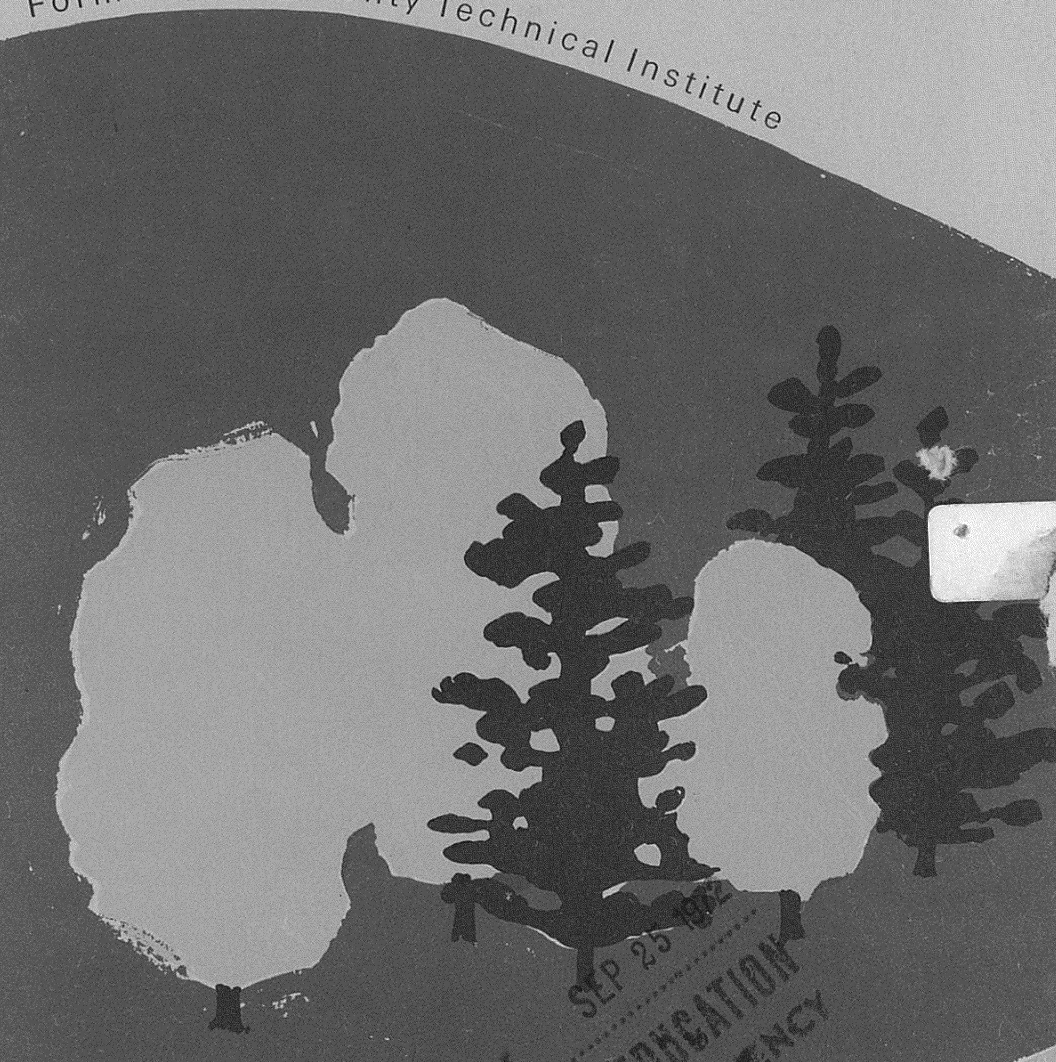
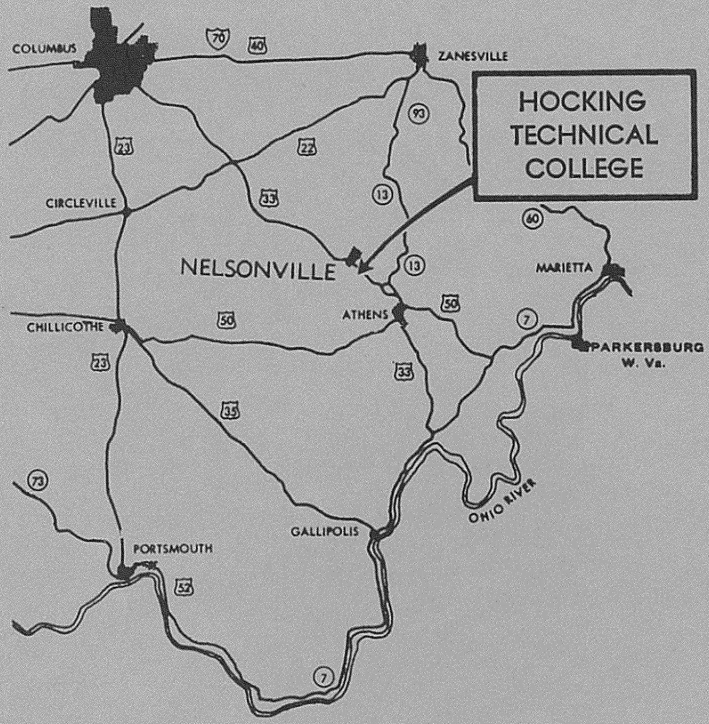
HOCKING TECHNICAL COLLEGE

HOCKING TECH,
Formerly Tri-County Technical Institute



NELSONVILLE, OHIO



where Hocking Technical College is located

Hocking Technical College is located on a campus one mile southeast of Nelsonville overlooking the Hocking River. It is easily accessable from all points in southern Ohio via U. S. route 33.

Nelsonville is serviced by Lake Shore Bus Lines. Nelsonville is 65 miles from Columbus, Ohio and 55 miles from Parkersburg, West Virginia.

HOCKING TECHNICAL COLLEGE

A Two Year Co-Educational College

Offering

ASSOCIATE DEGREE PROGRAMS AND TECHNICAL CERTIFICATES

General Information and Announcement of Courses

AN INSTITUTIONAL MEMBER OF THE AMERICAN ASSOCIATION OF JUNIOR COLLEGES

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James H. Patrick ..... *Dean-Director*

Frank W. Downhour ..... *Dean of Students*

George Radekin, Jr. ..... *Treasurer*

GENERAL INFORMATION

OBJECTIVES

Hocking Technical College's principal objective is to provide para-professional technical education to high school graduates of all ages. Complementing the technical courses will be appropriate general education courses at the associate degree level. Laboratories, staff, library facilities, etc., will be maintained and updated as necessary to meet the objectives of the school as well as state and national approving agencies.

Specific Objectives

1. Technical
   To provide adequate technical training which will permit students to enter their chosen para-professional occupation. To provide adult training and re-training as needed by business, industry, agriculture, and individuals.

2. Academic
   To furnish adequate opportunities in general and basic studies, in order to insure a balanced education.

3. Social
   To encourage the social development of students through interaction with technical groups, student government, student organizations and community projects

4. Psychological
   To create an environment in which the students grow in maturity and self-understanding.

5. Health and Recreation
   To arrange adequate health and recreational services through institutional or community facilities.

ADMISSIONS

Requirements

1. High school graduate or its equivalent.
2. Satisfactory recommendations (from school or employer).
3. An interest and ability in the field of training selected.
4. An interview at the college.

Special or Part-Time Students

1. Students who are not seeking an associate degree may enroll as special or part-time students.
2. Special students are high school graduates or non-high school graduates not carrying a complete load (less than 2/3 normal quarter-hour credit).
3. Special students may transfer to regular student status after they have satisfactorily completed 18 quarter hours.
4. Transcripts and records are not required for special student status.
5. A personal interview is required. Appointments will be arranged.
6. Tuition and laboratory fees for special students will be on a quarter-hour basis, not to exceed the normal tuition fee for a regular student.

Evening Division Students

1. Evening Division course offerings, fees, and registration dates are published separately about four weeks prior to the start of an Evening Division term.
2. All credit satisfactorily completed in the Evening Division Program is applicable to the degree program for full credit, unless otherwise noted in the Evening Division brochure.

TRANSFER CREDIT

Credit earned in other institutions may be transferred to Hocking Technical College, provided the course content is similar to the course for which credit is being sought, a grade of "C" or better was earned in the other course, and the following procedure is followed:

1. The student seeking credit must furnish an official transcript of the work taken.
2. A catalog course description of each course for which credit is being sought must accompany the transcript.

3. The student must apply for such transfer credit during the first quarter of residence at Hocking Technical College.

The Dean of Students and the appropriate Department Chairman will make a determination, concerning the transfer credit request, following the student's first quarter at Hocking Technical College.

Transfer credit appears as "CR" on Hocking Technical College transcripts, and no transfer grades are used in computing grade averages at Hocking Technical College.

BOOKSTORE

The bookstore is operated by the College for the convenience of the students. Students may purchase textbooks at the beginning of each quarter, and may sell textbooks that are to be reused.

WITHDRAWAL FROM SCHOOL OR CHANGE OF PROGRAM

To withdraw from school, add or drop a class, or change a technology, a student must follow a standard procedure: secure the appropriate form from the Student Records Office and follow the directions on the form. Unless this procedure is carefully followed, the student's records will be incomplete.

