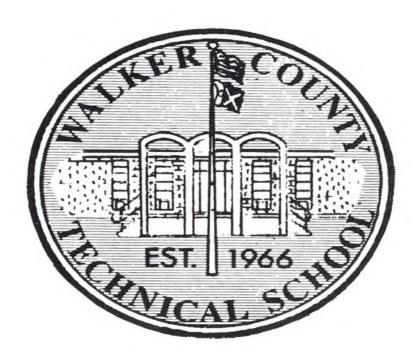
Walker County Area Technical School

Established 1966



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ROCK SPRING, GEORGIA 30739

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Walker County Area Technical School

OPERATED UNDER THE SUPERVISION OF
THE GEORGIA STATE DEPARTMENT OF EDUCATION
OFFICE OF ADULT AND VOCATIONAL EDUCATION

AND THE

WALKER COUNTY BOARD OF EDUCATION

ACCREDITED BY

THE SOUTHERN ASSOCIATION OF SCHOOLS AND COLLEGES



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GENERAL INFORMATION



General Information

Philosophy and Purpose

Education today is in a constant state of change due to the changes taking place in our technological society. The industrial society in which we live is demanding more highly trained craftsmen and technicians. Industry, through expanding technology, has created many new occupations for which there must be trained personnel. These changing demands of industry have promoted the establishment of Walker County Area Vocational-Technical School and others like it. Walker Tech's purpose is to provide training for life in this ever changing society. Therefore, the curriculum is continually under study to assure that it remains designed to meet these demands in the northwest Georgia area.

Objectives

The general objectives of Walker County Technical School are as follows:

- 1. To assist individuals in discovering vocational potentialities
- 2. To provide personal counseling services and evaluation
- 3. To provide technical knowledge for each student in his or her chosen field
- 4. To provide training relevant to the needs of business and industry in the area
- 5. To assist in developing each student's oral and written communication skills
- 6. To provide consumer education for each student
- 7. To promote the acceptance of responsibility and the development of pride in one's work

8. To provide supplementary training for all graduates of Walker Tech

9. To provide instruction so that a student may progress to his or her maximum capability

10. To provide job placement services and follow-up

School Facility and Equipment

The Walker County Technical School, serving four counties, is a part of the public school system of Georgia and Walker County. The building is of functional and flexible design and is one of the finest and best equipped schools in the state of Georgia.

The School contains 60,000 square feet of floor space to provide facilities for thirteen different course offerings. School personnel, with the cooperation of technical advisory committees, evaluate each training program to insure that the latest techniques and latest equipment will be used for up-to-date training.

Faculty

Each instructor is a highly qualified specialist in his or her field. In addition, he or she by professional preparation, is a state certified teacher. This means that an instructor must have worked a minimum of two years in the field that is taught. The instructor must also meet other special requirements set forth by the Department of Adult and Vocational Education of the State Department of Education.

The School Year

The school year at Walker County Area Technical School is divided into four quarters. Normally, students may enter school at the beginning of any new school quarter.

Students at Walker Tech observe the following holidays: Labor Day, Thanksgiving, Christmas, Easter, and Independence Day. Additionally the school is closed for a two-week period in late June or early July for summer vacation.

Day Classes

Full-time day classes are six hours in length. Students spend approximately one-half day in the classroom for related subject matter and theory; the other half of the day is spent in the laboratory for practical application.

Evening Classes

Evening classes are held from 6:30 p.m. to 10:30 p.m. Monday through Thursday night. The following evening classes are offered: Auto Body and Fender Repair, Electronics Technology, Drafting and Design Technology, Radio and TV Repair, Machine Tool, Heating and Air Conditioning, Automobile Mechanics, Welding, Appliance Servicing, Blueprint Reading, GED Preparation, Cosmetology, Business Education, and Data Processing.

Extended Day Classes

Full-time classes in Appliance Servicing, Automotive Mechanics, Data Processing, Radio and TV Repair, and Welding meet from 4:30 p.m. to 10:30 p.m. Monday through Friday.

Accreditation

Walker Tech is fully accredited by the Commission on Occupational Education of the Southern Association of Colleges and Schools.



Student Activities

Walker County Tech offers a wide variety of activities for its students. The school has a complete intramural athletic program for students who are interested in sports. There are social activities scheduled throughout the school year. The TECH-TALK is the school's newspaper. Also, Walker Tech has an active student council elected by the student body.

Adult General Education

Academic instruction is offered both on and off campus for adults. There are three divisions:

- 1. Adult and Continuing Education is designed to help those with less than an eighth grade education. Emphasis is on reading, math, and language skills.
- 2. GED preparation provides study in the five areas of the high school equivalency examination.
- 3. A high school credit program is available to those who wish to pursue a course of study leading to a regular high school diploma. All instruction and materials are free of charge.

For more information contact the Coordinator of Adult General Education.

General Education Development Test Program

Walker Tech has been designated as the GED test center for northwest Georgia. By passing the GED, it is possible to obtain a high school equivalency certificate in lieu of the high school diploma.

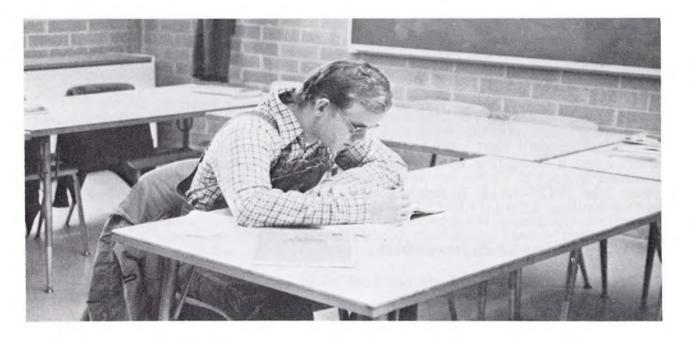
Courses in GED preparation are offered in both the day and evening division.

Students who have not finished high school and who enter an occupational program are encouraged to try to obtain the high school diploma by the time they finish their occupational training.

Individualized Instruction

Some of Walker Tech's programs are individualized. What this means to the student, as well as the instructor, is greatly increased efficiency in use of room and materials and a much more effective learning process. The student works independently to complete each section of a course until the entire course is completed. He or she may go as fast or as slow as his or her individual capabilities permit.

In addition, the student can enter the course at any time during the quarter. He or she receives a set of programmed materials, which may range from tapes or slides to video tapes, along with step-by-step instructions on how to use them. A student in an individualized course works mainly on his or her own, but the instructor is always there to assist. As soon as the student successfully completes one section of the course, he or she can go to subsequent sections until the course is completed.



GOAL Program

The Georgia Occupational Award for Leadership is sponsored jointly at the state level by the Georgia Department of Education and the Georgia Chamber of Commerce. At the local level the program is sponsored by the LaFayette Chamber of Commerce and Walker County Technical School. The purpose of the program is to give proper recognition to the dignity and importance of Vocational Technical Education in today's modern economy.

In the spring, four local winners will be selected by a screening committee. Each winner will be awarded a cash prize. Of the four local winners, one will be selected to represent Walker Tech in the state contest. The winner of the state contest wins a new automobile.

Grades, attitude, personal goals, and self-confidence are considered in selecting GOAL winners.

Grading System

The following grading system is used at Walker Tech:

93-100	A — Excellent	A = 4 quality points
85-92	B — Good	B = 3 quality points
77-84	C — Average	C = 2 quality points
70-76	D — Below Average	D = 1 quality point

Director's and Merit List

At the end of each quarter, students who compile an average of 3.8 to 4.0, with 4.0 being an all "A" average, are placed on the Director's List. To qualify for the Merit List, one must have an average of 3.50 to 3.79.



Career Development Center

The purpose of the Career Development Center is to assist individuals in making vocational decisions. Evaluation is a personal assessment of one's capabilities by utilizing work sampling, counseling and testing. Each individual

participates in a comprehensive evaluation so that he or she can better choose an occupation or area of training that is consistent with his or her capabilities.

In Work Sampling, "Hands On" activities are the focus of attention. Through the utilization of a work sample evaluation system, the career development center staff provides the student with an opportunity to perform actual work in the investigation of the occupational areas. The individual becomes familiar with the tools and terminology associated with each occupational area and thus enhances his or her opportunity to choose or enter a suitable and rewarding occupation.

Counseling sessions are provided on a scheduled but informal basis. These counseling sessions provide the student with information concerning job oppor-

tunities, training availability, and general attitude adjustment.

Tests and questionnaires are administered each individual and help indicate levels of interest, achievement, aptitude and dexterity. These inventories are not pass-fail tests; there is no student competition. The results of these inventories are used as a measuring device to aid in helping the individual formulate an Educational-Occupational Goal for himself.

For admission to the Center, call or come by to see the Coordinator of Student Personnel at Walker County Area Technical School. The only requirement is that you must be sixteen years old. There is no cost for the evaluation or basic skills classes.

The length of evaluation varies with each person. Evaluations are scheduled five days a week between the hours of 8:30 and 3:30 p.m.

Basic Single Skills

This laboratory is organized to assist individuals in preparing to enter a regular program at Walker Tech. Training is also offered in the following areas: Cabinetmaking, Cash Register Operation, Carpentry, Drafting, Lawnmower Repair, Sheet Metal Construction, Ten-Key Adding Machine Operation, and Typing.

Driver Education

The Driver Education program is open to anyone 15 years of age or older. The purpose is to give the non-driver an opportunity to learn the skills, rules and techniques required to drive a car properly. The course consists of 30 hours of classroom instruction, 12 hours of simulated driving procedures, and three hours behind-the-wheel instruction.

Cost

Since Walker County Tech is a tax-supported unit of the Walker County and Georgia State Department of Education, there will be no tuition charge for bona fide residents of Georgia. Each student will be required to pay a nominal supply fee and purchase books. The supply fees are listed below by courses.

Auto Body & Fender Repair	\$25.00*
Appliance Servicing	25.00*
Automotive Mechanics	25.00*
Business Education	25.00*
Cosmetology	25.00*
Data Processing	25.00*
Drafting & Design Technology	25.00*
Electronics Technology	25.00*
Heating & Air Conditioning	25.00*

Machine Tool	25.00*
Practical Nursing	25.00*
Radio & TV	25.00*
Welding	20.00**

ALL FEES MUST BE PAID BEFORE A STUDENT IS FULLY ENROLLED.





Financial Aid

Veterans Financial Assistance

Walker County Area Technical School is approved by the State Department of Veterans Services for training under Public Law 89-358 (Cold War G.I. Bill) and Public Law 840734 (War Orphans Act).

Social Security

Qualified students may receive assistance from the Social Security Administration while attending Walker Tech. Contact your local Social Security Office for additional information.

Vocational Rehabilitation

Qualified students may receive assistance while attending Walker Tech. Contact your local Vocational Rehabilitation Counselor for additional information.

CETA

Whenever individual slots are available, qualified individuals may receive a weekly allowance plus cost of books and fees to attend school.

Scholarships

Scholarships that cover the cost of fees, books and supplies are available from the Barwick Foundation. These scholarships are restricted to sons and daughters of Barwick employees or to employees of Barwick.

Two scholarships are awarded annually by the LaFayette Women's Club to female graduates of LaFayette High School.

College Work Study

Walker Tech participates in the College Work Study Program. Students in need of financial assistance may work from ten to forty hours a week in jobs located both on and off campus. Applications are available in the Financial Aid Office and can be processed in the institution. This program is funded on a fiscal year basis. This program enables the recipient to receive assistance for Fall, Winter, Spring, and Summer Quarters.

Georgia Incentive Scholarship

This program is sponsored by the Georgia Higher Education Assistance Authority. This grant gives an eligible student from \$50 to \$150 per quarter to attend Walker Tech. Applications are available in the Financial Aid Office and must be mailed to a processor for processing. This program funds only Fall, Winter, and Spring Quarters.

