that is concerned with heat, light and sound. It includes demonstrations and experiments on various uses of light and sound as the principles are used in modern communication devices.

## PHY 253 Physics III

Heat, light and sound places emphasis on the study of thermodynamics and heat transfer. Sound and light are thoroughly covered to familiarize the student with the basic phenomena involved in the transmission of sound and light.

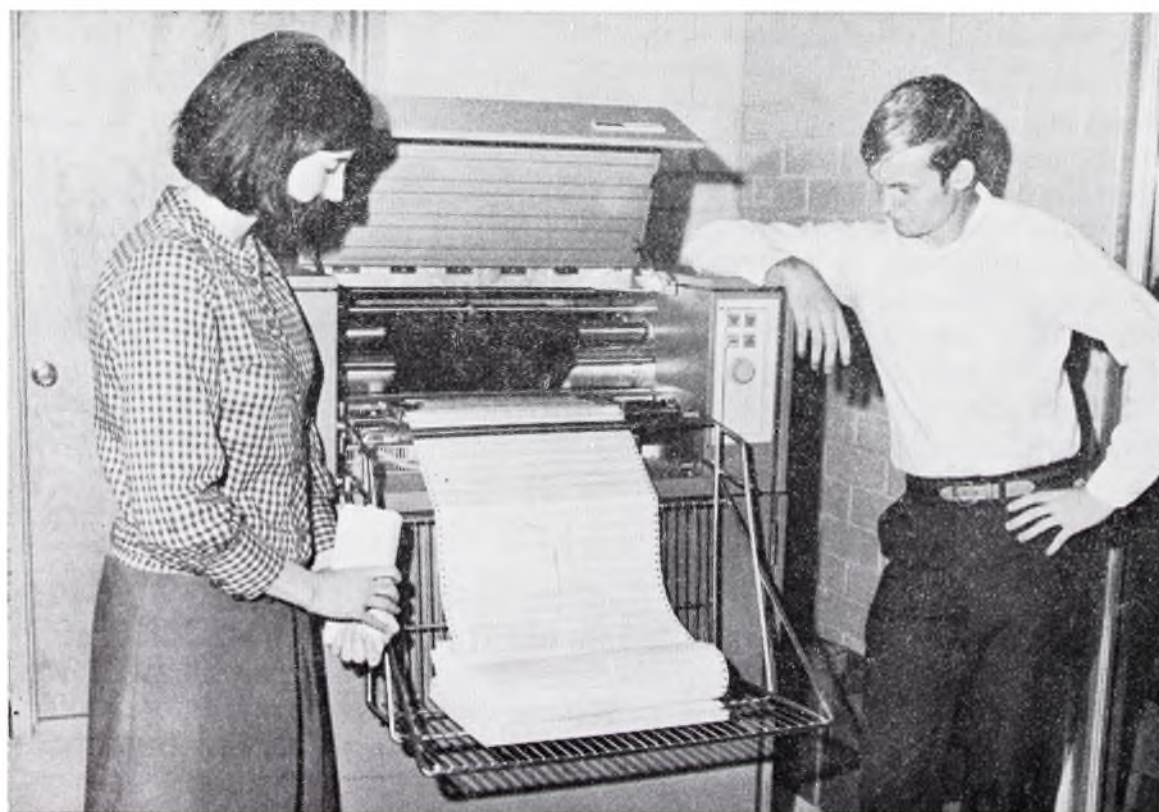
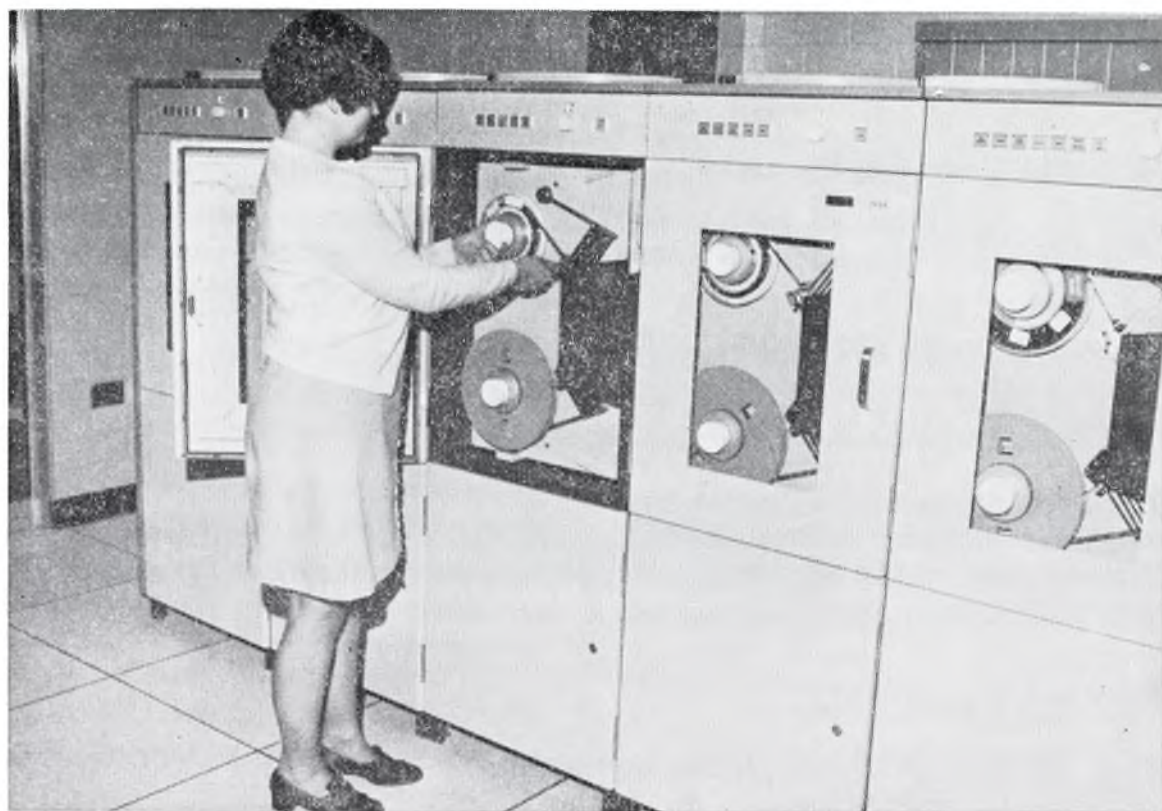
## Pre-Tech Program First Quarter

The Pre-Tech program is taught during the summer quarter for students who are to enter class the fall quarter. The purpose of the pre-tech program is to prepare students for the fall quarter's work. To some this may be a refresher course if they have been out of school for several years. For others the program will introduce them to material not previously studied in high school. Enrolled students may use this quarter to make up courses failed or to take additional credit courses in the curriculum.