COUNSELING

Counseling services are provided to insure maximum results from the student's educational opportunities. Counselors are available to discuss academic, personal, and career problems. We urge all students to contact a counselor as soon as a problem arises. Early attention usually corrects problems. Counseling services can also be arranged by notifying an instructor. Also, students will be assigned to a faculty advisor for additional counseling. All instructors are also available and have regular office hours posted for student conferences.

FINANCIAL AID

Financial aid for students attending Hocking Technical College is available under several different programs and from a variety of sources. The primary basis for granting financial aid is financial need. If you are in doubt about qualifying for financial aid, or your need for financial aid, it is strongly suggested that you apply.

How to apply for financial aid:

1. Obtain and complete a Hocking Technical College Financial Aid Questionnaire (available from the Financial Aid Office at Hocking Technical College).
2. The Parents' Confidential Statement must be completed and filed with the College Scholarship Service. If you are an independent student, the Student's Confidential Statement must be completed.

Identification of Self-Supporting (or Independent Student):

A student is not eligible for consideration as an independent student for federal student financial aid if he:

1. Has been claimed or will be claimed as an exemption for federal income tax purposes by either parent, or any other person (except spouse), for the calendar year in which aid is received, and the prior calendar year, or
2. Has received or will receive financial assistance of more than $200 (including room and board) of any kind, from one or both parents, or from persons acting in loco parentis in the calendar year in which aid is received and the prior calendar year. A student is considered to have received more than $200 in assistance if he has resided with his parents for four months or more.

A student whose parents, or others acting in loco parentis, have died within the period discussed above is eligible for consideration as an independent student even if the above tests are not met.

Any other applications required for specific Financial Aid Programs such as Ohio Instructional Grants and Law Enforcement Grants can be obtained from the Financial Aid Office at Hocking Technical College.

Ohio Instructional Grants

An Ohio student planning to enroll or already enrolled in Hocking Technical College on a full-time basis may apply for an instructional grant. These grants vary from $90 to a maximum of $510, depending upon family financial circumstances. The student may obtain an application form from his or her high school or from Hocking Technical College.

To be eligible for an Ohio Instructional Grant a student must:

1. Be a resident of Ohio.
2. Be enrolled as a full-time undergraduate student in an eligible Ohio Institution of higher education.

3. Be making "appropriate progress" toward an associate degree or a bachelor's degree.

4. Not be enrolled in a course of study leading to a degree in theology, religion, or other field of preparation for a religious profession.

5. All applications must be sent to the Ohio Board of Regents.

Educational Opportunity Grants

A citizen of the United States living in any state or territory of the United States, with a gross family income of $9,000 or less, is eligible to apply for an Educational Opportunity Grant. Grants range from $200 to $1,000 per year.

College Work-Study Program

Students attending Hocking Technical College may apply for the College Work-Study Program, in which the student may work up to a maximum of 15 hours per week, the wages to be applied toward his expenses at Hocking Technical. Application for this program is made to the Financial Aid Office at Hocking Technical College.

Scholarships

Students attending Hocking Technical College are eligible for a wide variety of local, state, and national scholarship programs. *Information* on these can be obtained from your *high school guidance counselor.*

Guaranteed Student Loans

Guaranteed student loans may be obtained from local banks, savings and loan associations or credit unions that participate in student loan programs. Students who cannot obtain a loan from a local lending institution may apply directly to Hocking Technical College for a loan. If the family adjusted gross income is less than $15,000, the Federal Government will pay the interest on the loan while the student attends school and up to one year after graduation. At this time, the student starts repayment of the loan.

Law Enforcement Grants and Loans

All students enrolling in Police Science and Corrections Technologies are eligible to apply for special grants and loans. Employment as a law officer after graduation will cancel the student's obligation to repay aid received under this program.

Practical Nursing

Students enrolling in Practical Nursing are eligible to apply for National Institute of Health grants and loans. These range from $300 to $2,500, depending upon the student's financial need. Contact the Hocking Technical College Nursing Counselor.

Bureau of Vocational Rehabilitation (BVR)

Approximately ten percent of the students attending Hocking Technical College are receiving financial assistance from BVR. Contact your high school counselor for information or call the BVR office in your area.

Manpower Development and Training Act (MDTA)

Some students qualify for financial assistance under MDTA. Application for this type of aid is made through the local office of the Ohio State Employment Service.

Deadlines

Deadlines vary for the different programs. Since financial aid is granted on a "first come basis," it is recommended that you submit your application by May, in order to allow sufficient time for processing. The awarding of aid after this time will depend upon the existence of remaining funds.

Summary

All students applying for financial aid must complete a Hocking Technical College Financial Aid Form and a Parents' Confidential Statement. In addition, those students applying for an Ohio Instructional Grant must complete the Ohio Instructional Grant Application.

Students must be accepted for admission to Hocking Technical College before action will be taken on applications for financial aid. Since few students qualify as independent students (self-supporting), requirements for an independent student status should be carefully considered before application is made in this category. If you have questions, contact your high school counselor or the Financial Aid Officer at Hocking Technical College.

GRADING SYSTEM

A — Exceptional
B — Superior
C — Average
D — Below Average
N — No Credit
I — Incomplete
W — Withdrawal
X — Credit by Examination
K — Transfer Credit
T — Audit
S — Satisfactory
U — Unsatisfactory

Quality points are used for averaging grades.

For each credit hour of A — 4 points
For each credit hour of B — 3 points
For each credit hour of C — 2 points
For each credit hour of D — 1 point

Points are not assigned to the other grade designations and those hours are not used in computing a student's point average.

GRADUATION REQUIREMENTS

The requirements for graduation are as follows:

1. To graduate, a student must have a 2.0 overall accum and a 2.0 in his major.
2. Students must have credit (passing grade) for all courses required by the technology in which he is enrolled. The course requirements for each technology are listed elsewhere in this catalog under the section entitled Course Requirements.
3. A student who earns a grade average of 1.5 or less for any quarter is placed on academic probation. The student and parents will receive official notification of academic probation. Also the student is required to complete at least half the credit hours for which he is enrolled in a given quarter. Failure to meet this requirement can result in a reduction of the number of hours the student will be permitted to attempt.
4. The student is responsible for completion of all graduation requirements. Refer to the Student Handbook for information regarding graduation procedures.

A faculty advisor is assigned to each student to assist the student in carefully planning his program in order to comply with graduation requirements, but the student is held accountable for knowing the graduation requirements of his technology and complying with them.

THE CERTIFICATE PROGRAM

The Certificate of Technology is awarded to those students who complete only the technical courses in a given technology.

CREDIT BY EXAMINATION

Credit may be earned for courses by passing a comprehensive examination in that particular subject matter area. Only students who exhibit advanced skills or have appropriate experience may take the examination. Veterans and graduates of vocational high schools may wish to consider this possibility for advanced standing. Applications for the examination is made by the student to the Chairman of the Department involved. Not all courses lend themselves to credit by examination. In particular, courses requiring large amounts of lab work and field experience are difficult to evaluate in one examination. Therefore, the Dean/Director will determine what courses are subject to credit by examination.

REGISTRATION

Prior to the beginning of every quarter the student will receive, by mail, materials for registration. A pre-registration period is designated before the opening of any quarter and the student is urged to use this opportunity. Each quarter has one official registration day; at this time all who have not pre-registered must register. A $5.00 late registration fee will be charged after this day.

ATTENDANCE REGULATIONS

Regular attendance is required to satisfactorily complete a course. It is the student's responsibility to be punctual and in attendance for each class or laboratory meeting. Learning to be punctual and dependable is a definite part of the curriculum.

Illness or real emergencies are the only valid reasons for missing a class. Work can be made up only in case of such valid reasons for absences. Make-up work is the responsibility of the student and must be made up under the direction of the instructor and at his convenience.

TUITION AND FEES

Checks and money orders should be made payable to the Treasurer, Hocking Technical College. Payment may be made by BankAmericard. Students using veterans' benefits must apply to the Veterans' Administration for a Certificate of Eligibility and Entitlement.

*Fees**

Instructional Charge ** (full-time load 12-18 credit hours)	150.00	per quarter
Service Charge	25.00	per quarter
Application Fee (one time only)	10.00	
Registration Fee (first quarter only)	10.00	
Part-time Instructional Charge	15.00	per quarter hour
Room and Board (approximately)	900.00	per year
Surcharges		
Ohio residents outside Appalachian Region	5.00	per quarter
Students residing outside Ohio and outside the Appalachian Region	175.00	per quarter

REFUNDS

Tuition refunds will be made according to board policy, and then only for valid reasons that require the student to change his plans. Refund requests must be made in writing.

Quarter fees will be refunded according to the following schedule:

1. From the date on which the fees were paid until the first day of class—full refund less $25 for Fall Quarter—full refund less $10 for Winter, Spring and Summer Quarters.
2. 80% refund when withdrawal form is completed in the first week of the quarter.
3. 60% refund when withdrawal form is completed in the second week of the quarter.
4. 40% refund when withdrawal form is completed in the third week of the quarter.
5. 20% refund when withdrawal form is completed in the fourth week of the quarter.
6. No refunds after the fourth week.