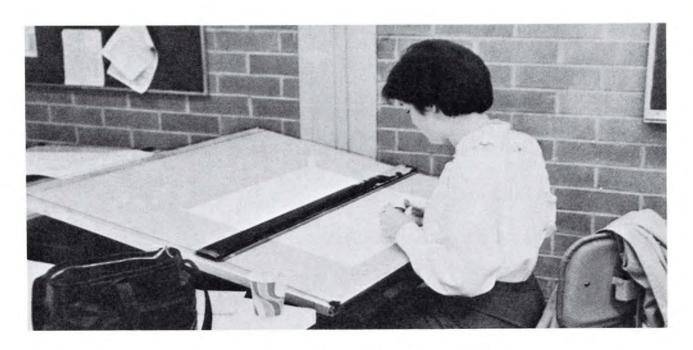
Authority Direct Student Loans

HEALTH OCCUPATIONS ONLY

This loan may be borrowed up to a maximum \$1500 per academic year. This loan may either be repaid or may be deleted by a year's service to an institution that is approved by the Commission.

Basic Educational Opportunity Grant

The Basic Educational Opportunity Grant is a program administered by the U.S. Office of Education and is available to high school graduates who enroll at Walker Tech. This grant is based on financial need and is used to defray the cost of attending school. Students interested in this grant should contact their high school counselor or Walker Tech for additional information. Applications are available in the Financial Aid Office. The applications must be mailed to the processor and processing takes from four to six weeks. This program is funded for Fall, Winter, Spring, and Summer Quarters. Applications must be submitted annually on a fiscal year basis in order to determine eligibility.



High School Senior Cooperative Program

The full-time senior co-op program is designed to allow a rising high school senior to earn his or her final six high school credits at an area technical school. This will give the "specialty oriented students" an opportunity to earn their high school diploma and at the same time to begin their training at a technical school. The following requirements and limitations are placed upon students entering the co-op program.

- 180 quarter hours in grades nine through eleven are required to enter this program.
- 2. There must be evidence that students are qualified to successfully pursue to completion the curriculum in which they are enrolled.
- 3. Admission of students will be based upon:
 - a. Evaluation of high school records
 - b. Interest
 - c. Achievement
 - d. Maturity and Responsibility
 - e. Personal interview with the student and parents
- 4. The student must identify his occupational objective.
- 5. Students must show evidence that they will complete the training program in the area technical school after graduation from high school if length of the training program exceeds the normal school year.
- 6. Walker Tech will assume responsibility for full-time students in the 12th grade (six hours per day).
- 7. The student must have the approval of his high school principal before entering the senior year program.
- 8. Students attending on the high school cooperative program cannot be counted on the high school's average daily attendance.

Admission Requirements

Age

A minimum age of 16 is required for all courses except Practical Nursing. The minimum age for Practical Nursing is $17\frac{1}{2}$.

Education

A sound educational background is a basic part of the preparation needed by students who plan to enter Walker Tech. To be admitted as a regular student, the applicant must possess a high school diploma or GED diploma. A student with less than a high school diploma will be admitted as a provisional student, provided he works toward obtaining his equivalency diploma while enrolled.

Interview

An interview with the Coordinator of Student Personnel is held with each applicant to assist the student in making a wise decision in his or her choice of study.

Health

All applicants must possess the minimum physical and mental standards necessary to carry out all requirements of the occupation for which he or she is preparing.

Admission Policies

- 1. All applicants for day or extended day programs must file an application for admission, pay the \$10.00 registration fee, take a placement test, and appear for a personal interview with the Coordinator of Student Personnel.
- 2. All applicants for extended day classes must pay \$10.00 registration fee prior to being admitted to class. Applicants for half-time day classes must pay a \$2.00 registration fee.
- 3. Applicants must apply specifically for day, evening, or extended day classes. Applications will be processed only for one course—the course that is listed first on the application. It is the responsibility of the applicant to notify the school if he or she desires to change his or her application from day to evening classes, or vice versa.
- 4. Any student currently enrolled may not apply for another course until he or she has completed the course in which he or she is currently enrolled.
- 5. Filing an application for admission does not mean that an applicant will be accepted into a program. The applicant must complete all admission procedures and take the necessary steps to insure that his or her application remains in the active file.

- 6. Applicants may be placed on a waiting list if the program for which they have applied is full. Being placed on the waiting list does not guarantee a specific admission date, but precedence in admission is given in the order that applications are received. Each individual will be notified of his or her entrance date.
- 7. Those students who voluntarily drop out and those who are terminated must reapply for admission.
- 8. All applications for day classes must be approved by the Coordinator of Student Personnel. All applications for evening and extended day classes must be approved by the Coordinator of Evening Instruction. Any inquiries concerning admissions should be directed to these coordinators.
- 9. Applicants will be expected to provide assurances that they are applying for enrollment for the purpose of obtaining employment in the field for which they will be trained.
- The applicant must meet minimum prerequisites for reading comprehension, computational skills and physical abilities established for the program to be entered.
- 11. Any individual desiring to enter a particular program who does not meet minimum entrance requirements established for that program may be provisionally accepted for future enrollment pending the attainment of those minimum standards.
- 12. Any individual who does not meet minimum standards for entry into a particular course or program will be considered as a student with special needs. Such students may be enrolled in the school but not in a program for which he or she cannot qualify.

Counseling

The school has a complete guidance and counseling program designed to assist each student in fulfilling his or her goals.

Job Placement

The school employs a full-time Job Placement Coordinator whose primary objective is to place satisfactory students on jobs for which they have been trained. The placement service of the school maintains continuous contact with the employers, both locally and statewide, and with the state employment office to assist students with employment opportunities available.

Refund Policy

- 1. The registration fee is non-refundable.
- 2. A percentage of the supply fee is refundable:
 - a. From the first through the tenth school day after the quarter begins 50%.

 - c. From the twenty-sixth through the remaining days of the quarter NONE.

Family Educational Rights and Privacy Act

The Family Educational Rights and Privacy Act of 1974 sets requirements designed to protect the privacy of education records, to establish the right of students to inspect and review their education records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings.

Directory information will be treated as public information. Directory information includes: the student's name; address; telephone number; date and place of birth; course of study; dates of attendance; and honors and awards.

Any student who does not wish directory information disclosed must file a written request.

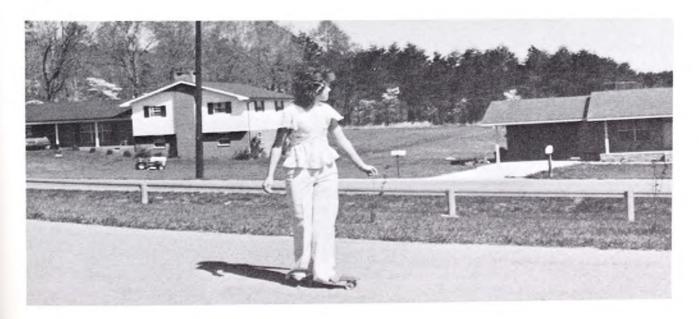
Questions concerning the Family Education Rights and Privacy Act may be referred to the Student Personnel Office.

Cooperative Associate Degree Program With Dalton Jr. College

Walker Tech graduates who meet specified academic and admission requirements can receive from 35 to 60 quarter hours credit for work completed at Walker Tech toward an associate of science degree at Dalton Junior College.

Title VI and Title IX Compliance

Walker County Area Technical School is in compliance with Title VI of the Civil Rights Act of 1964 and Title IX of the Educational Amendments of 1972. This institution does not discriminate on the basis of race, color, sex or national origin.



COURSE OFFERINGS



Auto Body and Fender Repair



Auto Body and Fender Repair

Course Objective

The Auto Body and Fender Repair course is designed to develop a skill level which will qualify the student for employment in the field of auto body repair.

Background Information

This program includes classroom instruction and lab periods in study and actual repair of the automobile body and frame components, fundamental process of straightening, repairing, replacing, and refinishing of damaged components. This course also deals with proper use of tools, equipment, materials, and techniques to the degree of proficiency necessary to the trade.

Employment Opportunities

Employment is expected to increase as a result of the rising number of motor vehicles damaged in traffic. Accidents are expected to increase as the number of motor vehicles grows. Most persons who enter this occupation may expect steady work since the automobile repair business is not very sensitive to change in the economy.

LENGTH OF COURSE: For

Four Quarters (One Year)

ENTRANCE DATES:

Quarterly

COST:

Supply Fee \$25 per quarter; Books approximately \$20

and tools approximately \$60.

Prerequisites for Admission

- Must have mathematics level equal to the eighth grade.
- 2. Must have reading level equal to the eighth grade.
- Applicants must be mechanically inclined and have good eye-hand coordination.

AUTO BODY AND FENDER REPAIR COURSE OUTLINE

First Quarter:	Quarter Hours Credit
ABR 101 — Welding	5
to Basic Painting	20
MA 101 — Basic Math	
	30
Second Quarter:	
ABR 103 — Remove and Replace Interior and Exterior Trim	10

ABR 104 — Basic Electricity	$ \begin{array}{r} 5 \\ 10 \\ 5 \\ \hline 30 \end{array} $
Third Quarter: ABR 106 — Glass Replacement ABR 107 — Fiber Glass ABR 108 — Refinishing II CF 101 — Consumer Finance	5 10 10 5 30
Fourth Quarter: ABR 109 — Major Damage Repair ABR 110 — Frame Straightening ABR 111 — Estimating and Damage Reporting ABR 112 — Refinishing III	10 5 5 10 30
*OJT 150 — On-the-Job Training	30

*May be substituted for last quarter's requirements.

AUTO BODY AND FENDER REPAIR

Description of Courses

- ABR 101 WELDING is a course designed to teach oxy-acetylene welding, cutting and burning, and brazing.
- ABR 102 REPAIRING DAMAGED SHEET METAL is a course where the student is taught the use of special tools such as dollies, hammers, files, sanders, jacks, and pneumatic tools. The student also studies how to analyze damage, shrink metal, grind metal, and finish metal.
- ABR 103 REMOVAL AND REPLACEMENT OF INTERIOR AND EXTERIOR TRIM AND HARDWARE is a course which deals with the types of retainers such as t-bolts, barrel clips, snap-on, adhesive and types of interior molding such as instrument panel, trim panel and roof rib. Door handles, mirrors, wood grain material, vinyl tops, antennas, lock hinges, grilles, bumpers, regulator handles, remote control handles, convertible tops, glove compartment, light covers, and seat tracks are covered by instructor.
- ABR 104 BASIC ELECTRICITY deals with the following: instruction in the kinds of electricity, sources of electricity, electrical system components, and wiring diagrams.
- ABR 105, 108, 112 REFINISHING is a course which deals with safety, proper use and maintenance of spray equipment, refinishing material, and surface preparation make-up.
- ABR 107 FIBERGLASS is a course in which the following topics are included: (1) Materials used in construction of fiberglass; (2) Resin preparation, filler preparation; (3) Repairing split or cracked panels; (4) Repairing fiberglass parts; (5) Replacing panels.

- ABR 109 MAJOR DAMAGE REPAIR is a combination of the basic fundamental skills of auto body repair that permits the student to work on major damage repair projects.
- ABR 110 FRAME STRAIGHTENING consists of frame construction, frame misalignment, frame straightening methods, sectioning of frames and frame replacement.
- ABR 111 ESTIMATING AND DAMAGE REPORTING consists of identification of vehicle, responsibility for payment, availability of parts. Use of flat rate manuals and sub-letting are covered by instruction.
- MA 101 BASIC MATHEMATICS APPLIED presents an indepth review of basic arithmetic including whole numbers, decimals, fractions, percents, ratios, proportions, areas, volumes, and formulas, as applied to the student's chosen field. Strong emphasis is placed on solution of practical work problems. MA 101 or a satisfactory entrance score is required of all areas.
- CF 101 CONSUMER FINANCE is a course designed to help the student become a better consumer. Budgeting, credit, and taxes are included in the course.
- CS 101 COMMUNICATIONS SKILLS is organized to develop the student's ability in written and oral communications, and to increase comprehension and study skills.



Automotive Mechanics



Automotive Mechanics

Course Objective

Automotive Mechanics is designed to prepare the student for employment at entry level in the repair and maintenance of automobiles.