## SSC 241 Social Science

Social Science emphasizes the factors which influence the student's initial and future employment. The ability of the student to handle an informal budget is considered an important part of an individual's understanding of the economic forces that affect his life, both as an individual and an employee. The study of industrial organizations acquaints the student with the structure of business.

# DATA PROCESSING TECHNOLOGY





## DATA PROCESSING TECHNOLOGY

Data Processing involves the collection and conversion of information into a form usable by electronic equipment. Skilled handling of a variety of business records is essential to the needs of management. Emphasis throughout this program is placed on the use of computers and programming techniques. Students graduating from this program can readily obtain positions as computing analyst, programmers, and systems analyst.

### Data Processing Technology Instructional Units

#### First Year

##### First Quarter (336 Hours)

ACC 101 Accounting I and Lab  
DPT 111 Punch Card Data Processing and Lab  
MTH 101 Business Mathematics I  
BUS 181 Introduction to Business

##### Second Quarter (336 Hours)

ACC 201 Accounting II and Lab  
MTH 123 Algebra  
ENG 201 Business English II  
DPT 124 Computer Programming I and Lab

##### Third Quarter (336 Hours)

ACC 301 Accounting III and Lab  
MTH 132 Data Processing Mathematics I  
ENG 342 Technical Report Writing  
DPT 134 Computer Programming II and Lab

##### Fourth Quarter (336 Hours)

DPT 141 Systems and Procedures  
DPT 144 Computer Programming III and Lab  
BUS 119 Business Psychology

#### Second Year

##### First Quarter (336 Hours)

DPT 251 Computer Programming (COBOL) and Lab  
MET 215 Statistics  
DPT 253 Data Processing Mathematics II

##### Second Quarter (336 Hours)

DPT 261 Computer Programming (FORTRAN) and Lab  
DPT 262 Advanced COBOL and Lab

**Third Quarter** (336 Hours)  
DPT 271 Computer Programming (EasyCoder and Lab)  
DPT 272 Research Project

**Fourth Quarter** (336 Hours)  
DPT 281 Computer Programming (RPG-PL/2)  
DPT 282 Field Project

## **DATA PROCESSING TECHNOLOGY**

### **Description of Courses**

ACC 101 Accounting I and Lab (56 Class Hours and 56 Lab Hours)

The Student is introduced to principles of accounting, collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises. The practical application of these principles through use of proper techniques is stressed. This unit also includes a study of notes, deferrals, and accruals.

ACC 201 Accounting II and Lab (56 Class Hours and 56 Lab Hours)

A continuation of Accounting I covering receivables, inventory, plant assets, and a study of systems and controls, payroll taxes, and the concepts and principles involved with partnership and corporate accounting.

ACC 301 ACCOUNTING III and Lab (56 Class Hours and 56 Lab Hours)

The third course in accounting theory is designed to give the accounting student a deeper insight and understanding of the various methods and procedures in accounting for manufacturing enterprises. It also illustrates the use of accounting principles to develop financial information for management.

BUS 119 Business Psychology (56 Class Hours)

In order to experience successful personal and interpersonal relationships, a student needs to know and to understand himself. Business psychology is designed to aid students in applying the knowledge and understanding of himself to his business surroundings.

BUS 181 Introduction to Business (56 Class Hours)

A survey of the business world, this course gives particular attention to the structure of the various types of business organizations, methods of financing, internal organization, and management.

DPT 111 Punch Card Data Processing (56 Class Hours and  
and Lab 56 Lab Hours)

This course is divided into seven sections and is designed to acquaint the student with each section by control panel wiring and programming of the various IBM machines. Experience on IBM sorters, card punch, reproducing punch, collator, and accounting machines are included in this area.

DPT 124 Computer Programming I and Lab (56 Class Hours and  
56 Lab Hours)

In this course the student engages in discussions of functions and capabilities of a number of Data Processing Systems. The course includes basic programming and computer operation. This is the first course in programming for the computer.

DPT 134 Computer Programming II (56 Class Hours and  
and Lab 56 Lab Hours)

This course introduces the student to the language of COBOL which is essentially independent of any particular computer. Once the programmer has learned source language and the rules governing it, he can program for any computer that uses a COBOL translator or compiler.

DPT 141 Systems and Procedures (56 Class Hours)

The effective use of data processing equipment and management sciences in meeting the information needs of business requires that much skill and knowledge be applied to the development and design of data processing systems. This course is designed to guide the student through the stages of an organized system.

DPT 144 Computer Programming III (56 Class Hours and  
and Lab 56 Lab Hours)

In this course the major emphasis is placed on developing advanced programming skills through solution of challenging programming problems. The student learns to utilize random access and use utility programs.

DPT 251 Computer Programming (56 Class Hours and  
(COBOL) and Lab 56 Lab Hours)

This course is the first of two courses designed to teach the student an assembly level programming language and its application to problem solving. The student is taught to write programs using COBOL language.

DPT 261 Computer Programming (56 Class Hours and  
(FORTRAN) and Lab 56 Lab Hours)

This course is designed to teach the student the programming language FORTRAN and its application to problem solving in the fields of mathematics, statistics, and business data processing.

DPT 262 Advanced COBOL and Lab (56 Class Hours and 56 Lab Hours)

A continuation of DPT 134 Computer Programming II and Lab dealing with programming in the COBOL language. The student begins to develop systems using COBOL language. The student learns to solve various COBOL programming problems.

DPT 271 Computer Programming (Easy Coder and Lab) (56 Class Hours and 56 Lab Hours)

This course is a machine oriented study of Easy Coder language. The student learns programming methods using a more powerful Easy Coder assembly system to include random-access programming.

DPT 272 Research Project (168 Lab Hours)

The student puts his skills to work in developing a system bringing together a data processing problem that will make use of all the equipment available in the data processing laboratory. Each student will complete several projects in which he applies principles and techniques learned from previous data processing courses.

DPT 281 Computer Programming (RPG-PL/2) (56 Class Hours and 112 Lab Hours)

To be well versed as a programmer a familiarity is necessary with RPG (Report Program Generator). Learning to write the parameters of a problem will cause some computers to generate their own programs making it easier to describe jobs to be done on the computer.

DPT 282 Field Project (168 Lab Hours)

During the last quarter, students take part in a field project. The field project requires the student to work in a local data processing installation. The students will meet at the school to discuss problems and experiences encountered while on the field project.