*The College reserves the right to change any part or all of the tuition and fee schedule as need may require.

**Applies to students residing in the Appalachian region of the thirteen states that comprise the Appalachian Region.

Students dismissed by the college, or students leaving school without following withdrawal procedures, are not entitled to a refund.

Refunds will be processed through the college fiscal office and will require approximately 30 days for payment.

Refunds due to billing errors or incomplete classes (evening division) will be processed within one week of request.

Summer fees will be refunded according to the following schedule:

1. 80% refund when withdrawal form is completed by Wednesday in the first week of the quarter.
2. 60% refund when withdrawal form is completed by Saturday in the first week of the quarter.
3. 40% refund when withdrawal form is completed by Wednesday in the second week of the quarter.
4. 20% refund when withdrawal form is completed by Saturday in the second week of the quarter.
5. No refund after the second week.

STUDENT GRIEVANCES

Students have the right to register grievances and make requests of the college administration. The Student Handbook outlines the procedure for this.

STUDENT CONDUCT AND DRESS

The College's position on conduct and dress for its students is stated in the Student Handbook. Generally speaking, the College expects students to conduct themselves in a mature and responsible manner that conveys respect for themselves and the rights of others.

STUDENT GOVERNMENT

The student government is the official voice of the student body. It is the governing body for students and insures the rights of students to officially act on matters that concern them. The student government has the responsibility and power to undertake investigation of conditions and circumstances involving administration. They will also be involved in entertainment and outside activities. The Student Handbook provides more detailed information about student government.

LIBRARY

Hocking Technical College's library is a learning resource and should be used for this purpose. Students are urged to use the library often for their career and personal goals.

STUDENT ORGANIZATIONS

Computer Science Club

The club consists of students who are working on their third quarter of computer courses. They work together to raise money for extended educational field trips. The club also contributes to the social activities of Hocking Technical College by sponsoring dances, student-faculty basketball games and other activities.

Hiscans Club

This club is primarily a hiking and nature study club. However, many other outdoor activities, such as riflery, camping, and archery are included.

Gamma Gamma

This society is a chapter of the Tau Alpha Pi National Honor Society, and its members are those engineering students in the upper 4% of all students in their school, and having a 3.50 average or above. The objectives are to provide recognition for a high standard of scholarship, to promote and encourage scholastic achievement and to engender certain desirable qualities of personality, intellect, and character.

Forestry Club

Membership is open to all students in the Forestry Technology. Its purposes are social and educational. The club raises money by selling Christmas trees, fuel wood, and by planting trees for private land owners. The money is used for weekend trips to state parks in Ohio and West Virginia.

Hotel and Restaurant Management Club

The club was founded to provide students in the Hotel and Restaurant Management Technology with additional field trips and programs, which will help them in their chosen field. The club sponsors many income-producing functions which are used to finance these field trips.

American Ceramic Society (Student Branch)

The main function of the society is to disseminate scientific and technical ceramic information, primarily through the organization's publications and meetings. Student branches are formed where there are bona fide university and college students interested in the ceramic arts and sciences, and enrolled in at least ten hours per week at their schools.

Lambda Alpha Epsilon

Lambda Alpha Epsilon is a fraternity dedicated to the advancement of professional administration of Criminal Justice.
The Epsilon chapter of Hocking Technical College was the first fraternity of this nature in Ohio. Membership is open to pre-service students and in-service personnel, as well as to those who have served honorably in law enforcement or related fields.

ADVISORY COMMITTEES

General Advisory Committees

The Technical College District has appointed a general advisory committee, or as sometimes called a steering committee, made up of key personnel from a variety of lay organizations. These resource people advise the trustees and administration on such things as community feelings and needs. They help assure that the proper emphasis and attention is given to the various aspects of our educational program. They are another liaison between the school and the public the school serves. This advisory committee offers recommendations to the board of trustees and the school administration.

Technical Advisory Committees

A Technical Advisory Committee has been named for each technical area or cluster of technical areas. These committees, like the general committee are advisory only, not policy-making. These committees, made up of professional and technical people competent in their fields of specialty, work directly with administration and staff on curriculum needs, employers' viewpoints, up-to-date changes in industry, new equipment and process trends, recruitment ideas, and many more pertinent subjects. This committee insures the college of the latest in industrial and business developments by meeting several times a year for discussions and evaluation.

COMMUNITY SERVICES

Hocking Technical College offers a variety of flexible programs, which fall into the general categories of evening classes, out-reach classes, educational service programs, and seminars. These programs are a vital asset to the total educational enterprise. The college seeks to serve the total community.

A firm policy of the institution is that sincere consideration and effort will be given to meet the educational needs of any group. Through flexibility of various programs, the community is assisted in meeting the challenges of today's society. The general programs are:

Evening School Program

Each quarter a schedule of evening classes is offered at Hocking Technical College. Most of these courses carry standard college credit. However, certain courses are usually offered on the basis of public interest. The purpose of the evening program is to serve the community needs of: (1) acquiring skills to advance in one's present employment, (2) developing skills to change occupations, (3) gaining knowledge of one's personal interest, and (4) working towards an associate degree.

Evening technical courses provide adults with the opportunity to sample and acquire knowledge without sacrificing the security of present job and life patterns. Approximately twenty-five courses are offered each quarter. Usually a cross-section of technology is offered.

Also of interest to evening students are the certificate programs which have been formulated. Each technology has a group of ten technical courses and two elected courses that comprise a certificate program. Upon completion of these ten technical courses and two elected courses, the student is certified in that technical area.

Out Reach Program

Hocking Technical College provides accredited technical courses within private or other state institutions. If the employees of an industrial plant are in need of technically related education, Hocking Technical College is prepared to initiate technical courses on the site of that industrial plant. The major advantages of this type of program are: (1) group has common objectives, (2) individual can readily see the application of technical concepts to his own job, (3) convenience to the student, and (4) credits earned may still be applied

toward a certificate or an associate degree. However, the time involved is usually somewhat lengthened when compared to a full-time program.

Educational Service Programs

Hocking Technical College has an organized program of special presentations. Several presentations have been developed by each technology. All presentations are designed to be both enjoyable and educational. The presentations are flexible as to time and audience. As a branch of this program, Hocking Technical College also has an organized speaker's bureau which presents topics relating to technical education. Brochures are available through the community involvement division of Hocking Technical College.

Seminar Development Program

Hocking Technical College will develop seminars for interested groups on any topic consistent with its means. Seminars have been organized from one day to two weeks in duration, and also on the basis of periodic meetings over an extended period of time. With the construction of a hotel on the campus, ample facilities are available to meet the needs of groups up to two hundred on an overnight basis, and 600-800 on a day-by-day capacity. Services in seminar development, however, are not limited to our on-site facilities. Seminars can be organized at suitable sites within roughly a 50-mile radius of the institution. Seminar services include all communications with all participants, arrangement of meals and lodging, scheduling of conferences and conference materials and equipment, activities, and all financial arrangements. On all the above described programs and services, contact:

Communty Service Director
Community Service Division
Hocking Technical College
Nelsonville, Ohio 45764

HEALTH SERVICES

It is of paramount importance to have good health for a successful college career. The College Health Center is interested in assisting the student in maintaining good health.

The Health Center is in Room 603. A registered nurse, currently licensed in Ohio, is on duty Monday through Friday from 8:30 a.m.

to 4:00 p.m., D. R. Johnson, M.D., is the college physician. The nurse is under the supervision of the physician. He has approved certain standing orders which the nurse may use for emergency illness and injury. The physician is the medical advisor for the College.

There is *no charge* for services rendered at the College Health Center. If treatment is necessary from a hospital or from a physician's office, there is a charge at the patient's expense.

STUDENT HOUSING

Housing is available in on-campus mobile homes (4 males per trailer), and in private homes and trailers, for males and females, in and around Nelsonville. Hocking Tech does not yet have dormitories.

Room rent for housing is approximately $125 - $168 per quarter, payable only to the landlord. At some residences, an advance damage deposit is required. This is *in addition* to the quarterly charges. In most cases, an advance deposit of $40 (non-refundable) will be required to hold the room. This will be applied toward the first quarter's rent. However, failure to keep the commitment requires that the $40 be forfeited.

Quarterly rates include all vacation days. Weekly, monthly or quarterly payments are to be arranged with the landlord. Kitchen privileges are usually offered at no extra cost. Meals in the school cafeteria (noon meal only), and restaurants will be approximately $12 per five-day week. Room and board are not available.

BUSINESS TECHNOLOGIES

Accounting

Computer Science

Hotel-Motel Management

Restaurant Management

Retail Management

Secretarial Science

ACCOUNTING TECHNOLOGY

Description of Technology

Accounting is concerned with measuring economic activity and communicating the results to interested persons. It is also useful in the administration of economic activity. Specifically, it is the art of gathering, summarizing, interpreting, and reporting transactions and events of financial significance which pertain to a particular business or accounting entity. This data is stated in terms of money for a particular date or period of time. In recent years, accounting has been useful in measuring the operational efficiency of a specific unit and in providing information used in decision making. To do this, it becomes necessary to learn many accounting rules and techniques and to apply them to a variety of situations.