Background Information

The value of the automobile as a dependable means of transportation has been proved many times. New automobiles are being produced in greater quantities than ever before, and the changes are rapid and complete. Automotive mechanics is a pre-employment course designed to prepare the student for employment at entry level in the repair and maintenance of automobiles and light trucks. The program of instruction consists of theory and practice and in the disassembly, assembly, and diagnoses of malfunctions in the various types of engines, carburetors, fuel pumps, generators, alternators, starters, ignition systems, clutches, transmissions, rear axles, front ends, and power and hydraulic brakes.

Employment Opportunities

Employment opportunities are considered excellent. There will be a demand for good auto mechanics throughout the 1970's and 80's.

LENGTH OF COURSE: Four Quarters or One Year (approximately)

ENTRANCE DATES: Quarterly

COST: Supply Fee \$25 per quarter; books \$65 for the entire year. Student must provide a set of tools which costs

approximately \$200.

Prerequisites for Admission

- 1. The student must have a mechanical ability, and have the desire to become an auto technician and have concrete plans to work in the automotive industry upon completion of the course.
- 2. The student should always be able to understand and apply basic mathematical principles and have a mathematics level equal to the seventh grade.
- 3. The student must be able to read on the eighth grade level.

AUTO-MECHANICS COURSE OUTLINE

Fall Quarter:	Quarter Hours Credit
AMCH 101 — Automotive Engines	10
Winter Quarter: AMCH 103 — Power Train	25 5 30

Spring Quarter:

AMCH 104 — Fuel and Ignition	$ \begin{array}{r} 15 \\ 10 \\ \underline{5} \\ 30 \end{array} $
Summer Quarter:	
AMCH 106 — Front Alignment	10 5
AMCH 108 — Automotive Air Conditioning	15
*OJT 150 — On-the-Job Training	
AMCH 106 — Front Alignment	5

*May be substituted for student's last quarter requirements.

AUTOMOTIVE MECHANICS

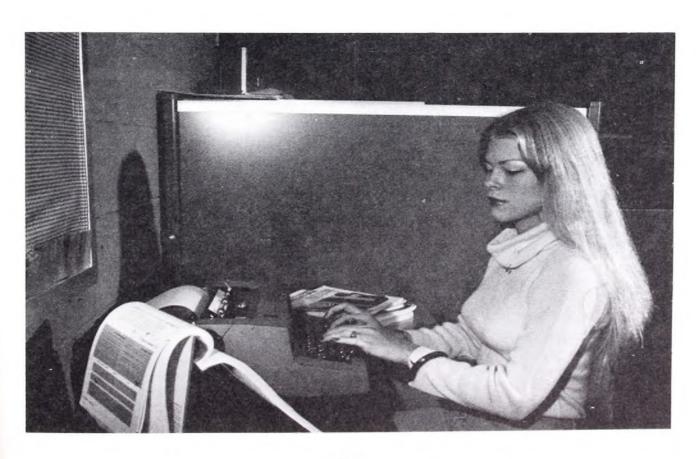
Description of Courses

- AMCH 101 AUTOMOTIVE ENGINES presents the basic fundamentals of internal combustion engines. The course consists of engine principles and construction, engine overhaul, and troubleshooting.
- **AMCH 102 AUTOMOTIVE BRAKES** gives the student an understanding of fundamentals of brakes, making him/her thoroughly familiar with automobile brakes systems and enabling him/her to perform complete brake system overhauls.
- AMCH 103 POWER TRAIN presents the basic fundamentals of the automobile gear trains. Power train is a presentation of troubleshooting, removal, repair, and replacement of transmissions (automatic and manual), propeller shafts, clutch assemblies, and differentials.
- AMCH 104 FUEL AND IGNITION presents the basic fundamentals of the automobile fuel and ignition system. Carburetor rebuilding, engine tune-up, and troubleshooting is stressed. The student is trained in the use of the latest engine diagnostic equipment.
- AMCH 105 STARTING AND CHARGING SYSTEMS presents the basic fundamentals of electricity as it applies to the automotive starting and charging system. Diagnosis and service of the automotive electrical system, using the latest diagnostic equipment, is stressed.
- **AMCH 106 FRONT END ALIGNMENT** introduces the student to the principles, problems, and use of equipment in front end alignment.
- **AMCH 107 WHEEL BALANCING** consists of the correct techniques of balancing wheels of an automobile.
- AMCH 108 AUTOMOTIVE AIR CONDITIONING is designed to familiarize the student with the basic fundamentals of air-conditioning. Specific attention will be devoted to the various components in the air-conditioning system, their function, installation and repair.
- MA 101 BASIC MATHEMATICS APPLIED presents an in depth review of basic arithmetic including whole numbers, decimals, fractions, percents, ratios, proportions, areas, volumes, and formulas as applied to the student's chosen

- field. Strong emphasis is placed on solution of practical work problems. MA 101 or a satisfactory entrance score is required of all areas.
- CF 101 CONSUMER FINANCE is a course designed to help the student become a better consumer. Budgeting, credit, and taxes are included in the course.
- CS 101 COMMUNICATION SKILLS is organized to develop the student's ability in written and oral communications, and to increase comprehension and study skills.



Business Education



Business Education

Course Objective

The Business Education program is designed to develop the necessary skills in typing, dictation, transcription, and office procedures for successful employment in the business world.

Background Information

The Business Education program consists of the secretarial and clerical courses. Shorthand is required in the secretarial curriculum. This curriculum is designed to develop the necessary skills in typing, dictation, transcription, and office procedures for employment in the business world. Secretaries handle a variety of business details on their own initiative. Secretaries often handle tasks such as scheduling appointments, taking care of correspondence, and handling private or confidential records. The clerical program is designed to train students for positions in the clerical field. The clerk-typist performs a wide range of general office duties such as typing, compiling reports and records, tabulating and posting data, recording orders for merchandise and service and answering the telephone.

Employment Opportunities

Numerous opportunities exist for business education graduates in private and public enterprises of practically every kind—particularly in manufacturing firms, banks and insurance companies and governmental agencies.

LENGTH OF COURSE: One Year ENTRANCE DATES: Ouarterly

COST: Supply Fee \$25 per quarter; Books \$100 (approximately) for the entire course.

Prerequisites for Admission

- 1. Must have mathematics level equal to the eighth grade.
- 2. Must have reading level equal to the eighth grade.
- 3. Must have a high school diploma or the equivalent, be a senior co-op student, or be working toward obtaining the high school equivalency diploma.

SECRETARIAL SCIENCE

Fall Quarter:	Quarte: Hours Credit
BUS 101 — Shorthand I	
BUS 122 — Shorthand Lab	. 5
MA 113 — Business Math	. 5
BUS 103 — Business English I	. 5
BUS 104 — Typewriting I	. 5
BUS 105 — Business Machines	5
	30

Winter Quarter:		
BUS 106 — Typewriting II BUS 107 — Business English II BUS 109 — Shorthand II	5	
BUS 109 — Shorthand II	5 5 5 5 5	
BUS 123 — Shorthand Lab	5	
BUS 110 — Accounting	5	
BUS 111 — Secretarial Procedures I		
	30	
Spring Quarter:		
BUS 113 — Shorthand III	5	
BUS 124 — Shorthand Lab	5	
BUS 114 — Typewriting III	5	
BUS 115 — Machine Transcription	5	
BUS 116 — Secretarial Procedures II	5 5 5 5 5	
	30	
	30	
Summer Quarter:		
BUS 118 — Shorthand IV	5	
BUS 119 — Typewriting IV	5 5 5	
BUS 120 — Preparing for Employment Testing		
CF 101 — Consumer Finance	10 5	
	30	
	-	
*OJT 150 — On-the-Job Training	30	
*May be substituted for student's last quarter requirements.		

CLERICAL

Fall Quarter:	Quarter Hours Credit
BUS 102 — Clerical Lab MA 113 — Business Math BUS 103 — Business English I BUS 104 — Typewriting I BUS 105 — Business Machines	. 5 . 5 . 10
Winter Quarter:	
BUS 106 — Typewriting II BUS 107 — Business English II BUS 108 — Clerical Lab BUS 110 — Accounting BUS 111 — Secretarial Procedures I	. 5

Spring Quarter: BUS 112 — Clerical Lab BUS 114 — Typewriting III 10 BUS 115 — Machine Transcription BUS 116 — Secretarial Procedures II 5 5 BUS 117 — Secretarial Procedures III 5 30 Summer Quarter: BUS 119 — Typewriting IV 10 BUS 120 — Preparing for Employment Testing 5 BUS 121 — Legal, Medical or General Office Procedures 10 CF 101 — Consumer Finance 5 30 *OIT 150 — On-the-Job Training 30

*May be substituted for student's last quarter requirements.

SECRETARIAL SCIENCE

Description of Courses

- BUS 102, 108, 112 CLERICAL LAB gives individualized instruction on courses the clerical student is enrolled in.
- MA 113 BUSINESS MATH is a fundamental course for the business student, which introduces some of the more common arithmetical computations used in the business world today. Basic mathematical processes are learned, practiced, and then applied to such areas as percentage, interest, insurance, payroll, tax areas and financial statements.
- BUS 103 BUSINESS ENGLISH I is a basic English course, principally dealing with parts of speech, sentence structure, capitalization, using words effectively, and forms of business letters.
- BUS 104 TYPEWRITING I is a beginning course for the student. The keyboard is introduced and drilled while the basic theory of typewriting is taught and reinforced. Special attention is devoted to the learning of proper techniques.
- BUS 105 BUSINESS MACHINES is designed to acquaint the student with the skill and use of adding machines, ten-key adding machines, calculators and other office machines used in an office of business.
- BUS 106 TYPEWRITING II develops the advancement of correct techniques, all forms of business correspondence, intricate tabulation, rough drafts and manuscripts.
- BUS 107 BUSINESS ENGLISH II provides the student with a comprehensive program tailored to develop the communication needed to enter and to progress in the business world. Different types of business letters are covered by instruction.
- BUS 110 ACCOUNTING is a basic course concentrating on one elementary accounting system. Collecting, summarizing, analyzing and reporting information are stressed.

- BUS 111 SECRETARIAL PROCEDURES I RECORDS MANAGEMENT includes criteria by which records are created, stored, retrieved, retained and disposed of; procedures for the operation and control of manual and automated storage systems; clear cut rules for alphabetic indexing, and the foundation of records storage methods.
- BUS 114, 119 TYPEWRITING III AND IV consists of the mastery of advanced and more complex typing skills.
- **BUS 115 MACHINE TRANSCRIPTION** is a course utilizing voice recorded media or dictation as a source of impulse-to-type. Consideration will be given to correspondence, memorandums, reports and other documents.
- BUS 116 SECRETARIAL PROCEDURES II—REPROGRAPHICS AND OFFICE SIMULATION REPROGRAPHICS includes learning how to type stencils and operate various duplicating and copying machines. OFFICE SIMULATION includes the complete procedure of a real office situation.
- BUS 117 SECRETARIAL PROCEDURES III includes a mail unit and telephone techniques.
- **BUS 120 PREPARING FOR EMPLOYMENT** is a course where the student will be able to look for a position that offers both job satisfaction and a promising career that results from careful planning.
- BUS 121 LEGAL, MEDICAL OR GENERAL OFFICE PROCEDURES LEGAL OFFICE PROCEDURES revolves around the calendar, where the secretary keeps a record of work to be done, court dates and appointments, and work that has been accomplished. It gives the student practice in typing legal documents, and introduces procedures that the legal secretary is expected to follow on the job. MEDICAL OFFICE PROCEDURES provides specialized training and practice for the student interested in preparing for a position as a medical office assistant. GENERAL OFFICE PROCEDURES provides a variety of forms and various projects that would occur in a general office.
- BUS 101, 109, 113, 118 SHORTHAND courses are designed to teach the student the basic principles of shorthand; each course builds upon the previous one. A shorthand lab gives individualized instruction on courses the clerical student is enrolled in.
- BUS 122, 123, 124 SHORTHAND LAB gives individualized instruction on courses the secretarial student is enrolled in.



Cosmetology



Cosmetology

Course Objective

The objective of the Cosmetology course is to provide the student with necessary skills and knowledge which will enable him/her to be licensed by the state board and be employed as a master cosmetologist.