ENG 201 Business English II (56 Class Hours)

Additional emphasis is placed on the skills introduced during the first quarter. New skills presented include the mechanics of writing such as: capitalization, punctuation, sentence and paragraph structure, and style. Special emphasis is given to the job application letter and personal data sheet.

ENG 342 Technical Report Writing (56 Class Hours)

The course utilizes the skills learned in the Communication Skills courses to introduce the aspects of preparing reports and communicating within groups. Emphasis is placed on techniques of collecting and presenting technical data.

MET 215 Statistics (56 Class Hours)

The purpose of this course is to give the students the fundamentals of variation, measures of variability and central tendency, and the normal distribution. The student will be able to apply these fundamentals to applications involving process and product control.

MTH 101 Business Mathematics I (56 Class Hours)

The primary objective of this course is to develop a workable knowledge of mathematical computations for business applications. This is an intensive review of all fundamental processes as well as a sustained application of these processes as they relate to computation of business data.

MTH 123 Algebra (56 Class Hours)

A review of basic algebra. Provides the basic skills needed for computation and development of the ability for logical, symbolic thinking. Includes exponents and radicals, quadratic equations, and determinants.

MTH 132 Data Processing Mathematics I (56 Class Hours)

A study of computer arithmetic and Boolean algebra fundamentals with their applications to switching circuits. Includes decimal and binary number systems, computer number systems and codes, binary arithmetic and circuit synthesis.

MTH 253 Data Processing Mathematics II (112 Class Hours)

A continuation of MTH 132 Data Processing Mathematics I including Boolean matrices, Karnaugh maps and circuit synthesis using coding systems and the parity.

# SKILLED TRADES

## COURSES OF STUDY

HEATING AND AIR CONDITIONING

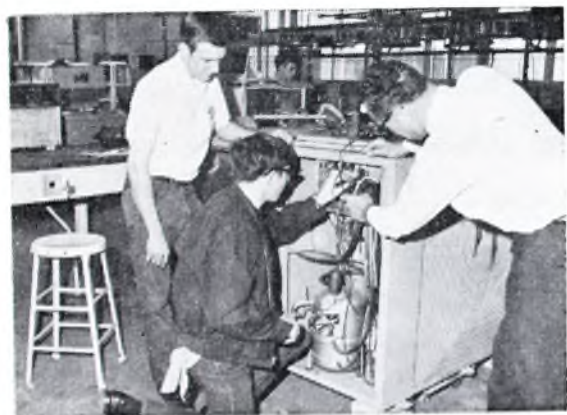
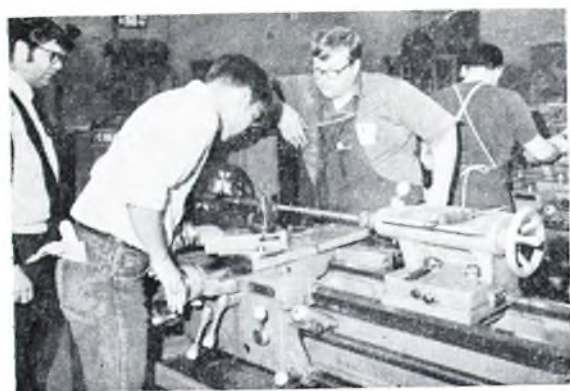
WELDING

MACHINE SHOP

AUTOMOTIVE MECHANICS

ELECTRICAL APPLIANCE SERVICING

RADIO AND TELEVISION SERVICING



## HEATING AND AIR CONDITIONING

The introduction of new Heating and Air Conditioning equipment and the rapid improvement in automatic control systems is requiring that servicemen in this field increase their technical knowledge to keep abreast of changes in the industry. The Heating and Air Conditioning program is a pre-employment course designed to prepare the student to enter this expanding service field. The student will be taught the latest techniques and methods in this trade with emphasis being placed on the automatic control system since this phase of the trade changed tremendously in the past several years.

The technician may install and service small units to large central plant-type systems. He must have a thorough knowledge of refrigeration, electricity, and control systems. This rapidly growing industry opens a bright future for young men who are well trained.

### Heating and Air Conditioning

#### Instructional Units

#### First Year

#### First Quarter (336 Hours)

MTH 113 Mathematics  
DFT 101 Drawing and Sketching  
HAC 111 Principles of Heating and Air Conditioning I  
HAC 112 Piping Procedure and Tools

#### Second Quarter (336 Hours)

PHY 101 Applied Physics  
HAC 123 Installation Procedures  
HAC 122 Principles of Heating and Air Conditioning II  
HAC 132 Heating Equipment

#### Third Quarter (336 Hours)

ENG 122 Communication Skills  
EET 221 Basic Electricity I  
HAC 134 Basic Refrigeration  
HAC 212 Motors and Drives I

#### Fourth Quarter (336 Hours)

EET 223 Basic Electricity II  
HAC 232 Air Distribution I  
HAC 221 System Design  
HAC 235 Refrigeration for Air Conditioning



## Second Year

<b>First Quarter</b>	<b>(336 Hours)</b>
HAC 333 Air Distribution II	
HAC 212 Motors and Drives II	
HAC 336 Advanced Refrigeration	
<b>Second Quarter</b>	<b>(336 Hours)</b>
HAC 233 Pipe Design & Layout	
HAC 401 Heat Pumps ✓	
HAC 437 The Absorption Refrigeration Cycle ✓	
<b>Third Quarter</b>	<b>(336 Hours)</b>
HAC 206 Customer Relations ✓	
HAC 307 Blueprint Reading ✓	
HAC 241 Automobile Air-Conditioning ✓	
HAC 231 Automatic Controls —	
<b>Fourth Quarter</b>	<b>(336 Hours)</b>
MTH 121 Pre-Tech Mathematics	
ENG 401 Pre-Tech Communication Skills	
MS 100 Orientation	

## WELDING

The metal working industries depend on the welding processes to bond metal in the production of most metal products. The technology of welding has advanced rapidly in recent years and new applications of welding techniques has caused an increasing need for skilled welders. This course is designed to teach modern welding techniques used in industry today. The student learns to use and develop skills in oxy-acetylene, electric arc, heli-arc, and automatic wire feed welding. Related instruction includes basic electricity, mathematics, and blueprint reading.