Possibility of Future Employment and Advancement

There are four main areas for future employment. These include: private organizations, governmental agencies, public accounting firms, and teaching. Within each of these areas there are several possibilities.

Advancement is based on persistence, ability, and drive as well as technical competency. An individual who has these qualities may advance to an accounting supervisor, usually after several years of experience.

Equipment Provided

Accounting machines, billing machines, rotary calculators, adding machines, electronic calculators, and posting boards.

ACCOUNTING TECHNOLOGY

Course No.	*General Requirements*	*Cr.*
1010	Communications I	3
1011	Communications II	3
1012	Communications III	3
0080	Political Science	3
0053	Sociology	3
0075	Speech	3
0050	Psychology	3
	Elective	3

Course No.	*Basic Requirements*	*Cr.*
1022	Math II	5
1026	Math 21	5
1230	*Accounting I	5
1231	*Accounting II	5
0040	Economics I	3
0041	Economics II	3
0219	Business Law	3

Course No.	*Technical Requirements*	*Cr.*	*Pre-Req.*
0221	*Survey of Data	3	
0242	*Bus. & Acctg. Machines	2	
1299	*Computer Concepts	2	
1232	*Accounting III	5	1231
2233	*Accounting IV	4	1232
2260	*Accounting V	4	2233
1236	*Automated Data Systems	4	
1201	Internship	12	
1200	Special Problems	3	
2235	*Payroll Accounting	4	1231
2218	*Tax Accounting	4	1232
2234	*Basic Cost	4	2233
2264	*Funds Accounting	4	2233
2261	*Advanced Cost	4	2234
2263	*Retail Accounting	4	2233
2262	*Auditing	4	2260
2237	Principles of Finance	3	

***These courses will be assigned a lab time.**

0221 *Survey of Data:* This course covers the gathering, handling, and converting of data to an automatic system. Various base numbering systems and logic are stressed.

0242 *Business & Accounting Machines:* Operation of ten-key adding machines, mechanical calculators, electronic calculators, and accounting machines. Demonstrations of new machines. Use of business forms in the application of machine skills to the solution of business and accounting problems.

1299 *Computer Concepts:* The computer and basic principles of its operation are introduced. Various types of computers and peripheral equipment are discussed. Flowcharting and programming techniques are studied and used.

1232 *Accounting III:* Accounting for bonds, departments, and branches. Introduction to cost accounting, including job order, process, and standard cost systems. Managerial uses of accounting. Supplemental financial statements and financial statement analysis.

2233 *Accounting IV:* The first course at the intermediate level. Study of accounting theory, financial statements, inventories, cash, receivables, intangible assets, and insurance. Problem solving is emphasized.

2260 *Accounting V:* A continuation of intermediate accounting. The acquisition and use of tangible fixed assets. Current and long-term liabilities, corporate capital, investments, incomplete records, and error correction. Problem solving is emphasized.

1236 *Automated Data Systems:* This course is specifically designed for the accounting student and will introduce the student to one of the many computer manufacturer supply programs.

This course requires that the student have a prior knowledge of basic card punching data processing techniques. Such things as general ledgers, accounts receivable, etc. will be programmed by the student. Extensive lab time will be made available to the student for this course.

1201 *Internship:* A student who earns internship credit will be one working in a data processing environment doing a job which requires the learning of some of the skills in his curriculum.

He will be required to turn in a paper on his particular area of work and be evaluated by his supervisor.

1200 *Special Problems:* Any student requiring credit for a special area of interest can receive credit through special problems.

A student and an instructor will define the area and establish certain requirements or courses which must be accomplished for the issuance of credit.

2235 *Payroll Accounting*: Laws affecting payroll accounting. Computing and paying wages and salaries. Payroll taxes. Payroll records and systems. Payroll entries and projects.

2218 *Tax Accounting:* Emphasis is upon Federal income tax for individuals, business proprietorships, and business partnerships. An introduction to corporate taxes. Special topics.

2234 *Basic Cost:* Includes basic concepts, terms, entries, records, reports, procedures, and problems. Accounting for materials, labor, and overhead.

2264 *Funds Accounting:* Fundamental principles of accounting for government and other non-profit entities. This includes illustrations of the cash and accrual bases of accounting. Applications to city funds, hospital funds, school district funds, state and federal government funds. Financial statements and case studies.

2261 *Advanced Cost:* Job order and process cost accounting systems. Budgeting and standard cost accounting, including variance analysis. Use of cost accounting for decision making. Standard cost practice set.

2263 *Retail Accounting:* The analysis of financial operating areas of retail establishments. Operating methods used to determine profits, return on investment, and gross margin. Systems and control. Use of retail method of inventory. Leased department and branch accounting. Budgeting. Cash flow and forecasting. Case studies.

2262 *Auditing:* The field of auditing and public accounting. Audit objectives, standards, evidence, and procedures. Internal control. Studies and application of specific assets, liabilities, capital and revenue accounts through the use of an audit case. Starting and concluding an audit.

2237 *Principles of Finance*: This is a survey course dealing with business and personal finance. It includes study of credit practices, financial institutions, insurance, investments, securities markets and financial analysis.

COMPUTER SCIENCE TECHNOLOGY

Description of Technology

The study of fundamentals of unit record wiring, application, and programming are offered. Most of the students' time in this area will be spent writing, running, and debugging computer programs in all four popular languages. The languages offered are Cobol, Fortran, Neat 3, and RPG.

Possibility of Future Employment and Advancement.

Start— Computer Operator or Programmer

Advance— Systems Analyst, Program Analyst, Systems Programmer, Management.

Equipment Provided

Unit Record Equipment, NCR Century 100 Computer

COMPUTER SCIENCE TECHNOLOGY

Course No.	*General Requirements*	*Cr.*
1010	Communications I	3
1011	Communications II	3
1012	Communications III	3
0053	Sociology	3
0075	Speech	3
0050	Psychology I	3
0080	Political Science	3
	Elective	3

Course No.	*Basic Requirements*	*Cr.*
1022	Math II	5
1026		
or		
1027	Math (Op. 21 or 22)	5
0291	*Accounting I	3
0292	*Accounting II	3
0040	Economics I	3
0041	Economics II	3
0219	Business Law	3
		23

Course No.	*Technical Requirements*	*Cr.*	*Pre-Req.*
0221	*Intro. to Data	4	
1223	*Computer Concepts	4	
1270	*Program Analysis I	2	
1271	*Program Analysis II	2	1270
1226	*Programming I	5	1223 & 0221
1227	*Programming II	5	1226
1214	*Systems Analysis I	2	1270 & 1271
1225	*Documentation Techniques	2	1226
1203	Internship	12	
1202	Special Problems	3	
2286	Bus. Org. & Mgt.	3	
2228	*Cobol I	5	1223
2229	*Cobol II	5	2228
2251	*Data Systems I	4	1226
2252	*Data Systems II	4	2251
2253	*Data Systems III	4	2252
2293	*Cost Accounting	3	0291 & 0292
2272	*RPG/Fortran	5	1223

***These courses will be assigned a lab time.**

COMPUTER SCIENCE TECHNOLOGY

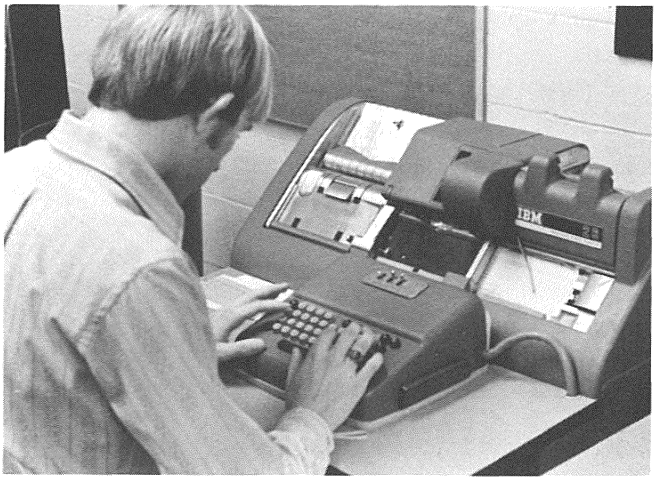
0221 *Introduction to Data:* An introduction to the punch card approach to Computer Science which encompasses the theory, wiring and operation of the keypunch, sorter and the interpreter. Problem solving techniques will be introduced along with system and program flowcharting.

1223 *Computer Concepts:* The computer and basic principles of its operation are introduced. Various types of computers and peripheral equipment are discussed. Flowcharting and programing techniques are studied and used.

1270 *Program Analysis I:* A study of different forms of input-output media and their development and uses in the data processing cycle. Card formats, print formats, and disk formats will be discussed. The layout of input-output data as related to machine functions will be analyzed.

1271 *Program Analysis II:* This course will concentrate on the taking of the input to the program and the steps necessary in its analysis to produce the designed output. Included in the curriculum will be methods of problem analysis decisions, tables, and flow charting.

Considerable emphasis will be placed upon open and closed sub-routines in program coding.