Background Information

Cosmetology includes a thorough study of all phases of beauty culture in both classroom theory and shop practice. Students are prepared to perform all the services usually available in beauty salons. Ethics and charm, safety practices, sanitation, anatomy and physiology, chemistry, trichoanalysis, salon management and salesmanship are among the subjects provided in classroom instruction. Laboratory instruction covers shampoos and rinses, hair styling, hair cutting, finger waving, permanent waving, scalp treatment, hair re-conditioning, hair coloring, facials, make-up application and manicuring.

Upon satisfactory completion of the course, the student is eligible to take the Cosmetology State Board examination.

Employment Opportunities

Excellent employment opportunities are available for licensed cosmetologists. They may work as hair designers in large and small salons, or they may establish their own shops. Many cosmetologists specialize in certain phases of beauty culture by becoming lecturers, demonstrators, teachers or hair stylists, make-up artist, or trichoanalyst.

LENGTH OF COURSE:

Approximately One Year

ENTRANCE DATES:

ENTRANCE DATES:

COST:

Quarterly, or whenever a vacancy occurs. Supply Fee \$25 per quarter; Books \$75; Kit \$90. Additionally, the student must purchase uniforms and

white shoes.

Prerequisites for Admission

- 1. Must have a mathematics level equal to the seventh grade.
- 2. Must have a reading level equal to the eighth grade.
- 3. Must have formally completed the ninth grade or the equivalent of the ninth grade on the General Education Development Test.

COSMETOLOGY COURSE OUTLINE

	Quarter
	Hours
First Quarter:	Credit
COS 101 — Customer Relations	 2.5
COS 102 — Shop Hygiene	 2.5
COS 103 — Shampooing	 5.0

COS 104 — Tech. in Hair Styling	$ \begin{array}{r} 10.0 \\ 5.0 \\ \hline 5.0 \\ \hline 30.0 \end{array} $
Second Quarter: CF 101 — Consumer Finance	5.0 10.0 10.0 10.0 5.0 30.0
Third Quarter: COS 109 — Facial and Makeup CS 101 — Communication Skills COS 110 — Permanent Color COS 111 — Hair Lightening COS 112 — Problems in Hair Color COS 113 — Manicuring	5.0 5.0 5.0 5.0 5.0 5.0 5.0 30.0
Fourth Quarter: COS 114 — Anatomy and Physiology COS 115 — Depilatories, Light Therapy, Basic Electricity COS 116 — Wigs and Hair Pieces COS 117 — Salon Management COS 118 — Preparation for State Board	5.0 5.0 5.0 10.0 5.0

COSMETOLOGY

Description of Courses

- COS 101 CUSTOMER RELATIONS is a course designed to teach the student the importance of good ethics in relation to his/her employers, patrons, and co-workers.
- COS 102 SHOP HYGIENE is concerned with the teaching of bacteriology, sterilization, sanitation, and the chemistry of sanitation in relationship to the student's working environment.
- COS 103 SHAMPOOING is a course designed to teach the student about the different type shampoos and their chemistry and makeup, shampoo and rinsing procedures, and safety measures in regard to shampoos and rinses.
- COS 104 TECHNIQUES IN HAIR STYLING is a course which places emphasis on: counterclockwise and clockwise shaping of the hair; pin curls; finger waves; skip waves; ridge waves; and identifying types of rollers and procedures involved in rolling hair.
- COS 105 HAIR CUTS is a course designed to teach the student the basics in hair cutting design, different type implements to use in hair cutting, and how to section, thin, and taper hair.

- COS 106 PERMANENTS AND RELAXERS is a course designed to teach the student the chemical concepts of permanents and relaxers, procedures used in giving permanents, and safety precautions that must be exercised when using such chemicals.
- COS 107 HAIR AND SKIN ANALYSIS is a course which places emphasis on the composition, functions, and disorders of skin and scalp. Also covered in this course is composition, structure, analysis, and disorders of hair.
- COS 108 CORRECTIVE TREATMENTS is a course designed to familiarize the student with products that can be used to treat dandruff, scalp, and damaged hair problems. Setting lotions and conditioners are also discussed in this course.
- COS 109 FACIALS AND MAKE-UP is concerned with teaching the student the proper implements and techniques used in applying make-ups and giving facials.
- COS 110 PERMANENT COLOR is a course designed to teach the student techniques used in hair coloring, types of hair coloring, and procedures used when coloring hair.
- COS 111 HAIR LIGHTENING is a course designed to teach the student how to lighten hair, retouch already lightened hair, and to streak and frost hair.
- COS 112 PROBLEMS IN HAIR COLOR is a course designed to discuss the "special problems" that are sometimes associated with hair colorings.
- COS 113 MANICURING is a course designed to teach the student how to give manicures and detect and remedy nail disorders. Types of instruments used in manicuring are also discussed.
- COS 114 ANATOMY AND PHYSIOLOGY is a course designed to teach the student the concepts behind cells, tissues, organs, and systems and how they can relate to cosmetology procedures.
- COS 115 DEPILATORIES, LIGHT THERAPY, BASIC ELECTRICITY is concerned with teaching the student about different types of hair removal and the purpose of hair removal. Students also receive basic instruction in electricity and how it applies to the instruments they use.
- COS 116 WIGS AND HAIR PIECES is a course designed to teach the student how to correctly clean, set, and comb wigs and hair pieces.
- COS 117 SALON MANAGEMENT gives the student instruction in how to properly manage a beauty salon.
- COS 118 PREPARATION FOR STATE BOARD is designed to review the necessary material the student must know in order to pass the state board exam.
- MA 101 BASIC MATHEMATICS APPLIED presents an in depth review of basic arithmetic including whole numbers, decimals, fractions, percents, ratios, proportions, areas, volumes, and formulas as applied to the student's chosen field. Strong emphasis is placed on solution of practical work problems. MA 101 or a satisfactory entrance score is required of all areas.
- CF 101 CONSUMER FINANCE is a course designed to help the student become a better consumer. Budgeting, credit, and taxes are included in the course.
- CS 101 COMMUNICATION SKILLS is organized to develop the student's ability in written and oral communications, and to increase comprehension and study skills.



Data Processing Technology



Data Processing Technology

Course Objective

The objective of the Data Processing Technology program is to prepare the student for entry level employment in the data processing and/or accounting field.

Background Information

Data Processing is the method of taking data from the source (such as an invoice); putting it into some type of computer media (such as punched cards); making computer calculations on the data; and creating meaningful information in the form of a printed report to management.

This program provides the student with hands-on experience on the keypunch machine and the computer and its peripherals. The two most widely used computer languages in this area are taught. The student takes related courses in accounting, mathematics, and communication skills.

Employment Opportunities

The use of electronic data processing equipment is expected to continue to increase very rapidly in future years, thus creating a demand for computer trained people. Graduates of Walker Tech's data processing program are qualified for the following positions: (1) Keypunch Operator, (2) Computer Operator, (3) Computer Programmer, and (4) Accountant and/or Bookkeeper.

LENGTH OF COURSE: Four Quarters (One Year)

ENTRANCE DATES: Fall Quarter Only

COST: Supply Fee \$25 per quarter; Books \$150 for entire course.

Prerequisites for Admission

- 1. Must have a mathematics and reading level equal to the ninth grade.
- 2. Must possess a high school diploma or GED, be working toward GED, or be a co-op student.
- 3. Should be able to type.

DATA PROCESSING TECHNOLOGY

	Quarter
	Hours
First Quarter:	Credit
DPT 101 — Accounting I	10 5
DF1 103 — Reypunch	30

Second Quarter:	
DPT 104 — Accounting II	10
DPT 104 — Accounting II	15
CS 101 — Communication Skills	5
	30
Third Quarter:	
DPT 106 — Accounting III	10
DPT 106 — Accounting III	15
CS 102 — Technical Report Writing	5
	30
Fourth Quarter:	
DPT 109 — Cobol Programming	25
MA 122 — Math of Finance	_ 5
	30
*OJT 150 — On-the-Job Training	30
Off 100 On the job riaming	50

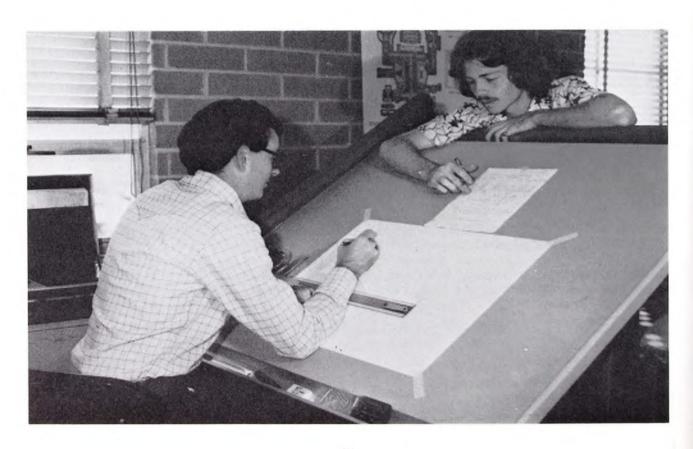
DATA PROCESSING

- DPT 101 ACCOUNTING I consists of the following units: Basic accounting theory and principles, recording transactions, ledger, financial statements, sales, cash receipts, purchases, cash payments, inventories, receivables and payables, adjusting and closing entries, deferrals and accruals, trial balance, and post closing trial balance.
- MA 113 BUSINESS MATHEMATICS consists of fractions, decimals, percentages, weights and measures, interest, discounts, markup, net profit and loss, payroll and taxes, and time payment plans and commercial loans.
- **DPT 102 INTRODUCTION TO COMPUTER PROGRAMMING** is a basic course in the functions, logic, and programming methods of modern digital computers. Emphasis is placed on flowcharting.
- **DPT 103 KEYPUNCH** increases the student's proficiency in the operation of keypunch machine. Typical business type keypunch jobs are performed by the student.
- DPT 104 ACCOUNTING II is a continuation of Accounting I. This course consists of the following units: Payroll systems, systems and control, systems design and automated data processing, concepts and principles, partnerships; corporations organization and operation, corporations stockholder's equity, earnings, and dividends corporations long-term liabilities and investments.
- **DPT 105 RPG PROGRAMMING I** includes writing programs in RPG II language and applying the language to some business problems. All programs are compiled and tested for errors.
- MA 122 MATH OF FINANCE includes essential algebraic operations, introduction to statistical measurements, ratio, proportion, percent, discounts, taxes, interest, annuities, and extinction of debt.

- CS 101 COMMUNICATION SKILLS is organized to meet the needs of the student by developing his/her ability with written and oral communications, and increasing comprehension and study skills.
- **DPT 106 ACCOUNTING III** is a continuation of Accounting II. It consists of the following units: Departments and branches, manufacturing and process cost accounting systems, job order cost systems, budgetary control and standard cost systems, management reports and special analyses, income taxes, cost and revenue relationships for management, statement of changes in financial position, consolidated statements and other statements, and financial statement analysis.
- CS 102 TECHNICAL REPORT WRITING is designed to teach the data processing student appropriate ways to communicate with other technical persons and with the public.
- DPT 107 RPG PROGRAMMING II is designed as an extension of DPT 105 with difficulty of programs being greater.
- **DPT 109 COBOL PROGRAMMING I** includes flowcharting and coding Cobol language business problem solutions as well as compiling and testing these written programs.
- OJT 150 ON-THE-JOB TRAINING enables the student to apply the principles of data processing and/or accounting by working in jobs of these types in business and industry.



Drafting and Design Technology



Drafting and Design Technology

Course Objective

The Drafting and Design course is designed to develop a skill level which will prepare the student for employment in the drafting field.

Background Information

Engineering drawing is a graphic language that expresses and conveys ideas of shape, size, and construction in all phases of industrial and engineering work. Consequently, drafters translate the ideas, rough sketches, specifications and calculations of engineers, architects and designers into work plans which are used by skilled craftsmen in making a product.

Employment Opportunities

Employment of drafters is rising rapidly as a result of the increasingly complex design of modern problems and products and processes. As the engineering and scientific occupations grow, more drafters will be needed.