### Welding

#### Instruction Units

<b>First Quarter</b>	<b>(336 Hours)</b>
MTH 113 Mathematics	
WLD 111 Oxy-Acetylene Cutting	
WLD 113 Basic Arc Welding	
<b>Second Quarter</b>	<b>(336 Hours)</b>
WLD 122 Basic Blueprint Reading	
WLD 123 Advanced Arc Welding	
WLD 132 Gas Tungsten Welding (TIG)	
WLD 134 Gas Metal Arc Welding (MIG)	

## MACHINE SHOP

Industry offers opportunity and advancement to men trained in machine shop and tool and die making. Increased emphasis on precision machinery demands that the machinist be thoroughly trained in all phases of machine shop practices. The machinist plans and carries out all operations needed in production of machined products. He selects tools and materials required for each job and plans cutting and finishing operations. This course will cover all phases of the work of the machinist.

The opportunities for employment in shops engaged in machine tool work are numerous. Typical jobs which the student might secure in the manufacturing field includes machinist, bench machinist, maintenance machinist, precision machinist, repair machinist, machine tool operator, and tester.

### Machine Shop

#### Instructional Units

#### First Year

<b>First Quarter</b>	<b>(336 Hours)</b>
MTH 113 Mathematics	
MS 111 Machine Shop Theory I	
MS 133 Blueprint Reading	
MS 112 Machine Shop Practices I	
<b>Second Quarter</b>	<b>(336 Hours)</b>
MTH 114 Machinist Mathematics I	
MS 121 Machine Shop Theory II	
MS 122 Machine Shop Practices II	
<b>Third Quarter</b>	<b>(336 Hours)</b>
MTH 125 Machinist Mathematics II	
MS 131 Machine Shop Theory III	
MS 123 Machine Shop Practices III	
<b>Fourth Quarter</b>	<b>(336 Hours)</b>
MTH 135 Machinists Mathematics III	
MS 211 Machine Shop Theory IV	
MS 212 Machine Shop Practices IV	

## Second Year

<b>First Quarter</b>	<b>(336 Hours)</b>
MTH 211 Machinist Mathematics IV	
MS 221 Machine Shop Theory V	
MS 222 Machine Shop Practices V	
<b>Second Quarter</b>	<b>(336 Hours)</b>
MS 234 Metallurgy I	
MS 231 Machine Shop Theory VI	
MS 232 Machine Shop Practices VI	
<b>Third Quarter</b>	<b>(336 Hours)</b>
ENG 201 Communication Skills	
MS 242 Machine Shop Practices VII	
<b>Fourth Quarter</b>	<b>(336 Hours)</b>
MTH 121 Pre-Tech Mathematics	
ENG 401 Pre-Tech Communication Skills	
MS 100 Orientation	
<b>Fourth Quarter — Optional</b>	<b>(336 Hours)</b>
PHY 101 Applied Physics	
MET 214 Strength of Materials	
MS 300 Machine Shop Standards	

## AUTOMOTIVE MECHANICS

Modern living depends upon transportation. The value of the automobile as a dependable means of transportation has been proven many times. New automobiles are being produced in greater quantities than ever before and the changes are rapid and complex. It is with this in mind that we offer the course in Automotive Mechanics.

The program is designed to give the student theoretical background plus actual shop experience using the most modern shop equipment. The student learns to make diagnostic tests on cars using electronic test instruments and a dynamometer.

## **Automotive Mechanics**

### **Instructional Units**

#### **First Quarter (336 Hours)**

AM 221 Suspension and Steering  
AM 111 Automotive Brake Systems

#### **Second Quarter (336 Hours)**

AM 201 Basic Electrical Systems  
AM 212 Engine Overhaul and Rebuild  
AM 241 Fuel, Lubricating, and Cooling Systems

#### **Third Quarter (336 Hours)**

AM 123 Power Transmissions  
AM 211 Fundamentals of Diagnosis  
AM 321 Rear Axle and Differential

#### **Fourth Quarter (336 Hours)**

AM 122 Electrical Systems  
AM 214 Trouble Shooting  
AM 412 Engine Tune Up

## **ELECTRICAL APPLIANCE SERVICING**

One of the most rapidly expanding industries today is the service industry for major home appliances. Increasing numbers of refrigerators, washing machines, electric stoves, and air conditioners are being used in homes today. The need for service men for home appliances will continue to increase and service men must be skilled technicians with abilities in the mechanical and electrical field.

The appliance servicing program is designed to prepare students for employment in the servicing and repairing of all types of household appliances. A large part of the program will consist of the study of refrigeration and related science. Tools and equipment are the same as those used in industry and in modern repair shops. Actual service and repair work will be performed on appliances in the laboratory.

## Instructional Units

### **First Quarter (336 Hours)**

EAS 111 Residential Blueprint Reading  
EAS 101 Heating Appliances  
MTH 113 Mathematics I  
EAS 112 Mechanical Operations I

### **Second Quarter (336 Hours)**

EAS 202 Laundry Equipment  
MTH 214 Mathematics and Electricity  
EAS 213 Mechanical Operation II

### **Third Quarter (336 Hours)**

HAC 134 Basic Refrigeration  
EAS 314 Solid State Circuits I  
EAS 315 Mechanical Operation III

### **Fourth Quarter (336 Hours)**

EAS 235 Air Conditioning and Heat Pumps  
EAS 415 Solid State Circuits II  
EAS 245 Mechanical Operation IV

## RADIO AND TELEVISION SERVICING

Radios and television sets are modern means of communications that have brought world events and entertainment into the homes of our nation. The design, manufacture, installation and maintenance of such complex equipment requires the services of skilled technicians. This is a rapidly expanding field and the need for skilled technicians is increasing daily.

This program is arranged to give a thorough knowledge of the mechanics and theory of radio and television. The student is taught theory in conjunction with laboratory experiences in making tests, repairs, and adjustments under supervision of the instructor.

Graduates are prepared for employment as radio and television servicemen, station engineers, industrial component testers or communication specialist on military bases.

## **Radio and Television Servicing**

### **Instructional Units**

#### **First Quarter (336 Hours)**

EET 221 Basic Electricity  
EET 134 Basic Electronics  
MTH 113 Mathematics

#### **Second Quarter (336 Hours)**

RTV 211 Radio Servicing  
RTV 200 Audio Systems

#### **Third Quarter (336 Hours)**

RTV 312 Black and White Television Fundamentals  
RTV 314 Black and White Television Servicing  
ENG 201 Communication Skills

#### **Fourth Quarter (336 Hours)**

RTV 413 Color Television Fundamentals  
RTV 414 Color Television Servicing  
RTV 411 Small Business Operation

## **SKILLED TRADES**

### **COURSE DESCRIPTIONS**

#### **AM 111 Automotive Brake Systems**

A course designed to develop skill in the use of equipment and tools related to analysis of brake trouble, maintenance of brake systems, and repair of automotive brakes of both hydraulic and power variety.