1226 *Programming I:* This course consists of the study of a computer language which is closely related to actual machine instructions. During this quarter particular emphasis will be placed upon the use of the input-output devices and the manipulating logic required for the creation of reports.

Organization of data use which affects the operating speed of the computer and its effect upon storage data will be discussed and demonstrated. Extensive lab time will be made available to the student for this course.

1227 *Programming II*: This is the continuation of Programming I. The student will go deeper into the use of a closely related machine language. During this quarter the student will be required to build and reference various tables within programs. Also, programs will be written which utilize storage and retrieval of data from magnetic media.

Extensive lab time will be made available to the student for the course.

1214 *Systems Analysis I:* The theory of systems and sub-systems interaction, as well as feedback and control loops will be explored. Various methods of investigation and interview techniques will be discussed.

The student will be given a background which will help him in the formation of the hypothesis with which he will work in the solving of an actual case study.

1225 *Documentation Techniques*: Documentation Techniques involve the use of various methods of recording data by which the programmer analyzes those steps required for the completion of a given computer run.

The student will design and study those forms designed by others for use in documenting the basic unit record of all data preparation steps. They will study the proper methods of documenting computer set up runs.

A project will be completed during this course, which includes all materials found in a normal computer run book; some of which will have prepared during a previous quarters' work.

1203 *Internship:* A student who earns internship credit will be one working in a data processing environment doing a job which requires the learning of some of the skills in his curriculum. He will be required to turn in a paper on his particular area of work and be evaluated by his supervisor.

1202 *Special Problems:* Any student requiring credit for a special area of interest can receive credit through special problems. A student and an instructor will sit down and define the area and establish certain requirements of courses which must be accomplished for the issuance of credit. For example, special programs may be required for administrative use for which the student can earn special credit.

2286 *Business Organization and Management:* A general survey of business organizations to familiarize the student with business organizational structures and its relationship to management. Line, staff, and management by exception will be covered in detail.

2228 *Cobol I:* This is the first part of a two part study of the Cobol Language (American National Standard) and its implementation into a business environment. The student will use the Cobol Language as a problem-solving tool. Special areas covered are file handling, table handling, and sequential accessing with sequential processing.

2229 *Cobol II:* The second part of a two part study of the Cobol Language (American National Standard) as used in the business environment. The problem-solving approach is still used with special areas covered such as random accessing with sequential processing, indexed sequential processing, two and three dimensional table handling and overlay processing.

2251 *Data Systems I:* This course introduces the student to the compiling process and its complexities. It delves into detail as to what happens from the time the source program is read into the computer until the computer is ready to process as an object program.

The computer manufacturer supplies each user with programs known as utility programs. The use of these utility programs is explored in some depth. Extensive lab time will be made available to the student for this course.

2252 *Data Systems II:* This is a study of various hardware devices available for the computer, their practical applications, and relative cost factors.

2253 *Data Systems III:* Each computer manufacturer supplies each user with package programs. These programs were written to perform specific jobs, but must be modified for the exact installation where they are used.

During the course, the student will take an actual program package as received from the manufacturer, modify it to fit the college's computer configuration and implement and run live data on it. Extensive lab time will be made available to the student for this course.

2293 *Cost Accounting:* Includes basic concepts, terms, entries, records, reports, procedures, and problems. Accounting for materials, labor, and overhead.

2272 *RPG/Fortran:* The normal business programmer will not have extensive contact with buzz languages or scientific languages. However, they do need to know of their existence.

During the first six weeks of the quarter, the student will learn how to write programs in report program generator. He will focus his attention on Fortran and write basic analytical type Fortran programs. Extensive lab time will be made available to the student for this course.

RESTAURANT MANAGEMENT TECHNOLOGY

The restaurant management technology is designed to equip the student with the basic communicative skills and technological background which will enable him to instruct and supervise a quality establishment. The student's work will include supervision in sales and reservations, front-desk operations, auditing and related areas. He must identify and solve problems in human relations, sales and merchandising, to maintain quality service.

The Restaurant Management Program is a part of the Hotel-Restaurant Technology. The student's work will include: menu planning, purchasing and merchandising, and controlling the records of an operation.

Possibility of Future Employment and Advancement

Assistant manager—chain operated motor lodge or food service.
Apartment—housing management.
Front office manager.
Dining room host or hostess.

Equipment Provided

NCR or Monroe Sweda hotel posting machine.
Hotel-Restaurant training complex. (under construction).

HOTEL-MOTEL MANAGEMENT TECHNOLOGY

Course No.	*General Requirements*	*Cr.*
1010	Communications I	3
1011	Communications II	3
1012	Communications III	3
0053	Sociology	3
0075	Speech	3
0050	Psychology	3
0080	Political Science	3
	Elective	3

Course No.	*Basic Requirements*	*Cr.*
1022	Math II	5
1030	Intro. to Business	3
0291	*Accounting I	3
0292	*Accounting II	3
0040	Economics I	3
0041	Economics II	3
2534	Marketing	3
0219	Business Law	3

Course No.	*Technical Requirements*	*Cr.*	*Pre-Req.*
1625	*Intro. to Hosp. Indus.	5	
1635	*Quality Food Prep.	5	
1681	*Hotel-Motel Operations	5	
1684	*Posting & Auditing	4	
1630	*Purch. for Food Lodg. Est.	5	1635
1615	*Food & Lodg. Merch.	4	1635
1690	Internship	12	

1693	Special Problems	3	
2610	*Food & Beverage Mgt.	5	1681 & 1684
2294	*Accounting for Hotel & Restaurant	4	1681 & 1684
2682	*Hotel Management I	5	1681 & 1684
2683	*Hotel Management II	5	15 hrs. of 2682
0221	*Survey of Data	3	
2686	*Facilities Prog. & Plan.	5	15 hrs. of 2682

*These courses will be assigned a lab time.

HOTEL-MOTEL MANAGEMENT

1625 *Introduction to Hospitality Industry*: This course will expose students to actual experiences of the food service industry to see if they have the desire and stamina to study the complete operation. They will be aware of the skills and abilities they need through field trips, discussions, and personal contact with professional speakers. Industries, restaurants, nursing homes, hospitals, schools and dormitories will be visited.

1635 *Quality Food Preparation:* This course will prepare students for quantity cooking that will start in second quarter. They will learn to prepare different white and cheese sauces, soups and stocks, vegetable preparations, potato preparations, gravies and other basic recipes to begin serving. Also, personal hygiene and sanitation, weights and measures will be reviewed.

1681 *Hotel-Motel Operations:* Students will continue principles of management of hotel-motel operating problems; a survey of personnel needs and equipment needs; and a study of the various departments within a hotel.

1684 *Posting & Auditing:* Using the principles of accounting theory, students will learn the practical application of posting and auditing, hotel registration, billing, and the use of posting machines.

1630 *Purchasing for Food Lodging Establishments:* Course includes USDA codes, grading, regulations, and classifications of meats, produce and dry-goods; the development of uniform specifications; food and supplies for individual operations; methods of receiving and storing foodstuffs. The restaurant supply industry will be discussed, and there will be guest speakers and field trips.

1615 *Food & Lodging Merchandising:* The study of services offered to individual dining room customers, as well as groups; banquet and catering services, receptions, meeting facilities for civic and fraternal organizations; and parking facilities. Also covered will be the restaurant as part of a motel, a supper club, a transportation facility service, and a carryout or home delivery service.

1602 *Internship:* This course will provide the student with practical on-the-job training, relative to future employment.

1601 *Special Problems:* This course will be held by special arrangement with a student's instructor. It will provide an opportunity for individual research, relative to the student's major area of study.

2610 *Food & Beverage Management*: Determination of the kind of food service best adapted to the needs of particular institutions. Physical layouts, flow of foods from preparation to consumer, and effective merchandising will be discussed.

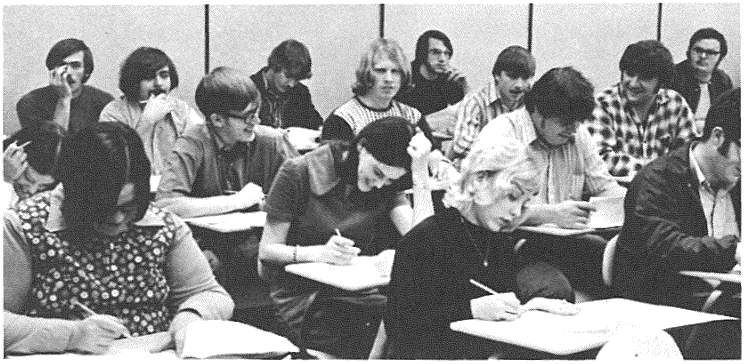
2294 *Accounting for Hotel & Restaurant:* This course will cover records needed in quantity food service operations, and their importance to budgeting and financial control; consideration of tools used to affect savings in food costs, such as waste prevention, efficient purchasing, special techniques of standardizing portions, security measures; and the relationship of management to labor cost control by means of simplification of tasks, and the effective use of employee time.

2683 *Hotel Management I:* A study of the principles of management. First course covers management of personnel and routine managerial duties.