LENGTH OF COURSE: Seven Quarters

ENTRANCE DATES: Quarterly

COST: Supply Fee \$25 per quarter; Books \$85 for entire

course; Equipment \$50.

Prerequisites for Admission

- 1. Must have mathematics level equal to ninth grade.
- 2. The student should have a high school diploma or the GED certificate or be a senior year co-op student, or be working toward obtaining a GED.
- 3. All students must possess the minimum physical and mental standards necessary to carry out all requirements of the Drafting program.
- 4. Should have above average spatial aptitude.
- 5. Must have reading level equal to eighth grade.

DRAFTING AND DESIGN COURSE OUTLINE

First Quarter:	Quarter Hours Credit
DDT 101 — Engineering Drawing I (Basic Drawing)	20 5 5 30
Second Quarter: DDT 102 — Engineering Drawing II (Basic Drawing)	20 5 5 30

Third Quarter: DDT 103 — Engineering Drawing III (Basic Drawing)	25 5 30
Fourth Quarter: DDT 201 — Engineering Design I (Basic Design) DDT 202 — Structural Steel Detailing I	20 10 30
Fifth Quarter: DDT 203 — Engineering Design II (Architectural)	15 10 5 30
Sixth Quarter: DDT 205 — Engineering Design III (Schematics) DDT 206 — Basic Elementary Surveying MA 258 — Elementary Statics & Strength of Materials	20 5 5 30
Seventh Quarter: DDT 207 — Engineering Design IV	30 30

DRAFTING AND DESIGN

- **DDT 101 ENGINEERING DRAWING I (BASIC DRAWING)** is an elementary course designed for the student with little or no experience in drafting. The student will be introduced into the field of graphic representation. Emphasis is placed on correct line work, geometrical construction and lettering.
- DDT 102 ENGINEERING DRAWING II (BASIC DRAWING) is a continuation of DDT 101. The student gains further skills in methods of graphic representation and a better working knowledge of standards used in industry. Primary emphasis is placed on multiview projection, sectioning primary and secondary auxiliary views and lettering.
- **DDT 103 ENGINEERING DRAWING III (BASIC DRAWING)** is a continuation of DDT 102. The student gains better working knowledge of revolutions, axonometric projection and basic dimensioning.
- DDT 201 ENGINEERING DESIGN I (BASIC DESIGN) is a study involving basic general design and working drawings.

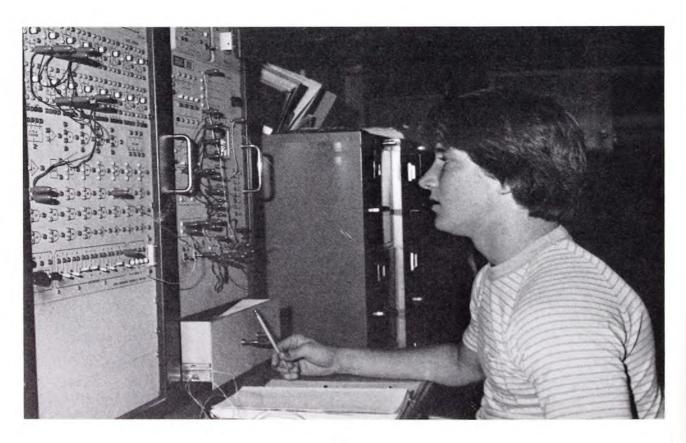
- **DDT 202 STRUCTURAL STEEL DETAILING I** is a study of basic structural steel detailing. The student gains experience in detailing beams, columns, and bracing. The AISC Handbook and Smoley's Handbook are used extensively.
- **DDT 203 ENGINEERING DESIGN II (ARCHITECTURAL)** is a continuation of DDT 201 with emphasis on architectural drafting.
- DDT 204 STRUCTURAL STEEL DETAILING II is a course that gives the student experience in detailing gusset plates, skewed, sloped and canted beam connections.
- **DDT 205 ENGINEERING DESIGN III (SCHEMATICS)** introduces the schematical phase of drafting which includes piping and electrical schematics. The student also is introduced to intersection and development.
- DDT 206 ELEMENTARY SURVEYING is a course which includes survey theory, leveling, taping, precision, and checks.
- **DDT 207 ENGINEERING DESIGN IV** offers the student the opportunity to spend his/her entire time in the area of specialization he/she has chosen. OJT 250 can be substituted for DDT 207.

OJT 250 ON-THE-JOB TRAINING

- MA 114 APPLIED GEOMETRY is a course which begins with a review of ratio and proportion and other basic topics as needed before beginning geometry as such. Geometry covered includes congruent and similar triangles, angles, parallel lines, construction techniques, perimeters, areas, and volumes. Theorem applications are discussed without proofs. Applications are taken with the drafting student in mind.
- MA 125 APPLIED COLLEGE ALGEBRA includes the number system, polynomials, algebraic fractions, exponents, and radicals, equations linear and quadratic, inequalities, functions and relations, and determinants.
- MA 135 APPLIED COLLEGE TRIGONOMETRY is a study of trigonometric functions, graphs of trigonometric functions, solution and applications or right triangles, identities, inverse functions, general triangle, complex numbers, logarithms, vectors, and conic sections.
- CF 101 CONSUMER FINANCE is a course designed to help the student become a better consumer. Budgeting, credit, and taxes are included in the course.
- CS 101 COMMUNICATION SKILLS is organized to develop the student's ability in written and oral communications, and to increase comprehension and study skills.
- CS 202 TECHNICAL REPORT WRITING is designed to teach the drafting student appropriate ways to communicate with other technical persons and with the public.
- MA 258 ELEMENTARY STATICS AND STRENGTH OF MATERIALS is a course which covers stresses, strains, pressure in pipes, riveted joints, centroids, and moments. Required of Drafting students.



Electronic Technology



Electronic Technology

Course Objective

The Electronic Technology course prepares the student for entry level employment in the electronics field.

Background Information

The student who successfully completes the electronic technician course will have demonstrated a proficiency in applying procedures, engineering mathematics, physics, and related subjects to layout, build, test, troubleshoot, repair, and modify development and production electronic equipment including computers, missile-control, instrumentation, and machine tool numerical control.

The electronic technician will be able to install, test, calibrate and operate electronic devices and equipment. The technician will be required to apply all of the principles of alternating and direct currents; to locate and identify component parts by referring to associated circuit diagrams; and to troubleshoot and make temporary and permanent repairs of the malfunctioning equipment.

The electronic technician must be experienced in recognizing the applicability of electronic test equipment; must be able to interpret and record test data; and must be able to relay facts and concepts mathematically, graphically and orally. The individual may be required to work singly or in support of engineering and scientific personnel.

Employment Opportunities

Currently, job opportunities are excellent for Electronic Technicians. Graduates of Walker Tech's Electronics program have the background to enter the industrial electronics field, the rapidly growing medical electronics field, communications or computers.

LENGTH OF COURSE: Seven Quarters ENTRANCE DATES: Ouarterly

COST: Supply Fee \$25 per quarter; Books approximately

\$100 for entire course.

Prerequisites for Admission

- 1. Must possess a high school diploma or GED certificate, be working toward obtaining a GED, or be a senior year co-op student.
- 2. Must have good mathematics background including at least one year of algebra and equal to the ninth grade level.
- Should be able to read and interpret technical manuals.
- 4. Should be able to apply and understand principles of higher math and physics.
- 5. Must be able to read on the ninth grade level.

ELECTRONIC TECHNOLOGY COURSE OUTLINE

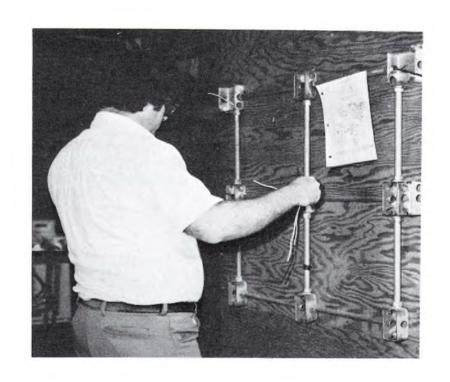
First Quarter:	Quarte Hours Credit
MA 125 — Applied College Algebra	. 5 . 5
Second Quarter: MA 135 — Applied College Trigonometry ELEC 103 — Electronic Devices I ELEC 104 — AC Circuits	. 5
Third Quarter: CS 101 — Communication Skills	15
Fourth Quarter: CF 101 — Consumer Finance MA 145 — Introduction to Boolean Algebra ELEC 107 — Elect. Systems ELEC 108 — Semiconductor Circuit Analysis II	. 10
Fifth Quarter: CS 202 — Technical Report Writing ELEC 201 — Introduction to Computers ELEC 202 — Computers II	. 10
Sixth Quarter: ELEC 203 — Transmission Fundamentals ELEC 204 — Industrial Electronics I ELEC 205 — Industrial Electronics II	. 15
Seventh Quarter: ELEC 206 — Hydraulics and Pneumatics	. 10

*ELEC 209 — Microprocessors	
**OJT 205 — On-the-Job Training	30
*May be substituted for ELEC 206, and ELEC 207.	
**May be substituted for student's last quarter requirements.	

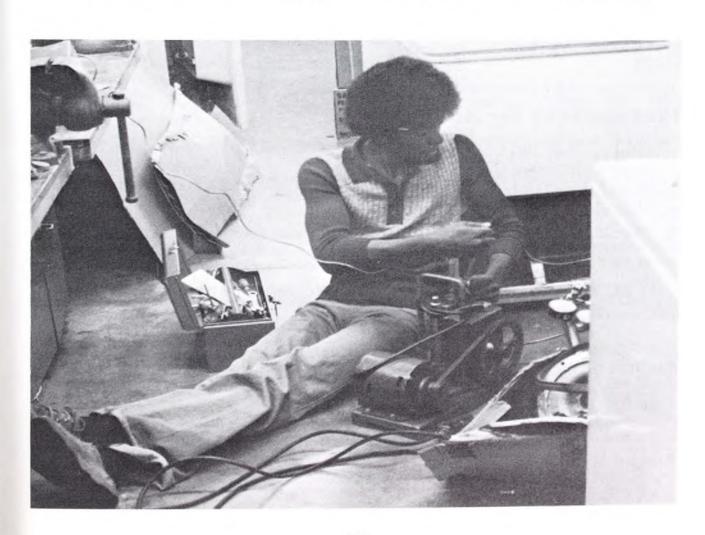
ELECTRONIC TECHNOLOGY

- MA 125 APPLIED COLLEGE ALGEBRA begins with a review of arithmetic and progresses through algebra.
- **ELEC 101 SHOP PRACTICE** emphasizes the proper use of the basic tools of the electronic technician and stresses safety practices.
- **ELEC 102 BASIC ELECTRICITY AND DC CIRCUITS** presents the fundamentals needed in the study of all electronics. Beginning with electron theory, the course progresses through magnetic fundamentals.
- ELEC 103 ELECTRONIC DEVICES I includes the study of the operation of semiconductor diodes and power supplies.
- **ELEC 104 AC CIRCUITS** is a study of alternating current circuits and analyzes the behavior of alternating current components.
- **ELEC 105 ELECTRONIC DEVICES II** is a continuation of Electronic Devices I and includes transistor theory, field effect transistors and circuit configurations.
- **ELEC 106 SEMICONDUCTOR ANALYSIS I** is an analysis of basic transistor circuits and equivalent circuits.
- **ELEC 107 ELECTRONIC SYSTEMS** includes the study of radio frequency detectors, oscillators, multivibrators and oscilloscopes and associated circuits.
- **ELEC 108 SEMICONDUCTOR ANALYSIS II** is a continuation of Semiconductor Analysis I and includes both vacuum tube and semiconductor amplifier circuits, and operational and differential amplifiers.
- **ELEC 201 INTRODUCTION TO COMPUTERS** is the study of electronic circuits used extensively in computers, industrial control systems, radar systems and guided missiles.
- ELEC 202 COMPUTERS II covers the operation of modern digital and analog computers, and emphasizes their usage.
- **ELEC 203 TRANSMISSION FUNDAMENTALS** is a study of the generation and transmission of electrical energy at radio frequencies.
- **ELEC 204 INDUSTRIAL ELECTRONICS I** is a study of rectifiers, photo devices, timing circuits, relays and associated circuitry utilized in industrial applications in industry.
- **ELEC 205 INDUSTRIAL ELECTRONICS II** is a continuation of Industrial Electronics I and includes three-phase systems, synchro control, speed control and regulated power supplies.
- **ELEC 206 HYDRAULICS AND PNEUMATICS** is a study of the use of hydraulics and pneumatics and associated components in industrial applications.
- **ELEC 207 INTRODUCTION TO INSTRUMENTATION** is an introduction to the field of measurements and control of industrial processes.