#### **AM 122 Electrical Systems**

A course designed to develop an understanding of auxiliary electrical systems, motors, and controls as found in the horn, windshield wipers, heaters, and air conditioners. A brief course in repair of car air conditioners is included.

#### **AM 123 Power Transmissions**

This course develops a basic understanding of the construction and operation of all makes of power transmissions. The student learns to repair and adjust power transmissions. The course covers automatic transmissions as well as manually operated transmissions.

### AM 201 Basic Electrical Systems

This course gives the student a background in basic electricity and develops skills in analysis of electrical systems. The course features laboratory experiences in making major and minor repairs of electrical equipment on the modern automobile.

### AM 211 Fundamentals of Diagnosis

This course teaches the student to understand and operate various automotive test equipment. The student learns to use electronic engine test equipment and the dynamometer to locate problems and adjust and tune motors.

### AM 212 Engine Overhaul and Rebuild

A course taught for the purpose of developing skilled automotive mechanics with experience in repair and overhaul of automotive engines. The student receives experience in analyzing and trouble shooting, removal and disassembly of the engine, rebuilding the engine, and installing the engine.

### AM 214 Trouble Shooting

This course teaches the student to use good shop practices in the diagnosing and trouble shooting of automobile troubles as encountered by the trained mechanic. Trouble is put in live motors and the student locates and corrects the problem.

### AM 221 Suspension and Steering

This course includes the development of knowledge and skill in the use of wheel alignment, wheel balancing, and suspension equipment and tools and in analysis of wheel steering and suspension problems. The course will also include power steering systems.

### AM 241 Fuel, Lubrication, Cooling Systems

A course designed to develop skills in fuel and cooling systems repair and adjustment. The course emphasizes the use of test instruments to diagnose engine malfunctions related to fuel and cooling systems.

### AM 321 Rear Axle and Differential

This is a laboratory course in the operation, maintenance, and repair of differentials and rear axles.

### AM 412 Engine Tune-Up

The student learns to use test instruments to properly tune engines to maximum operating efficiency. The student develops skill in the use of tune-up test equipment and learns to quickly locate and correct problems.

### DFT 101 Drawing and Sketching

This course is designed to give the student experience in reading and preparing diagrams and drawings. The course gives attention to sketching heating and cooling systems and their layouts, the course also includes blueprint reading.

### EAS 101 Heating Appliances

This course includes a study of all household appliances that are concerned with resistant heating applications. This includes electric heaters, toasters, electric stoves, electric clothes dryers, and electric hot water heaters. The various control systems are thoroughly studied.

### EAS 111 Residential Blueprint Reading

In this course the student will be expected to learn the essentials of electricity along with blueprint reading. The course will include series and parallel circuits and housewiring. Residential blueprint reading is taught with electricity so as to take full advantage of methods of housewiring and circuit drawing.

### EAS 112 Mechanical Operations I

This course covers the laboratory work for much of the quarter. It consists of mechanical operations, trouble shooting, basic house wiring, repair and installation of heating appliances.

### EAS 202 Laundry Equipment

A thorough study of theory and mechanics of all types of washing machines and clothes dryers. The student learns to disassemble and assemble these appliances.

### EAS 213 Mechanical Operations II

The laboratory phase of the program during the second quarter gives the student experience in repairing all types of laundry equipment. The student learns to make adjustments and replace worn parts.

### EAS 235 Air Conditioning and Heat Pumps

Included in this course are household air conditioners, their operation and repair. The student also will learn theory and mechanics of heat pumps.

### EAS 314 Solid State Circuits

Many modern appliances have transistorized control systems. This course teaches the theory and operation of these solid state devices. The student learns to test and replace damaged controls.

### EAS 315 Mechanical Operations III

The third quarter course includes repairing refrigerators and freezers. The student learns to test for trouble, evacuate refrigerators, charge compressors, and make repair of solid state controls.

### EAS 415 Solid State Circuits II

A continuation of EAS 314 Solid State Circuits I. The student will study theory of solid state circuits, learn to test circuits, and repair solid state circuits.



#### EAS 425 Mechanical Operations IV

The fourth quarter laboratory phase of training gives the student experience in installing and repairing air conditioners and heat pumps. A review of repair of all household appliances is included in this quarter of lab work as well as additional experience in repairing solid state circuits.

#### EET 134 Basic Electronics I

A study of basic electronic circuits including topics on the application of vacuum tubes and transistor circuits. The student is taught the theory and application of circuits as well as power supplies and the use of oscillators.

#### EET 221 Basic Electricity I

Basic Electricity I presents fundamentals needed in the study of Electricity and Electronics. Beginning with the electron theory, the course progresses through magnetic fundamentals. Laboratory experiments are utilized to provide the student skills and knowledge in DC circuitry.

#### EET 223 Basic Electricity II

A continuation of Basic Electricity. The student is introduced to alternating current circuits, generators, and motors. The student is taught to use test equipment by performing laboratory experiments on various circuits.

#### ENG 122 Communication Skills I

This course places emphasis on developmental reading and on practical composition. Listening skills are developed along with the teaching of effective study habits.

#### HAC 111 Principles of Heating and Air Conditioning I

An introduction and history of heating and air conditioning introduces the student to basic refrigeration theory and principles. The course covers heat theory, sensible and latent heat, specific heat, heat quantity, British thermal unit, heat transfer, and control of heat flow.

#### HAC 112 Piping Procedure and Tools

An introductory course that introduces the student to pipe and tube materials, valves and their purposes, pipe and tube fittings, cutting and threading, and tools used in these processes. The student learns to solder, make flame fittings, sweat joints, hang and cover pipe, and calculate materials from blueprints.

#### HAC 122 Principles of Heating and Air Conditioning II

A continuation of HAC 111 Principles of Heating and Air Conditioning I. The student studies advanced theory of refrigeration and air conditioning principles.

### HAC 123 Installation Procedures

A survey course in the methods of installing heating and air conditioning equipment. The course covers all types of common installation and gives the student an adequate background in installation procedures.

### HAC 132 Heating Equipment

A study of the types of heating equipment in general use today. The course covers residential heating with gas, oil, electricity, hot water, steam, and electric heat pumps. Included in the course are valves and control systems.

### HAC 134 Basic Refrigeration

This course is designed to teach the student the fundamentals of refrigeration as it applies to air conditioning. The course includes the study of the refrigeration cycle, compressors, evaporators, water cooled condensers, evaporative condensers, air cooled condensers, and types of refrigerants.