2683 *Hotel Management II:* A study of the organization and function of the sales department; public relations and advertising; and promotion and expansion of facilities.

0221 *Survey of Data:* The handling of business data from the simplest of manual methods to the most sophisticated computer method is covered. Various manufacturers' equipment is discussed, as well as the economic factors involved in converting to electronic data processing.

2686 *Facilities Programming & Planning:* The study of food service equipment; safety and cost relationships to this equipment; and banquet planning for effective use of facilities and personnel.



RETAIL MANAGEMENT TECHNOLOGY

Description of Technology

This technology is designed to prepare students for the general areas of marketing, retail sales, direct sales, and sales management. Emphasis is placed on store operations, sales techniques, and general business operation.

Possibility of Future Employment and Advancement

The possibility of future employment and advancement is excellent, provided the student or graduate is willing to grow with the position, continue study, and relocate with his different assignments.

RETAIL MANAGEMENT TECHNOLOGY

Course No.	*General Requirements*	*Cr.*
1010	Communications I	3
1011	Communications II	3
1012	Communications III	3
0050	Psychology	3
0080	Political Science	3
0075	Speech	3
0053	Sociology	3
	Elective	3

Course No.	*Basic Requirements*	*Cr.*
1022	Math 11	5
1026	Math 21	5
1030	Intro. to Business	3
0040	Economics I	3
0041	Economics II	3
1230	*Accounting I	3
1292	*Accounting II	3
0219	Business Law	3
2540	*Merchandising Acctg. (1230 & 1231 pre-req.)	3

Course No.	*Technical Requirements*	*Cr.*	*Pre-Req.*
1510	*Sales I	3	
1511	*Sales II	3	1510
1520	*Retailing I	3	
1521	*Retailing II	3	1520
1714	*Typing & Business Machines	2	
0221	*Survey of Data	3	
1599	*Sales Promotion	3	1520 & 1521
1590	Internship	12	
1594	Special Problems	3	
0217	*Credits & Collections	3	1520 & 1521
2534	*Marketing I	3	
2535	*Marketing II	3	2534
2525	*Retail Buying I	3	
2526	*Retail Buying II	3	2525
2550	*Principles of Management	3	
2288	Personnel Management	3	2550
2560	*Sales Management	3	1510 & 1511
2582	Principles of Finance	3	
2580	*Store Operations	3	

*These courses will be assigned a lab time.

RETAIL MANAGEMENT TECHNOLOGY

1510 *Sales I:* A study of selling, including preparation for selling, selling processes, and an introduction to sales management. The basic philosophy of this course is to gain an understanding of the salesman's obligation (1) to himself, (2) to his company, and (3) to his customer.

1511 *Sales II:* This is a continuation of Sales I, including selling techniques used in various areas of business problems, case history, and practical application of principles and techniques used in solving these problems. The course is further complemented by field survey research projects and an introduction to creative selling.

1520 *Retailing I:* A study of the principles and methods of retail management, including organization, policy making, location, operation, selling services, records and inventory.

1521 *Retailing II:* This is a continuation of Retailing I, with emphasis on expense control, budget planning, price control, insurance, types of sales, sales promotion and the coordination of store policies and customer services.

1714 *Typing & Business Machines:* An introduction to typing and business machines, such as adding machines, calculators, etc.

0221 *Survey of Data:* This course covers the gathering, handling, and converting of data to an automatic system. Various base numbering systems and logic is stressed.

1599 *Sales Promotion:* A study of the various sales promotion activities, including advertising, retail display and the continuation of an effective sales promotion program.

1590 *Retail Internship:* Supervised on-the-job application of knowledge and skills acquired in the classroom. Students will discuss their experiences in class. The tasks performed by the student on the job, for the most part, will not involve supervisory or managerial functions. In this process, however, they should form attitudes which will allow them to think and act like a manager.

1594 *Special Problems:* Special problems confronted by the student on the job are prepared in report form to be submitted at the retail seminars held at the College four times during the internship quarter. Additional projects are required to be completed during his internship quarter. Through these projects, the student is expected to become familiar with company policies and procedures and the methods of establishing a merchandise emphasis or a merchandise department.

0217 *Credits & Collections:* An analytical study of credit risk, credit control, and management of collections.

2534 *Marketing I*: A study of marketing fundamentals, consumer behavior, retailing and wholesaling, and manufacturing structures. The functions performed in marketing, marketing policies, a critical appraisal of the field of marketing, and the use of the case method approach will be emphasized.

2535 *Marketing II*: A study of marketing functions and fundamentals, consumer behavior, marketing research, marketing policies and a critical appraisal of marketing.

2525 *Retail Buying I:* A study of the nature, functions, and terminology of merchandising; merchandise information, and decisions in buying.

2525 *Retail Buying II*: Continuation of Retail Buying I, with emphasis on expense control, budget planning price control, insurance, types of sales, sales promotion and the coordination of store policies and customer services.

2550 *Principles of Management:* The study of a realistic approach to the principles and practices of management.

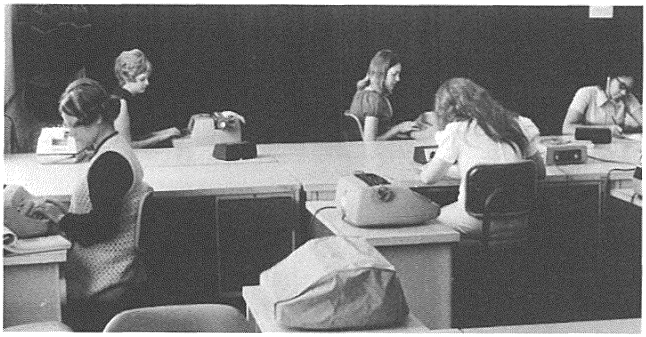
2288 *Personnel Management:* This course will emphasize the philosophy and policy considerations that are basic to sound personnel programs. The majority of students taking this course will be performing line supervisory functions rather than personnel management functions in their work programs; therefore, the objective is to provide the broad understanding needed by executives. Material will be presented in analytical rather than a descriptive style.

2560 *Sales Management:* A course to acquaint the student with the total marketing and sales effort. Included are: selection of personnel, use of records and reports, planning the sales effort, the sales function in the structure of a company, the sales manager's basic duties and personal relationships, training programs, management goals and programs, motivation of sales personnel, compensation plans, sales call reporting, accounting for expenses, territory analysis, selling management on new ideas, and market research.

2582 *Principles of Finance:* This course will teach the student to recognize problem areas in credit, credit borrowing, budgeting, relationships with financial institutions, savings, insurance, real estate and taxation.

2580 *Store Operations:* This course will provide an overall survey of operational procedures and problems encountered in the day to day operations of general merchandise, chain stores, department stores and discount stores.

The management approach will be emphasized throughout the course with the use of the case problems, and projects. Field survey reports will be required. Students will use their cooperative work experience as a basis for analyzing appropriate problems in operational and merchandising divisions of the enterprises.



SECRETARIAL SCIENCE TECHNOLOGY

Description of Technology

This technology was developed to give the student the qualifications to hold a job in an executive office. The graduate will be trained to accept responsibilities and to understand the operation of a business. The training will be modern with emphasis on the continuing changes in business and the importance of keeping up to date. Skill and speed are to be developed to a professional level.

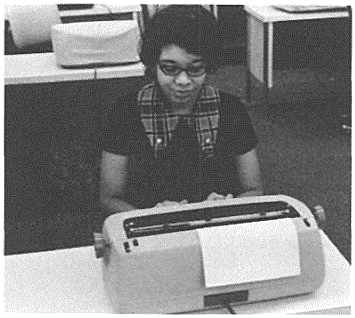
Possibility of Future Employment and Advancement

Many positions are available for a well-trained, highly skilled secretary. The expanding economy for business, professional and scientific services offers unlimited opportunities for secretaries.

Advancement in a secretarial position depends largely upon the individual's ability and initiative.

Equipment Provided

Typewriters
Dictation and Transcribing Equipment
Adding Machines and Calculators
Duplicating Equipment
Automatic Typewriter



SECRETARIAL SCIENCE TECHNOLOGY

Course No.	*General Requirements*	*Cr.*
1010	Communications I	3
1011	Communications II	3
1012	Communications III	3
0050	Psychology	3
0075	Speech	3
0053	Sociology	3
0080	Political Science	3
	Elective	3

Course No.	*Basic Requirements*	*Cr.*
1022	Math II	5
1030	Intro. to Business	3
0291	*Accounting I	3
0292	*Accounting II	3
0040	Economics I	3
0041	Economics II	3
0219	Business Law	3

Course No.	*Technical Requirements*	*Cr.*	*Pre-Req.*
1240	*Typewriting I	3	
1241	*Typewriting II	3	1240
1248	*Typewriting III	3	1241
1245	*Shorthand I	4	
1246	*Shorthand II	4	1245
1247	*Shorthand III	4	1246
1242	*Business Machines	2	
1215	*Sec. Office Procedures	2	
1205	Internship	12	
1204	Special Problems	3	
0242	*Bus. Machines & Duplicating	3	
0221	*Survey of Data	3	
0217	*Credits & Collections	3	
2216	*Shorthand Dict. & Trans.	3	1247
2283	*Financial Records & Reports	3	
2249	*Data Procedures	3	
2280	*Office Organization & Mgt.	3	
2281	*Spec. Prob. in Transcription	5	
2282	*Secretarial Seminar	3	
2284	*Tech. Secretarial Skills	3	2216
2285	*Special Typing Problems	3	

***These courses will be assigned a lab time.**

SECRETARIAL SCIENCE TECHNOLOGY

1240 *Typewriting I:* This course is planned for beginning typing students at college level. Those who have had no previous training in typing begin by learning the keyboard. The course offers a quick review of elementary typing knowledge to students with previous training and then allows them to progress, as much as possible, at their own rate.