- ELEC 208 RESEARCH PROJECT is an approved design, construction, analysis and written report of a useful project of choice by the student.
- **ELEC 209 MICROPROCESSORS** includes programming using machine language and interfacing to peripheral devices such as keyboards, displays and digital-to-analog converters.
- **ELEC 210 FCC LICENSE PREPARATION** prepares student to pass Federal Communication Commission examination for commercial radio telephone license.
- MA 135 APPLIED COLLEGE TRIGONOMETRY is a study of trigonometric functions, graphs of trigonometric functions, solution and applications of right triangles, identities, inverse functions, general triangle, complex numbers, logarithms, vectors, and conic sections.
- MA 145 INTRODUCTION TO BOOLEAN ALGEGRA is a course which includes the study of number systems of various bases, especially binary and octal systems, conversions between systems, work within systems, and algebraic logic (Boolean Algebra), including symbols, truth tables, and applications to switching networks.
- CF 101 CONSUMER FINANCE is a course designed to help the student become a better consumer. Budgeting, credit, and taxes are included in the course.
- CS 101 COMMUNICATION SKILLS is organized to develop the student's ability in written and oral communications, and to increase comprehension and study skills.
- CS 202 TECHNICAL REPORT WRITING is designed to teach the electronic technology student appropriate ways to communicate with other technical persons and with the public.



Electrical Appliance Servicing



Electrical Appliance Servicing

Course Objective

The purpose of the Electrical Appliance Servicing course is to prepare the individual student for entry level employment as an electrical appliance repairer and for related employment.

Background Information

The appliance technician must be able to install, maintain and service all major home appliances, which include washing machines, clothes dryers, water heaters, ranges, refrigerators, freezers and window air conditioners. In order to service the modern appliance, one must be able to read cycle charts and wiring schematics, use hand tools and test equipment, and understand house wiring.

Employment Opportunities

Upon graduation, students are eligible to be employed by appliance dealers, department stores, private repair shops, or with gas or electric companies. Appliance manufacturers are employing more and more repairers to adjust and inspect new appliances and to work in repair centers opening in most large cities. Some students will go into business for themselves.

LENGTH OF COURSE: Four Quarters ENTRANCE DATES: Ouarterly

COST: Supply Fee \$25 per quarter; Books \$60 for the entire course. Tools approximately \$175 for entire course.

Prerequisites for Admission

- Must possess a high school diploma or GED equivalency diploma, be working toward obtaining GED, or be a high school co-op student.
- 2. Must have a mathematics and reading level equal to the eighth grade level.
- 3. Should have the ability to lift and move heavy objects.
- 4. Should have manual and finger dexterity and be mechanically inclined.

ELECTRICAL APPLIANCE SERVICING COURSE OUTLINE

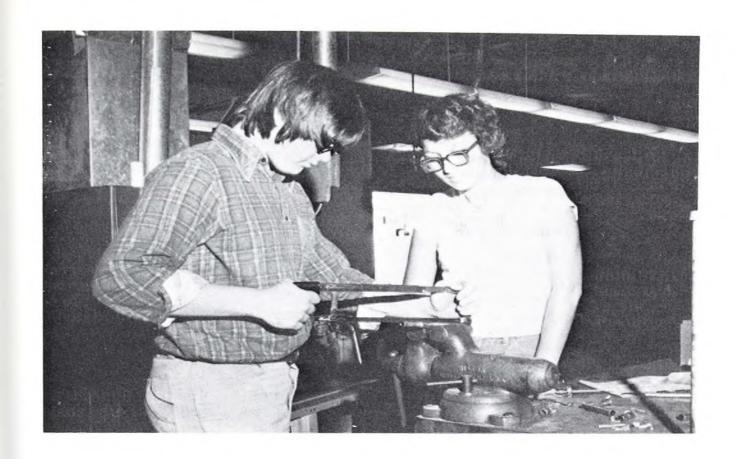
First Quarter:	Quarter Hours Credit
MA 101 — Basic Mathematics EAS 101 — Basic Electricity EAS 102 — House Wiring EAS 103 — Blueprint Reading	10 10
Second Quarter:	
CF 101 — Consumer Finance	5 5

EAS 105 — Schematic Diagram	$\begin{array}{r} 5 \\ 15 \\ \hline 30 \end{array}$
Third Quarter:	
EAS 111 — Blueprint Reading MA 213 — Business Mathematics EAS 109 — Schematic Diagram EAS 110 — Refrigeration	5 5 15 30
Fourth Quarter:	
CS 101 — Communication Skills EAS 107 — Schematic Diagram	5 5
EAS 108 — Laundry Appliances	15 5
*OIT 150 On the Joh Training	30
*OJT 150 — On-the-Job Training	30

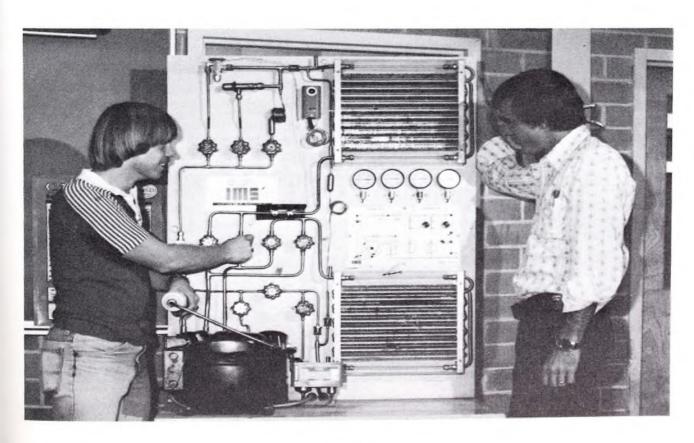
ELECTRICAL APPLIANCE SERVICING

- **EAS 101 BASIC ELECTRICITY** relates electrical fundamentals to modern appliances. The course includes electric motors and a familiarization with hand and power tools.
- **EAS 102 HOUSE WIRING** presents methods of installations and pertinent code requirements for wiring the modern home.
- **EAS 103, 104, 111, 112 BLUEPRINT READING** develops the necessary skills to interpret conventional trade drawings and to understand electrical symbols and abbreviations.
- EAS 105, 107, 109 SCHEMATIC DIAGRAMS is organized to develop the student's skill in operation and troubleshooting of an electrical appliance. The student will be able to check, diagnose and replace defective components effectively.
- **EAS 106 MAJOR APPLIANCES** is the operation and servicing of gas ranges, electric ranges, microwave ovens, hot water heaters and other electric heating units.
- **EAS 108 LAUNDRY APPLIANCES** offers background information on the basics of the washing process and the reasons of the various cycles. Electromechanical components are isolated and explained.
- **EAS 110 REFRIGERATION** teaches the basic principles which are necessary for a working understanding of refrigeration system operation and the operating principles of the electrical and refrigerant controls used with refrigeration systems. The refrigeration cycle is also covered.
- MA 101 BASIC MATHEMATICS APPLIED presents an indepth review of basic arithmetic, including whole numbers, decimals, fractions, percentage, rat-

- ios, proportions, surface measurement, and formulas as applied to appliance servicing. Strong emphasis is placed on the solution of practical work problems. MA 101 or a satisfactory entrance score is required of all areas.
- MA 213 BUSINESS MATH consists of an introduction to mathematical principles involved with basic bookkeeping. Topics include interest, payroll, taxes, income statements, balance sheets, and depreciation. This course is designed to give an overview of operating a small business.
- CS 101 COMMUNICATION SKILLS develops the study skills, reading skills, and vocabulary skills necessary to a successful appliance servicing student.
- CF 101 CONSUMER FINANCE helps the student formulate constructive goals and utilize resources effectively to shape a satisfying life style. Students consider the effects of their decisions on personal finance, the economy, the community and the environment.



Heating and Air Conditioning



Heating and Air Conditioning

Course Objective

The Heating and Air Conditioning course is designed to prepare the student for employment at the entry level in the installation and service of heating and air-conditioning systems.

Background Information

Heating and Air Conditioning is a pre-employment course designed to prepare the student for employment at entry level in installation and service of residential heating and air-conditioning systems. The program of instruction covers both theory and practice, and includes installation and service of refrigeration components used in air conditioning, electrical devices used both in heating and air conditioning, and residential gas and oil furnaces.

Employment Opportunities

The growing demand for air-conditioning and heating systems throughout the nation is providing many job opportunities for skilled technicians who install, service and design such equipment.

LENGTH OF COURSE: One Year

ENTRANCE DATES: Quarterly (Fall and Spring Quarters)

COST: Supply Fee \$25 per quarter; Books \$70 for the entire

course; Tools \$275.

Prerequisites for Admission

- 1. Must be able to read and comprehend on the eighth grade level.
- 2. Must be able to understand and apply basic mathematical principles equal to the eighth grade level.
- 3. Should have a high mechanical aptitude.
- 4. Should have good finger and manual dexterity.

RESIDENTIAL HEATING AND AIR CONDITIONING COURSE OUTLINE

First Quarter:	Quarter Hours Credit
RHA 101 — Basic Refrigeration	10 10
Second: Quarter: MA 101 — Basic Mathematics Applied	5 10 15 30

Third Quarter:

RHA 106 — Heating Fundamentals RHA 107 — Oil Heating RHA 108 — Gas Heating RHA 109 — Piping and Venting CF 101 — Consumer Finance	6 6 7 5 30
Fourth Quarter:	
RHA 110 — Air-Conditioning Fundamentals RHA 111 — Residential Air Conditioning RHA 112 — Air-Conditioning Systems Repair RHA 113 — Heat Pumps	10 10
	30
*OJT 150 — On-the-Job Training	30

*May be substituted for student's last quarter requirements.

RESIDENTIAL HEATING AND AIR CONDITIONING

- RHA 101 BASIC REFRIGERATION covers theory of mechanical refrigeration operation including the refrigeration cycle, as well as the refrigeration controls, accessories, and devices used on residential air conditioners.
- RHA 102 PRINCIPLES AND PRACTICES OF REFRIGERATION consists primarily of laboratory experiences using related materials and testing devices necessary for the construction, installation, and testing of mechanical refrigeration systems as applied to air conditioning.
- **RHA 103 CYCLE COMPONENTS** includes the study of the different types of evaporators, condensers, compressors, and metering devices found on residential air conditioners.
- RHA 104 BASIC ELECTRICITY covers the fundamentals of electricity that will enable the student to have an understanding of the nature, uses and control of electricity in the residential heating and air-conditioning fields. Laboratory experiences with testing devices, hand power tools, wire splicing and soldering techniques is also a major part of this course.
- RHA 105 ELECTRIC MOTORS AND CONTROLS allows the student to develop knowledge about the basic electrical fundamentals relative to the diagnosis, repair and maintenance procedures of electrical motors and circuit controls used in residential heating and air conditioning.
- RHA 106 HEATING FUNDAMENTALS is a study of fuels and combustion, heat transfer, and properties of air and air circulation.
- RHA 107 OIL HEATING provides the basic knowledge and laboratory experience in diagnosing, servicing, and determining operational efficiency of oil burning equipment.
- RHA 108 GAS HEATING introduces the student to the procedures for safety, lighting, testing, and determining, repairing and adjusting gas burning equipment.
- RHA 109 PIPING AND VENTING is a study of the national and local standards of pipe fitting and venting.