### HAC 206 Customer Relations

This course is aimed directly toward orienting the student to the human problems he will encounter in dealing with customers. Principles and rules that the employee can put to practical use in dealing with the public are included in this course.

### HAC 212 Motors and Drives I & II

A study of AC motors, shaded pole motors, split phase motors, capacitor start and capacitor start-run motors, and D. C. Motors. The course includes a study of combination engines as power sources for refrigeration equipment.

### HAC 221 System Design

In this course the design of a system of heating and air conditioning is studied and includes ventilation requirements, air ducts and fittings, high and low pressure requirements, fans and coils. The course emphasizes the design of hot water and electrical heat systems.

### HAC 231 Automatic Controls

A survey course in which the student learns the various automatic devices used in the control of air conditioning and heating equipment. The course covers overload protectors, starting relays, contactors, magnetic starters, and thermostats.

### HAC 232 Air Distribution I

This course is a study of systems, instruments, and ventilation requirements for residential, commercial and industrial systems. The course covers fresh air, infiltration and smoke handling units as well as air measuring instruments, temperature and humidity recorders, and psychrometers.

### HAC 233 Pipe Design and Layout

This course is a study of refrigerant line sizing for multi-evaporators, multi-compressor installations, oil traps and return lines, mufflers, condensers, and water line sizings.

### HAC 235 Refrigeration for Air Conditioning

A thorough study of refrigeration systems used for air conditioning purposes. Electric and gas systems are studied including installation procedures for all types of systems.

### HAC 241 Automobile Air Conditioning

A course designed to teach the student the theory and mechanics of car air conditioning systems. The various makes of car air conditioners are studied.

### HAC 307 Blueprint Reading

A course designed to acquaint the student with mechanical and electrical blueprints used in the installation of heating and air conditioning systems. The students learn to use working drawings in installing systems.

### HAC 333 Air Distribution II

A continuation of HAC 232 Air Distribution I with emphasis on air distribution installations and control systems. Automatic control systems are thoroughly covered in this course.

### HAC 336 Advanced Refrigeration for Air Conditioning

This course deals with the internal mechanisms and controls found in air conditioning systems. The course includes the study of the components of an air conditioning system, the refrigerant controls, dual controls and timing devices, oil separators, water valves, and all safety controls.

### HAC 401 Heat Pumps

This course covers the theory and operation of heat pumps and heat pump systems. The course includes air to air systems and control systems, and the various absorbers used in a system.

### HAC 437 Absorption Refrigeration Cycle

This course is a study of the cycle of operation, the principles and theory of absorption, control and purge systems, and the various absorbers used in a system.

### MET 214 Strength of Materials

Strength of Materials supplements the subjects of Engineering Mechanics in order that the student gain the basic knowledge required for the design of machine parts and structural members, parts, and connections. Laboratory time will be spent in both testing materials and in solving problems that are typical of those found in industry.

### MS 100 Orientation

A course to familiarize the students with the work and duties of a machinist. Includes: safety practices, responsibilities, and how to care for tools and machines.

### MS 111 Machine Shop Theory I

A first course in machine shop theory which includes an orientation to the trade, recognition of tools, and safety. The course introduces the operation of the lathe, drill press, turret lathe and power saws.

### MS 112 Machine Shop Practices I

A laboratory period, designed to give the student experience in the operation of the engine lathe, turret lathe, drill press, and power saw. This course is concerned with elementary operations and maintenance of these machines.

### MS 121 Machine Shop Theory II

An introduction to the operation of milling machines and basic welding techniques. The use and care of precision measuring tools is stressed.

### MS 122 Machine Shop Practices II

A continuation of MS 112 Machine Shop Practices I with introduction to milling operations. The student learns to work from prints to produce a project utilizing the machines previously studied.

### MS 123 Machine Shop Practices III

A continuation of MS 122 Machine Shop Practices II. The course gives the student advanced practices in the laboratory on the engine lathe and milling machines.

### MS 131 Machine Shop Theory III

A continuation of MS 121 Machine Shop Theory II in which additional set ups for lathes and milling machines are covered. The course includes the operation of shapers and how they relate to machine shop practices.

### MS 133 Blueprint Reading

A course that teaches the student the basic principles of machine trade blueprint reading. The student learns the three view drawing and preception techniques.

### MS 211 Machine Shop Theory IV

Additional theory pertaining to use of grinders and the other tools will be covered in this course.

### MS 212 Machine Shop Practices IV

A continuation of laboratory experiences in the machine shop. More complex projects are assigned that utilizes skills on all machines.

### MS 221 Machine Shop Theory V

The theory of finished grinding, automatic screw machines, and tool making. Metal finishes and precision operations are covered.

### MS 222 Machine Shop Practices V

A laboratory course that stresses advanced work on all machines in the shop. Emphasis is upon tool making and special equipment used on machine tools.

### MS 231 Machine Shop Theory VI

A continuation of MS 122 Machine Shop Theory V with emphasis on advanced shop practices. Selecting of metal for special jobs is covered.

### MS 232 Machine Shop Practices VI

A lab course with advanced experiences in the use of grinding machines and other complex machine tool operations.

### MS 234 Metallurgy I

A course in methods of heat treating ferrous metals. Correct furnace practices are stressed. The course also includes a study of alloys and the changes in properties of metals after heat treating.

### MS 242 Machine Shop Practices VII

The student is assigned several complex projects that require the use of all machine tools studied. One major project is selected by the student and completed this quarter.

### MS 300 Machine Shop Standards

A study of standards required as far as precision and finish of machined parts are concerned. The student will also be taught the various means of producing a part and the best way to do a particular job.

### MTH 113 Mathematics

A course designed to give the student a basic understanding of mathematics of a practical nature. The student studies basic arithmetic, formulas and equations that are used in the skilled trade area.

### MTH 114 Machinist Mathematics I

A study of the principles of mathematics as it applies to machine shop operations. Emphasis is on fractions and decimal fractions.

### MTH 125 Machinist Mathematics II

A continuation of MTH 114 Machinist Mathematics I which will include rectangles, square roots, triangles, plane figures, scales, circles, solid figures, and mathematics of other geometric shapes.

### MTH 135 Machinist Mathematics III

Introduces the student to algebraic functions and trigonometry that is needed in machine tool operations.

### MTH 211 Machinist Mathematics IV

A practical application of formulas as they pertain to machine shop operations. The course covers mathematics for gear design, helical milling, indexing and use of sine bar.