1241 *Typewriting II:* A continuation of Typing I, to improve speed and accuracy, and increase skill in production of business letters, tables, forms, and reports.

1248 *Typewriting III:* A continuation of Typing II, to improve speed and accuracy and increase skill in the production of business letters, tables, forms, reports, dittos and stencils.

1245 *Shorthand I:* This course is planned for the beginning shorthand student at college level. The student with no knowledge of shorthand begins by learning to construct basic shorthand outlines. Those with prior training may progress at their own rate after a review of basic principles. This is possible with the use of an eight-channel tape system and individual headsets (EFI Audion Notebooks).

1246 *Shorthand II:* A continuation of Shorthand I, this course includes brief form review, timed dictation, theory review, and transcription of business letters. The wireless shorthand laboratory is extensively used in speed development.

1247 *Shorthand III:* Using the shorthand laboratory, speed is further increased in this course. Included are longer and more difficult business letters for transcription.

1242 *Business Machines:* A general survey of office equipment, including adding, calculating, transcribing, and duplicating machines. This course develops a working knowledge of their basic operations.

1215 *Secretarial Office Procedures:* A course to acquaint the student with the duties of a secretary in a modern office. Appropriate conduct and dress are included.

1205 *Internship:* This course will provide the student with practical, on-the-job training relative to future employment.

1204 *Special Problems:* This course will be held by special arrangement with an instructor in the student's particular technology. It will provide an opportunity for individual research in the student's major area of study.

0242 *Business Machines and Duplicating:* An advanced course which gives the special applications of various business machines and stresses the use of duplicating machines, including the offset duplicator.

0221 *Survey of Data:* This course covers the gathering, handling, and converting of data to an automatic system. Various base numbering systems and logic are stressed.

0217 *Credits & Collections:* Fundamental principles and procedures in credit and collection are emphasized, to provide a better understanding of credit procedures, concepts, principles, and job activities and responsibilities.

2216 *Shorthand Dictation & Transcription:* A continuation in shorthand offering more advanced training by using office style dictation and material which requires editing and revising.

2283 *Financial Records & Reports:* A course giving the various filing procedures commonly used in business and industry, such as alphabetic, numeric, Kardex and geographic systems. Methods of handling financial records and reports are included.

2249 *Data Procedures:* This course is designed specifically for secretaries so that they might gain the necessary knowledge required when working with data processing personnel.

Such things as vocabulary skill building, data processing standardized forms, and methods of procedure writing will be discussed. The student, as part of the course, will be required to develop and document some simple data processing procedures.

2280 *Office Organization & Management:* Covers the basic principles of office management as applied in the small or large office; functions of the office manager; organization of the office; office layout; manuals and reports; office procedures; work measurement; office forms and budgeting control.

2281 *Special Problems in Transcription*: This course allows the student to concentrate on the particular competency which she needs to improve. Special attention is given to helping the student acquire the ability to

transcribe her dictation into copy that is accurate and grammatically correct. Dictation will include terminology from the fields of medicine, law, engineering, insurance and education.

2282 *Secretarial Seminar:* This course includes advanced study and research conducted by a small group in problems of the executive secretarial field.

2284 *Technical Secretarial Skills:* Emphasizes the dictation and transcription of technical material including that of law, medicine, aerospace, electronics, and nucleonics.

2285 *Special Typing Problems:* The objective of this course is to have the students overcome their own weaknesses in typing. Proficiency should be developed in the use of the Flexowriter and the executive typewriter. Secretarial projects of unarranged, unedited material are used. Typing speed and accuracy are developed by the use of the Diatype analyzers and special exercises.

ENGINEERING TECHNOLOGIES

Ceramic Engineering

Drafting & Design

Electronic Engineering

Industrial Engineering

Mechanical Engineering

Broadcasting

BROADCASTING TECHNOLOGY

Hocking Technical College's objective will be to educate and train para-professionals in the broadcasting technical area, with professional engineers and management personnel.

Opportunities exist in:

- Radio Stations
- Commercial TV Stations
- Educational TV Stations
- Video Tape Stations
- Sound Reproducing
- Recording Companies
- CATV (Cable TV) Companies

BROADCASTING TECHNOLOGY

General Requirements	*Cr.*	*Basic Requirements*	*Cr.*
1010 Communications I	3	1020 Math 02	1
1011 Communications II	3	1024 Math 12	5
1012 Communications III	3	1028 Math 22	5
0050 Psychology	3	1032 Math 32	5
0053 Sociology	3	2042 Math 42	5
0080 Political Science	3	1150 Physics I	3
0075 Speech	3	1151 Physics II	3
0040 Economics	3		

Technical Requirements	*Cr.*
1131 Elements of D. C. Circuits	6
1140 Engineering Drawing I	3
1132 A. C. Circuits	4
1145 Electrical Measurements	3
1152 Electronics I	4
1109 Internship	12
1110 Special Problems	3
1165 Broadcast Instruments & Measurements	4
2137 Electronics Process I	2
2153 Electronics II	4
2195 Fortran	3
2154 Electronics III	4
1167 Federal Broadcast Regulations	2
1168 Broadcast Equipment I	3
1169 Broadcast Equipment Maintenance	4
2143 Electrical Drawing	3
1170 Communications Systems & Circuits	2
1172 Broadcast Equipment II	4
2170 Communications Systems	4
1173 Broadcast Equipment Maintenance II	4

1131 *Elements of D. C. Circuits:* A study of electrical concepts and units; Ohm's Law; Krichhoff's Laws; circuit analysis; networks, magnetic circuits; electromagnetics; capacitance; electronstatics.

1140 *Engineering Drawing I:* A study of the basic concepts of mechanical drawing with emphasis placed on developing the student's power of visualization and understanding of orthographic projection. Also will include the use of instruments in making working drawings, isometric and section drawings, lettering, dimensioning, and freehand sketches.

1132 *A. C. Circuits:* Introduction to single phase alternating current generation; vectors and complex quantities; vector and phase relationships; capacitive and inductive reactance; impedance; single phase A. C. circuit analysis; resonance; basic transformer theory and applications.

1145 *Electrical Measurement:* Concentration on the devices used in the measurement of resistance, capacitance, inductance, current, and voltage; operation, repair and calibration of measuring instruments; and mathematical analysis with extensive use of vector algebra and trigonometry.

1152 *Electronics I*: Introduction to electronic devices. This course will include vacuum tube and solid state device theory; half and full wave rectifiers, power supply filters, and voltage regulations.

1108 *Internship:* This course will provide the student with practical on-the-job training.

1107 *Special Problems:* This course will be held by special agreement with an instructor in the student's particular technology. It will provide an opportunity for individual research in the student's major area of study.

2137 *Electronics Process I:* A study of electronic manufacturing practices. A printed circuit project will be assigned to each student, completion of which will be the student's responsibility. At the completion of the project the student will submit a project report.

2153 *Electronics II:* A study of the application of tubes and transistors in amplifier circuits; bias and stabilization; coupling methods; classes of operation; push-pull distortion; and feedback circuits.

2195 *Fortran:* This course should provide the student with the elementary concepts of programming with a problem-oriented language and formula translation. It should give him the background on which to build programming skills for the higher level procedure-oriented languages. Through his use of the computer for processing actual engineering problems, he should gain confidence in his ability to program highly technical problems of the scientific disciplines.

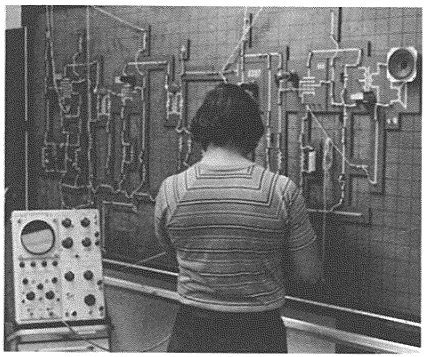
2154 *Electronics III:* Includes pulse and switching circuits and their application, multivibration, shaping, and introduction to logic circuits.

2143 *Electrical Drawing:* Templates and symbols will be used to construct block and schematic diagrams. Also, assembly drawing of component mounting, wire cable, and printed circuit boards will be constructed.

2170 *Communications Systems:* An introduction to the principles of electromagnetic radiation. The student is introduced to transmission line and antenna theory, modulation methods, receivers and demodulation. *Federal Broadcast Regulations:* An introduction to Federal Communications Commission rules and regulations with emphasis on those parts relating directly to AM, FM and TV broadcasting.