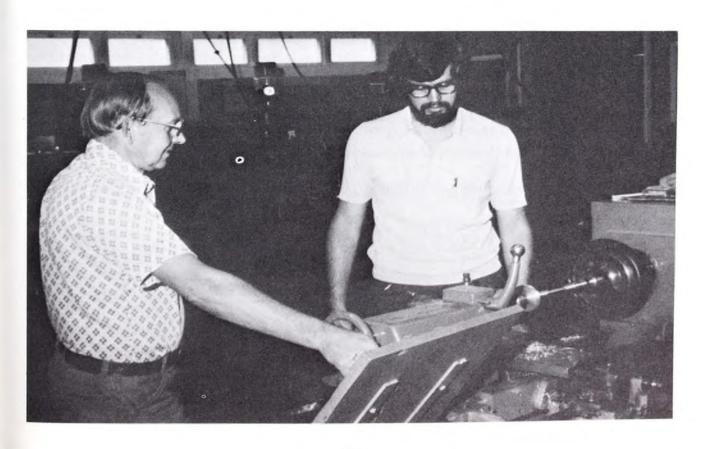
- RHA 110 AIR CONDITIONING FUNDAMENTALS is a study of the factors and instrumentation involved in the air-conditioning process.
- RHA 111 RESIDENTIAL AIR CONDITIONING is an analysis of the design and assembly of the various units that are used for residential air conditioning.
- RHA 112 AIR-CONDITIONING SYSTEMS REPAIR consists of mechanical and laboratory solutions to the many problems caused by chemical reactions of various system components and heat.
- RHA 113 HEAT PUMPS is the study of the compression cycle heat pump with emphasis placed on the operation and mechanics of the heating cycle components.
- OJT 150 ON-THE-JOB TRAINING The student is employed in the heating and air conditioning field, his or her last quarter in school, a minimum of thirty hours per week. The employer evaluates the student on such things as attendance, punctuality, attitude, ability to work with others, ability to work with minimum supervision, eagerness to learn, work proficiency, adaptability and any other area he or she feels should be covered. These reports are sent to the school monthly and the instructor uses them to arrive at a grade at the end of the quarter for the student.

Note: Before being eligible to begin OJT the student must be recommended for employment by his or her instructor and must have the approval of the coordinator of instruction and the school director.

- MA 101 BASIC MATHEMATICS APPLIED presents an in depth review of basic arithmetic including whole numbers, decimals, fractions, percents, ratios, proportions, areas, volumes, and formulas as applied to the student's chosen field. Strong emphasis is placed on solution of practical work problems. MA 101 or a satisfactory entrance score is required of all areas.
- **CF 101 CONSUMER FINANCE** is a course designed to help the student become a better consumer. Budgeting, credit, and taxes are included in the course.
- CS 101 COMMUNICATION SKILLS is organized to develop the student's ability in written and oral communications, and to increase comprehension and study skills.



Machine Tool



Machine Tool

Course Objective

The Machine Tool course is designed to prepare the student for employment at the entry level in the machine shops of industries.

Background Information

The Machine Shop course is a program of pre-employment training designed to prepare the student for employment at entry level in the machine shops of industries. The program of instruction covers both theory and practice, and includes installation, care and repair of machines found in machine shops; job interpretation, set-up and operation required to complete work in a manner acceptable to industry; and tool care, repair, and basic 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.

Employment Opportunities

After graduation, students find work in industries keeping mechanical equipment in good operating order, or in the production department of metalworking industries producing parts.

alworking industries producing parts.

An important advantage of this occupation is that work can be found in all localities and in all industries. Skilled machinists are in great demand wherever

tools and machines are utilized.

LENGTH OF COURSE: Four Quarters (One Year)

ENTRANCE DATES: Quarterly

COST: Supply Fee \$25 per quarter; Books \$30 for the entire

course; Tools approximately \$100.

Prerequisites for Admission

- Have a high school or GED diploma or work toward obtaining GED while enrolled.
- 2. Must be able to read on the seventh grade level. Must possess ability to learn to read blueprints.
- 3. Must have mathematical level equal to the eighth grade.
- 4. Must be mechanically inclined and have a strong desire to learn to work with machinery.

MACHINE TOOL COURSE OUTLINE

	Quarte
	Hours
First Quarter:	Credit
MA 101 — Basic Mathematics Applied	5
MAT 101 — Blueprint Reading	5

MAT 102 — Basic Machine Tool	<u>20</u> 30
Second Quarter: MAT 103 — Intermediate Machine Tool	25 _5 30
Third Quarter: CF 101 — Consumer Finance	5 25 30
Fourth Quarter: MAT 106 — Special Problems	25 5 30
*OJT 150 — On-the-Job Training	30

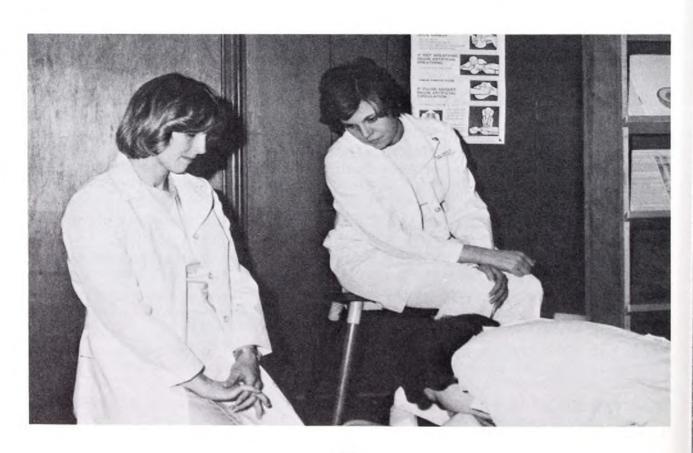
MACHINE TOOL

*May be substituted for student's last quarter requirements.

- MA 101 BASIC MATHEMATICS APPLIED enables the student to re-establish the fundamentals of mathematics and to develop mathematical skills required of a machinist.
- MAT 101, 104 BLUEPRINT READING develops the necessary skills in visualization plus a thorough understanding of the symbols and other representations which commonly appear on machine trade blueprints.
- MAT 102 BASIC MACHINE TOOL is a course designed to aid the student who has had little or no experience in the machine trade. The student will be instructed in basic machine shop operations and setups, which include measuring tool precision, bench tools, drill press and lathes.
- MAT 103 INTERMEDIATE MACHINE TOOL consists of the study of various operations that are common, but with more emphasis on ACC.
- CF 101 CONSUMER FINANCE is a course designed to help the student become a better consumer. Budgeting, credit, and taxes are included in the course.
- CS 101 COMMUNICATION SKILLS is organized to develop the student's ability in written and oral communications, and to increase comprehension and study skills.
- MAT 105 ADVANCED MACHINE TOOL is designed for the student who is ready to go into advanced machine tool processes and operations. Accuracy will be stressed in all machining operations.
- MAT 106 SPECIAL PROBLEMS is designed to permit the student to complete advanced machine tool projects.



Practical Nursing



Practical Nursing

Course Objective

The Practical Nursing program prepares the student for the State Board Examination for Licensed Practical Nursing and for employment as a practical nurse.

Background Information

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 is also instructed to give safe, intelligent and competent bedside care to selected patients and to assist the registered nurse with the care of the more seriously ill. Part of the trainee's 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 supervisor.

Employment Opportunities

Licensed practical nurses are expected to be in good demand during the 1970's. The need for more workers in this occupation has been due in large part to the greater utilization of licensed practical nurses for certain kinds of patient care which do not require the skills of a registered professional nurse.

LENGTH OF COURSE:

One Year

ENTRANCE DATES:

March and September

COST:

Uniforms \$55-75; Books \$90 year; Supply Fee \$100 year; Registration Fee \$10; Miscellaneous Expense \$75; Physical for State Board Exam \$25-50; and State

Board Exam Fee \$25-35.

Prerequisites for Admission

- 1. Minimum age of 171/2.
- 2. Must be a high school graduate or possess a GED Diploma.
- 3. Must have mathematics and reading level equal to the ninth grade level.
- 4. Interview with instructors.
- 5. Physical condition and emotional maturity to fulfill satisfactorily the duties of an LPN as certified by a physician.
- 6. An admissions committee formally evaluates each applicant and makes recommendations concerning acceptance.

ADMISSIONS POLICY FOR PRACTICAL NURSING

- Classes are admitted twice yearly—in the spring and in the fall. The deadline for applying for the spring class is December 1; the deadline for the fall class is June 1.
- 2. All admission procedures must be completed before an individual can be considered for admission.

- 3. An admissions committee formally evaluates each applicant and recommends students to be accepted. All students admitted must be approved by the admissions committee.
- 4. If a student is not accepted for a nursing class, he or she may apply for the next class; however, it is the responsibility of the student to notify the school that he or she wishes to be considered for the nursing class. Notification should be prior to the deadline for applying.
- 5. Any student who is denied admission may request a hearing before the admissions committee.
- 6. Preference in admission is given to residents of Georgia.

PRACTICAL NURSING COURSE OUTLINE

First Quarter:	Quarter Hours Credit
PN 101 — Nursing Fundamentals I PN 102 — Personal and Vocational Relations PN 103 — Microbiology PN 104 — Nutrition PN 105 — Anatomy and Physiology	 3 2 5
Second Quarter: PN 106 — Maternity Nursing	 . 3 . 6 . 5
Third Quarter: PN 111 — Conditions of Illness	 . 25
Fourth Quarter: PN 114 — Conditions of Illness	

PRACTICAL NURSING

Description of Courses

PN 101 NURSING FUNDAMENTALS I combines theory and application of nursing arts beginning with basic nursing care and including the special and therapeutic procedures for patient care. Included are instructions in

- safety and first aid. References, textbooks, audio-visual aids, nursing arts laboratory, lectures, class discussions, and clinical experience will be used.
- PN 102 PERSONAL AND VOCATIONAL RELATIONS is designed to help the student formulate his/her personal objectives in Practical Nursing Training. Personality development, relationship of the individual to self, patient, and co-workers and basic elements of psychology are explored. Methods of teaching will include lecture, class discussions, audio-visual aids and reference readings. Legal aspects, nursing organizations and publications, job opportunities and obligations, letters of application and resignation are planned within the fourth quarter.
- PN 103 MICROBIOLOGY is designed to help the student achieve an understanding of disease as it relates to microorganisms. It explores use of the microscope, types of microorganisms, their structure and behavior. Practical applications of theory concerning microbiology will be in the areas of infection and immunity, methods of destruction of bacteria, environmental control, hospital sanitation and isolation procedures for communicable diseases. Methods of instruction will be lectures, labs, individual projects, workbooks, and audio-visual aids.
- PN 104 NUTRITION gives the practical nurse student a workable knowledge of good nutrition and diet therapy. Instruction in basic food nutrition, diet therapy, basic food requirements, adaption of family menu to prescribed diet for the sick, and the dietary treatment of the more common diseases are given. Textbooks, references, demonstrations, and films are used.
- PN 105 ANATOMY AND PHYSIOLOGY is a basic and concentrated course dealing with the structure and function of the body to enable the practical nurse student to gain insight concerning the normal body as a basis for understanding variations from normal. With such an understanding he/she will be able to give more intelligent care to the sick. Lectures, reference readings, class discussions, audio-visual aids, charts, human skeleton, and human torso model will be used.
- PN 106 MATERNITY NURSING deals with the physiological, psychological, and pathological aspects of pregnancy. Nursing care during the prenatal, labor and delivery, and post partum periods will be emphasized. Care of the newborn will include normal and abnormal conditions, care of the premature infant and neonate. Clinical experience will be allotted for labor and delivery, post partum, nursery and clinics. In addition, texts, references, case studies and audio-visual aids will be used.
- PN 107 PEDIATRIC NURSING introduces the student to diseases and disorders associated with the particular age in which they are most frequently seen or in which the disease or disorder has a greater physical and emotional impact on the child and his family. Growth and development are incorporated. The way a child reacts to and copes with stress, separation from family, treatment processes, and the child's developmental level are stressed. Clinical experiences, case studies, texts, references, field trips, and audio-visual aids are used.
- PN 108 NURSING FUNDAMENTALS II is an introduction to medical-surgical nursing, and is directed toward helping the practical nurse student to understand the classification and ediology of disease, body disorders, signs and symptoms of illness related to nursing care, diagnostic procedures and the nurse's responsibility in their administration. The student will investigate care and needs of the mentally ill patient and of the terminally ill patient. Nursing care of the medical, surgical, geriatic, and chronically ill patient and rehabilitation with emphasis on the basic needs of man are included. These subjects will be covered in the medical-surgical course (Conditions of Illness). Nursing arts, audio-visual aids, clinical and laboratory facilities, texts, and references are used.