### MTH 214 Mathematics and Electricity

The student is taught mathematics as it applies to the solving of electrical problems. The course includes a thorough understanding of electricity as it is used on appliances.

### PHY 101 Applied Physics

An elementary course designed to acquaint the student with the fundamentals of heat, light, sound, electricity, and principles of mechanics.

### Pre-Tech Program

The pre-tech program is taught during the summer quarter for students who are to enter the fall quarter. The purpose of the pre-tech program is to prepare students for the fall quarter's work. To some this may be a refresher course, for others the program will introduce them to material not previously studied in high school. Enrolled students may use this quarter to make up courses failed or to take additional credit courses in the curriculum.

### RTV 200 Audio Systems

The audio systems course is designed to train the student to trouble shoot, check, repair, and make adjustments on the various components of an audio system.

### RTV 211 Radio Servicing

The course teaches the fundamentals of circuits and gives the student a background in trouble shooting, checking, repairing, and making the necessary adjustments on circuits encountered in a radio receiver.

### RTV 312 Black and White Television Fundamentals

A course in television theory fundamentals designed to give the student an understanding of the operation and purpose of the stages and circuits of television. The course gives the foundation for the black and white television servicing course.

### RTV 314 Black and White Television Servicing

A laboratory course in which the student gains knowledge and skills in diagnosing, repairing, and adjusting circuits, and components of black and white television receivers.

#### RTV 400 Small Business Operation

A management course designed to develop an understanding of codes, permits, and laws concerning small business operations. The course includes public relations and record keeping systems necessary for the successful operation of a small business.

#### RTV 413 Color Television Fundamentals

A course designed to develop knowledge and understanding of the purpose and operation of the circuits encountered in color television receivers.

#### RTV 414 Color Television Servicing

A lab course designed to give the student practical experience in use of instruments to diagnose circuits and component problems in color television receivers.

#### WLD 111 Oxy-Acetylene Cutting

Basic skills and understandings are presented in step by step procedures. In this course the student becomes proficient in oxy-acetylene cutting, piercing, and beveling. Stress is placed on making square and beveled cuts using the cutting torch. Safety is emphasized in this course.

#### WLD 113 Basic Arc Welding

A first course in arc welding that provides the student with a working knowledge of safety and welding techniques, considerable practice in the techniques of various types of welds is given; examples are: horizontal, vertical, and fillet tee joint welds.

#### WLD 122 Basic Blueprint Reading

This course covers the basic principles of blueprint reading and teaches the interpretation and visualization of blueprints that are concerned with welding. Welding symbols in prints are studied.

#### WLD 123 Advanced Arc Welding

A second course in arc welding which further develops skills in horizontal and vertical multi-pass welding techniques. The course also includes pipe and ring welding and prepares the student for certification in four basic types of welds.

#### WLD 132 Gas Tungsten Welding (TIG)

The objective of this course is to teach the student skill in operating gas tungsten arc welding equipment. Skill will be developed in the flat, vertical and horizontal positions. Students will practice stainless steel welding and copper brazing.

#### WLD 134 Gas Metal Arc Welding (MIG)

A course that enables the student to gain experience in the use of automatic wire feed welders. The student will use both cored and solid wires on steel and non ferrous metals in making welds.

# HEALTH OCCUPATIONS

PRACTICAL NURSING

MEDICAL OFFICE ASSISTANT







## **PRACTICAL NURSING**

The Practical Nursing program leads to eligibility to take the examination given by the State Examining Board for a Licensed Practical Nurse. It prepares the student to work as a member of the nursing team under the direction of a physician or a registered nurse. The student also is instructed to give safe, intelligent and competent bedside care to selected patients and to assist the R. N. with the care of the more seriously ill. Part of the trainees time is spent at the school with emphasis on theory and basic nursing principles. The remainder of the course is spent in arranged clinical facilities for actual on-the-job experiences under a qualified instructor. The length of the course meets the recommendations of vocational education and requirements of the Practical Nurse law.

### **Practical Nursing**

#### **Instructional Units**

##### **First Quarter**

LPN 110 Personal and Vocational Adjustment  
LPN 112 Personal and Community Health  
LPN 113 Nutrition  
LPN 114 Nursing Fundamentals I  
LPN 117 Body Structure and Function  
LPN 118 The Life Span  
LPN 119 Pharmacology I  
LPN 111 Clinical Experience

##### **Second Quarter**

LPN 125 Mother-Child Care  
LPN 126 First Aid and Disaster Nursing  
LPN 124 Nursing Fundamentals  
LPN 121 Clinical Experience II  
LPN 129 Pharmacology II

##### **Third Quarter**

LPN 134 Nursing Fundamentals III  
LPN 133 Conditions of Illness I  
LPN 131 Clinical Experience III

##### **Fourth Quarter**

LPN 143 Conditions of Illness II  
LPN 140 Personal and Vocational Adjustment II  
LPN 142 Clinical Experience IV

## **MEDICAL OFFICE ASSISTANT**

The Medical Office Assistant program is designed to develop the ability of an individual to perform the duties which are necessary for the safe, efficient, and economic operation of a physician's office. The first portion of the program is spent in the classroom where the student gains a basic understanding of routine office procedures and an appreciation for her role as public relations agent between the physician and his patients. The latter portion consists of instruction in both business and clinical areas.

### **Medical Office Assistant**

#### **Instructional Units**

##### **First Quarter**

MOA 101 Ethics and Professional Adjustment  
MOA 102 Body Structure and Function  
BUS 101 Typewriting I  
BUS 111 Business Machines I  
MOA 103 Medical Terminology  
MOA 104 Medical Assisting Skills I

##### **Second Quarter**

MTH 101 Business Mathematics I  
BUS 141 Filing Systems and Procedures  
MOA 204 Medical Assisting Skills II  
MOA 205 First Aid  
MOA 206 Laboratory Techniques  
BUS 113 Personal Appearance

##### **Third Quarter**

ACC 501 Secretarial Accounting  
MOA 308 Obstetrics and Pediatrics  
MOA 310 Conditions of Illness - Medical - Surgical Diseases  
ENG 101 Business English I  
MOA 311 Medical Typewriting Practice

##### **Fourth Quarter**

MOA 401 Nutrition  
MOA 402 Pharmacology  
MOA 500 Experience in Physician's Office

## HEALTH OCCUPATIONS

### Course Descriptions

ACC 501 Secretarial Accounting (56 Class Hours)

This is an introductory course in accounting prepared especially for students working toward a secretarial science diploma. The basic principles of record keeping applies to the professional practice of a doctor or lawyer, and to the records maintained by a large manufacturing corporation.

BUS 101 Typewriting (56 Class Hours)

The beginning typing course emphasizes mastery of the keyboard accuracy, current typing techniques, continuity of movement, and the development of speed. Centering, simple letter writing, tabulation, business forms, rough drafts, and the mechanics and adjustments of the typewriter are taught.

BUS 111 Business Machines I (56 Class Hours)

The objective of this course is to develop skill in the operation of the most commonly used office machines, namely: ten-key and full-key adding machines, calculators, duplicating and copying machines, and other commonly used office machines.

BUS 141 Filing Systems and Procedures (56 Class Hours)

This course is a thorough study of the types of systematic control of all daily business occurrences and transactions. It includes an extensive course in filing, covering the four basic methods.

ENG 101 Business English I (56 Class Hours)

The Business English course has as its primary objective to help the student solve effectively his communication problems. This includes improvement of communication habits and skills in reading, writing, speaking and listening, as well as positive planning for effective human relations.

MOA 101 Ethics and Professional Adjustment

This course is designed to acquaint the student with the traditions and moral aspects of the paramedical field and to understand medical laws and ethics. It helps the student to adjust to this chosen field of nursing and to appreciate her role as public relations agent between physician and his patients.

MOA 102 Body Structure and Function

A Course designed to acquaint the student with a basic understanding of the body and how it functions.

### MOA 103 Medical Terminology

A course designed to build a vocabulary of medical words from Greek and Latin prefixes, suffixes, word roots, and combined forms. The student will be able to recognize and spell medical words and be able to use a medical dictionary.

### MOA 104 Medical Assisting Skills I

This course is designed to acquaint the student with the responsibilities and skills of her job as receptionist, secretary, housekeeper, office nurse assistant, and technician. She will become familiar with all aspects of the physician's office and her role as a medical office assistant.

### MOA 204 Medical Assisting Skills II

A continuation of MOA 104 Medical Assisting Skills I.

### MOA 205 First Aid

This short course is designed to provide the student with the basic knowledge of first aid and how to apply it to herself and others. This course is taught by an American Red Cross instructor.

### MOA 206 Laboratory Techniques

This will be an introductory course in the basic laboratory procedures used in a physician's office. The student will become familiar with tests used, the equipment and how to function as a technician in a physician's office.

### BUS 113 Personal Appearance

This course is designed to teach the student how to dress, walk, talk, and make personal improvements. She will learn the importance of communication by reading, writing, listening and speaking correctly.

### MOA 308 Obstetrics and Pediatrics

In this course the student is taught the basic fundamentals of obstetrics and pediatrics. She will learn the importance of good medical care of the mother throughout the pre-natal and puerperium periods. She will be taught the importance of good medical care of the child from birth to puberty.

### MOA 310 Conditions of Illness - Medical - Surgical Diseases I, II

In this course the student will acquire the basic understanding of diseases and how to care for the patient using skills and knowledge taught in the program.

### MOA 311 Medical Typewriting Practice

A typing course designed to teach the student to type medical forms and medical reports.

### MOA 401 Nutrition

This course is designed to provide the student with an understanding of the value of food in relation to good health. The student will also learn the importance of diet as it relates to diseases.

### MOA 402 Pharmacology

This is a fundamental course which reviews math and its application to medical assisting. It teaches the importance of accuracy in the administering of drugs. The medical assistant's responsibility of administering drugs will be stressed.

### MOA 500 Experience in Physician's Office

This will play an important role in the student's training. She will be able to use the skills and knowledge acquired in a clinical situation. The work in a physician's office will be supervised by the instructor and the physician.

### MTH 101 Business Mathematics I

(56 Class Hours)

The primary objective of this course is to develop a workable knowledge of mathematical computations for business applications. This is an intensive review of all fundamental processes as well as a sustained application of these processes as they relate to computation of business data.

### LPN 110 Personal and Vocational Adjustments I and II

This orientation course permits a broad survey of the Practical Nurse program, its history, ethical and legal principles, and the part the individual plays as a team worker.

### LPN 111 Clinical Experience I, II, III, and IV

Clinical facilities are used for practical application of classroom learning. The student enters simple situations and progresses toward advanced patient care.

### LPN 112 Personal and Community Health

This course presents the wide concepts of health, mental and physical, as related to the individual and the community agencies.

### LPN 113 Nutrition

This unit of instruction emphasizes the basic principles of nutrition in relation to health. The later study of diet therapy in conditions of illness uses this as a foundation.

### LPN 114 Nursing Fundamentals I, II, and III

Basic nursing skills are presented according to degree of complexity, from the simple to the more involved, to provide a knowledge of principles and techniques for the care of all patients and for the adaptation to individual patient needs.

### LPN 117 Body Structure and Function

This course introduces the learner to normal body anatomy and physiology as a basis for understanding conditions of illness. Medical terminology and physiological principles relating to nursing skills are emphasized.

### LPN 118 The Life Span

A presentation of growth and development of the individual from birth to the death is used to guide the student in his later studies in conditions of illness.

### LPN 119 Pharmacology I and II

This course reviews basic arithmetic and uses this as a foundation to the administration of medications. It also acquaints the student with drugs and drug therapy.

### LPN 125 Mother-Child Care

This is a two-part unit that stresses both theory and practical aspects of maternity and child care. From mother-newborn presentation, the student is carried into a study of the child in the hospital setting.

### LPN 126 First Aid and Disaster Nursing

Red Cross requirements are used for this presentation of emergency needs in nursing the injured.

### LPN 133 Conditions of Illness I

This three-part course deals with all aspects of nursing the patient in varying degrees of complexity of care. Both medical and surgical situations are utilized. Both physical, mental, and spiritual connotations are noted. Attention is given to the diseases according to specific system of the body.

## INDUSTRIAL SERVICES

Coosa Valley Tech serves industries in the area by employing a full time industrial coordinator. His duties include: (1) acting as liaison between school and industry, (2) establishing and coordinating training programs in an industrial setting, (3) coordinating closely with industrial coordinators from adjacent area schools.

The purpose of industrial services is to provide a convenient and inexpensive method for employees to update or upgrade their working skills in industry.

Coosa Valley Tech will provide: (1) a professionally developed and administered course of study, (2) a qualified instructor, and (3) tuition-free training program to a group of twelve or more students who will agree to meet a regular schedule, at a specified place for the purpose of gaining increased skills.

Any course or subject that will advance employees in their skills will be taught. The course of study can be tailored to meet individual company's needs.



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## *NOTES*

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Coosa Valley Technical College  
Library Services  
One Maurice Culberson Drive  
Rome, GA 30161