- PN 109 PHARMACOLOGY provides a foundation for preparing and administering medications, beginning with basic concepts. Conversion within and between systems (household, metric and apothecary), calculation of dosage problems, accuracy, and the moral and ethical responsibility of drug administration will be emphasized. Classification, effects and usage, contraindications, and adverse reactions will be incorporated throughout the course. Lectures, texts, drug cards, charts, audio-visual aids, laboratory, and equipment for drug administration are used.
- PN 111, 114 CONDITIONS OF ILLNESS I AND CONDITIONS OF ILLNESS II, based on concepts learned in Fundamentals II, deals with disease processes and/or illness as related to the body systems. Special emphasis will be placed on cardinal signs and symptoms, specific treatment and nursing care, and psychological implications as related to specific illnesses and disorders. Care plans, texts, references, audio-visual aids, varied clinical experiences, lectures, and class discussions will be used.



Radio and Television Repair



Radio and Television Repair

Course Objective

Radio and Television Repair is a pre-employment course designed to prepare the student for employment at the entry level in the repair, servicing, and installation of radio receivers (including transistors), television receivers (including color and closed circuit), high fidelity and stereophonic sound reproduction systems, and related electronic equipment.

Background Information

Radio and television technicians repair a large and growing number of electronic products, of which television sets and radios are the most numerous. They also repair stereo components, tape recorders, intercoms and public address systems.

Employment Opportunities

Employment of television and radio service technicians is expected to increase through the 1980's.

LENGTH OF COURSE: Eight Quarters Ouarterly

COST: Quarterly Supply Fee \$25 per quarter; Books \$100 for entire

course.

Prerequisites for Admission

- 1. Must be able to read and comprehend on the eighth grade level.
- 2. Must be able to perform basic mathematical operations equal to the eighth grade level.
- 3. Must have good finger and manual dexterity.
- 4. Must be mechanically inclined.
- 5. Should possess the ability to learn to read schematic diagrams.

RADIO AND TELEVISION COURSE OUTLINE

First Quarter:	Quarter Hours Credit
MA 115 — Algebra-Trigonometry RTV 101 — DC Circuits and Ohm's Law RTV 102 — AC and Reactive Circuits RTV 103 — Use of Meters and Oscilloscopes	10 10
Second Quarter:	
RTV 104 — Complex AC and Tuned Circuits	5 5

RTV 105 — Vacuum Tubes and Solid-State Devices	$\frac{10}{10}$
Third Quarter: RTV 107 — Oscillators and Amplifiers CS 101 — Communication Skills RTV 108 — Amplitude and Frequency Modulation RTV 109 — Superheterodyne Receivers RTV 110 — Antennas	10 5 5 5 5 5 30
Fourth Quarter: RTV 111 — Advanced Solid-State Devices	10 10 10 30
Fifth Quarter: RTV 201 — Introduction to Television	5 10 10 5 30
Sixth Quarter: RTV 205 — Video Amplifier Circuits	10 5 5 10 30
Seventh Quarter: RTV 209 — TV Deflection Oscillators & Output Ckt	20 10 30
Eighth Quarter: RTV 211 — TV Color Circuits	15 5 10 30 30

RADIO AND TELEVISION

- RTV 101 DC CIRCUITS AND OHM'S LAW explains how the amount of current (I) in a circuit depends on its resistance (R) and the applied voltage (E).
- RTV 102 AC AND REACTIVE CIRCUITS shows how to analyze sine-wave AC circuits that have R, XL, and Xc.
- RVT 103 COMPLEX AC AND TUNED CIRCUITS explains the theory of band width and series, and parallel resonant circuits.
- RTV 104 USE OF METERS AND OSCILLOSCOPES is designed to acquaint the student with the theory and operation of meters and oscilloscopes.
- RTV 105 VACUUM TUBES AND SOLID-STATE DEVICES is a study of diode, triode, tetrode and pentode vacuum tubes and diodes, bipolar junction transistors and varactor solid-state devices.
- RTV 106 POWER SUPPLY is the study of basic half-wave and full-wave rectifier circuits and the use of capacitance and inductance as filters.
- RTV 107 OSCILLATORS AND AMPLIFIERS is a study of the many different types of oscillators and amplifiers.
- **RTV 108 AMPLITUDE AND FREQUENCY MODULATION** is a thorough study of AM, FM, USB, LSB, percent of modulation, band widths, pre-emphasis, de-emphasis, PM, FM stereo signal, and FM deviation ratio.
- RTV 109 SUPERHETERODYNE RECEIVERS is a thorough study of AM, FM, and FM stereo multiplex receivers.
- RTV 110 ANTENNAS is a study of the various types of antennas and transmission lines used in radio reception.
- RTV 111 ADVANCED SOLID-STATE DEVICES is a study of different types of solid-state devices such as BJTs, Zeners, SCR, UJT, Triac, Diacs, FET, MOS-FET, Op-Amps, and Integrated circuits.
- RTV 112 SOLID-STATE CIRCUIT DESIGN is a thorough study of the application of the many devices studied in RTV 111.
- RTV 113 SOLID-STATE SERVICING TECHNIQUES is a study of the testing and servicing of the many solid-state devices. The student will become proficient in testing the devices covered in RTV 111.
- RTV 201 INTRODUCTION TO TELEVISION is designed to explain the principles of scanning, synchronizing, and video signals.
- RTV 202 RF AMPLIFIERS, TV TUNERS, AUTOMATIC FINE TUNING explains the operation of the RF amplifier local oscillator and mixer in the TV tuner.
- RTV 203 VIDEO IF AMPLIFIER AND VIDEO DETECTORS explains the detector of the video signal, and the types and function of the video IF amplifier.
- RTV 204 AUTOMATIC GAIN CONTROL explains the operation of the peak and keyed AGC system.
- RTV 205 VIDEO AMPLIFIER CIRCUITS explains the function of video amplifiers, and the types of video amplifiers for monochrome and color sets.
- RTV 206 BLACK AND WHITE, AND COLOR PICTURE TUBES explains the theory of monochrome picture tubes and tri-gun color picture tubes and associated circuits.
- RTV 207 TV POWER SUPPLIES explains the requirements of low voltage power supplies.

- RTV 208 TV SYNCHRONIZING CIRCUITS explains the theory of sync and video separation and the use of sync pulses for the vertical and horizontal circuits.
- RTV 209 TV DEFLECTION OSCILLATORS AND OUTPUT CIRCUITS is a study of the development of deflection frequencies, waveforms, and high voltage used to reproduce a television raster for displaying the transmitted video signal.
- RTV 210 TV SOUND SYSTEM is a study of the FM modulated audio signal used in present television receivers. The methods of detection and the advantages of the FM sound system over an AM system are also covered.
- RTV 211 TV COLOR CIRCUITS is the study of the reproduction of practically all natural colors by mixtures of the three primary colors of the color picture tube, including a thorough coverage of the complex color signals and the methods of demodulation of the color signals for color reproduction.
- RTV 212 TV RECEIVER ALIGNMENT is a study of the use of alignment equipment and the correct procedures of aligning the sound, video IF, tuner and color sections.
- RTV 213 TROUBLESHOOTING COLOR TV RECEIVERS is a process of applying the color television theory to locate defective sections, defective stages, defective components and the replacement of defective components.
- OJT 250 ON-THE-JOB TRAINING may be substituted for 8th quarter when approved by instructor.
- MA 115 INTRODUCTORY APPLIED ALGEBRA-TRIGONOMETRY is a course which includes basic algebraic manipulation of constants and variables, solution of basic algebraic equations, percentages, ratios, proportions, scientific notation and an introduction to trigonometry, (solutions of right triangles). Applications in this course will be related to Radio and TV. Required of all Radio and TV students and prerequisite of MA 125.
- CF 101 CONSUMER FINANCE is a course designed to help the student become a better consumer. Budgeting, credit, and taxes are included in the course.
- CS 101 COMMUNICATION SKILLS is organized to develop the student's ability in written and oral communications, and to increase comprehension and study skills.



Welding



Welding

Course Objective

The Welding course is designed to prepare the student for employment at entry level in the occupational field of welding and to improve the skills of persons presently employed in the field.

Background Information

Instruction includes an understanding of the welding processes and their possibilities; a study of composition of various metals and the practical method of identifying and welding them; skill in working and handling the equipment with confidence and a proper regard for safety; the practice of economy; preparation and execution of welds; testing of completed work; and recognizing defects and helping to correct them.

Employment Opportunities

Many welders are employed in such manufacturing industries as automobile, shipping and aviation. Other graduates are employed by construction firms. Increasing metal-working industries and wider use of welding processes will continue to create positions for trained welders.

LENGTH OF COURSE: Three Quarters Ouarterly

ENTRANCE DATES: Quarterly Supply fee \$20 per month; Books \$25. Students must

purchase gloves and welding helmet at an additional cost of approximately \$20. Supply fee is due the first

of the month.

Prerequisites for Admission

- 1. Must be in good physical condition.
- 2. Must be free of any respiratory or eye ailments.
- 3. Must have the ability to learn to read blueprints.
- 4. Must be able to read on the sixth grade level.

WELDING COURSE OUTLINE

First Quarter:	Quarter Hours Credit
MA 101 — Applied Basic Math WLD 101 — Blueprint Reading WLD 102 — Arc Welding WLD 103 — Oxyacetylene Welding	$\frac{2.5}{20.0}$
Second Quarter:	
WLD 104 — Metallic Inert Gas Welding	10.0

CF 101 — Consumer Finance	$\frac{5.0}{30.0}$
Third Quarter:	
WLD 107 — Pipe Welding	15.0
WLD 108 — Tungsten thert Gas Welding	5.0
	30.0
*OJT 150 — On-the-Job Training	30.0

WELDING

- WLD 101 WELDING BLUEPRINT READING develops the necessary skill to interpret conventional trade drawings, plus a thorough understanding of abbreviations and symbols.
- WLD 102 ARC WELDING requires a knowledge of safety, metals, electrodes, power source, and welding in the flat, horizontal, and vertical positions.
- WLD 103 OXYACETYLENE WELDING includes a study of safety, lighting and adjusting the torch, and welding in the flat, horizontal, and vertical positions.
- WLD 104 METALLIC INERT GAS WELDING (MIG) requires a knowledge of consumable wire electrodes, shielding gases, and power supplies, welding in the flat, horizontal, and vertical positions.
- WLD 105 ADVANCED ARC WELDING is a continuation of WLD 102 with emphasis on overhead welding with E-6010 electrodes and all position welding with low hydrogen group electrodes.
- WLD 106 WELDING BLUEPRINT READING is a continuation of WLD 101.
- WLD 107 PIPE WELDING is designed to give the student practice in joining pipe sections. Pipe can be welded using the roll method to keep the welding in a flat position, or by the vertical and horizontal fixed positions where the pipe remains stationary.
- WLD 108 TUNGSTEN INERT GAS WELDING (TIG) familiarizes the student with hard-to-weld metals such as aluminum, stainless steel, and other metals.
- WLD 109 WELD TESTING is designed to show the student what may happen if defects in welding aren't eliminated, and proper procedure for passing certification test.
- MA 101 BASIC MATHEMATICS APPLIED presents an in depth review of basic arithmetic including whole numbers, decimals, fractions, percents, ratios, proportions, areas, volumes, and formulas as applied to the student's chosen field. Strong emphasis is placed on solution of pactical work problems. MA 101 or a satisfactory entrance score is required of all areas.
- CF 101 CONSUMER FINANCE is a course designed to help the student become a better consumer. Budgeting, credit, and taxes are included in the course.