Broadcast Equipment I: The study of a typical broadcast system, including the studio, microphones, speech amplifiers, monitor amplifiers, recording and playback equipment. AM and FM transmitters and remote facilities are introduced to the students.

Broadcast Equipment Maintenance I: A course related to Broadcast Equipment I which increases the student's understanding of the system and extends the system circuit theory to fault finding methods and procedures.



Advanced Communications Systems and Circuits: A study of the elements of microwave communications links; coaxial cables, microwave antennas, oscillators; and pulse and pulse shaping, mixing, clipping and clamping circuits.

Broadcast Equipment II: A study of the elements of the television system, including scanning, aspect ratio, fields and frames, composite video signal waveform analysis, and an introduction to color fundamentals. The television camera, camera signals, and synchronizing generators will also be studied.

Broadcast Equipment Maintenance II: A study of the television transmitter; monitors, film equipment, video recorders; theory of operation and circuits; and maintenance of equipment.

Broadcast Instruments and Measurements: Includes metering typical broadcast systems; interpretation of meter indications; RF measurements and measuring instruments, and antenna measurements.

CERAMIC ENGINEERING TECHNOLOGY

Description of Technology

This is the first two-year program in America to train men to work as technicians in the ceramic industry.

The ceramic industries are those concerned with heat processing of clays and inorganic earth minerals, turning them into useful products. Typical ceramic products are glass, porcelain enamels, abrasives, whitewares (pottery, dinnerware, sanitary ware), structural clays (brick and clay pipe), refractories (firebrick), cement, and electronic ceramics. Ceramic products are the most heat resistant, most durable, and hardest products available to man. Ceramic materials are finding ever expanding usage in aerospace, electronic, computer, and jet engine applications.

Possibility of Future Employment and Advancement

Ceramic technology graduates have obtained jobs in such fields as glass, refractories, and electronic ceramics with such varied engineering related duties as quality control, production supervision, and research and development. Future graduates may also find positions in technical sales or customer service.

Geographically, past graduates have accepted positions from Virginia to Missouri.

CERAMIC ENGINEERING TECHNOLOGY

Course No.	General Requirements	Cr.
1010	Communications I	3
1011	Communications II	3
1012	Communications III	3
0053	Sociology	3
2070	Technical Writing	3
0040	Economics I	3
0050	Psychology	3
0080	Political Science	3

Course No.	Basic Requirements	Cr.
1020	Math 02	1
1024	Math 12	5
1028	Math 22	5
1032	Math 32	5
1802	*Chemistry I	3
1803	*Chemistry II	3
1151	*Physics II	3

Course No.	Technical Requirements	Cr.	Pre.-Req.
1161	*Mineralogy	3	
1122	*Ceramic Mfg. Process I	4	1802
1123	*Ceramic Mfg. Process II	4	
1140	*Eng. Drawing I	3	
1141	*Eng. Drawing II	3	1140
1102	Internship	12	
1101	Special Problems	3	
2162	*Glasses, Glazes, Enamels	4	1802, 1122
2130	*Intro. to Electricity	4	1032
2163	*Hydraulics & Pneumatics	3	1032
2164	*Combustion	4	1032 & 1151
2195	*Fortran	3	1032
2146	*Instrument & Controls I	3	2130
2193	*Stat. Quality Control	4	1032, 1122, & 1123
2149	Industrial Supervision	3	
2177	*Ceramic Automation	2	1122 & 1123
2175	*ASTM Procedures	4	1122 & 1123
2174	*Instruments & Controls II	4	2146
1120	*Manufacturing Process	3	
2190	Sem. in Indus. Problems	1	1122 & 1123

*These courses will be assigned a lab time.

CERAMIC TECHNOLOGY

1101 *Special Problems:* This course, by special arrangement with an instructor in Ceramic Technology, will provide an opportunity for individual research in the student's major area of study.

1102 *Internship:* This course will provide the student with practical on-the-job training and will be by special arrangement with an instructor in Ceramic Technology.

1120 *Manufacturing Processes:* A study of the fundamentals of present-day manufacturing processes, the materials and manufacturing methods employed in cold and hot working processes. Also included are lectures, demonstrations, and practical applications to machine tools, tooling, measuring, inspection procedures; welding operations; special milling procedures; bonding practices, metal casting; foundry practices and basic metallurgy.

1122 *Ceramic Manufacturing Process I:* Included in this course are ceramic materials, particle size reduction, screening, weighing and blending, batch calculations, forming, finishing, drying, firing, kilns, furnaces, and dryers.

1123 *Ceramic Manufacturing Process II:* A continuation of Ceramic Manufacturing Process I.

1140 *Engineering Drawing I:* Covered in the course are basic concepts of mechanical drawing with emphasis placed on developing student's power of visualization and understanding of orthographic projection. Also includes the use of instruments in making isometric and section drawings; lettering, dimensioning, and freehand sketches.

1141 *Engineering Drawing II:* A continuation of Engineering Drawing I, including screw threads and fasteners; detail and assembly drawings; introduction to structural, architectural, and pipe drawings.

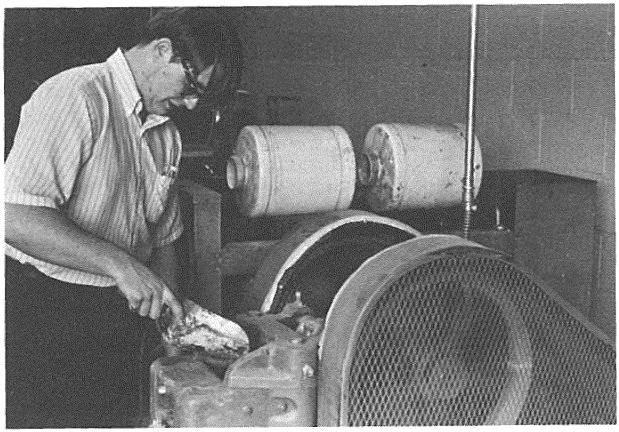
1161 *Mineralogy*: An introductory earth science course covering concepts and terms of geology and mineralogy. Emphasis is upon classifications structures, and properties of minerals and rocks.

2130 *Introduction to Electricity:* Introduces fundamentals of electricity and electronics. Laboratory experiments are designed to demonstrate learned theory and to familiarize the student with the use of test equipment.

2146 *Basic Instrumentation:* Study of the art and science of measuring pressure, level, flow, temperature and humidity with the use of test equipment.

2149 *Industrial Supervision:* An introductory course for a supervisory improvement and development program. Duties and responsibilities of supervisors, practical problem solving, techniques of supervision will also be covered.

2162 *Glasses, Glazes, Enamels*: A study of raw material compositions, uses, physical properties, manufacturing processes, melting and annealing, physical testing, introduction to glass ceramics.



2163 *Hydraulics & Pneumatics:* A study of the fundamentals of fluid flow as applied to industrial power generation, distribution, and hardware. Laboratory stresses use of air and hydraulic circuits and hardware.

2164 *Combustion:* This course includes lecture, laboratory, and plant experiences designed to familiarize students with the elements of combustion, including fuels, combustion analysis, equipment, and control systems. Methods of heat transfer and metering of flow are also covered.

2174 *Instruments & Controls II:* A continuation of Instruments and Controls I.

2175 *ASTM Procedures:* This course is designed to give an understanding of tests approved by the American Society for Testing Materials and used for quality control tests throughout the ceramic industries.

2177 *Ceramic Automation:* Through plant visits, reports, and discussions, the techniques of manufacturing in many types of ceramic industries are covered, with emphasis upon manufacturing processes and the methods of accomplishing their automation.

2190 *Seminars in Industry Problems:* Students will be assigned problems in areas of the ceramic industry of particular interest, and will conduct individual investigations. Seminars will be held periodically to discuss the problems and the steps industry is taking to meet the problems.

2193 *Statistical Quality Control:* Application of statistical techniques to quality control; and introduction of inspection methods and precision inspection services.

2195 *Fortran:* Fundamental principles of programming a computer using scientific language (Formula Translation) are learned and applied toward the solution of engineering problems. Students learn the basic Fortran language, the logic of planning the program, flow charting, and computer operation techniques.

DRAFTING & DESIGN TECHNOLOGY

Description of Technology

A program intended to prepare technicians as draftsmen, junior draftsmen and detail men for the manufacturing industries, or building trades. Some graduates will be required to translate ideas and sketches of engineers into drawings that will be used by those directly responsible for the manufacturing and construction of various parts or overall assemblies.

Possible Employment

Positions are available as draftsmen, junior draftsmen, detailers, technical illustrators in areas of machine design, jig & fixture design and tool design.

Equipment Provided

New lab, blueprinting machines, drafting & design reference materials, codes, manuals, visual-aids, enlarging equipment and lighted tracing tables.

DRAFTING & DESIGN TECHNOLOGY

Course No.	*General Requirements*	*Cr.*
1010	Communications I	3
1011	Communications II	3
1012	Communications III	3
0040	Economics I	3
0041	Economics II	3
2070	Technical Writing	3
0080	Political Science	3
0053	Sociology	3
	Elective	3

Course No.	*Basic Requirements*	*Cr.*
1020	Math 02	1
1024	Math 12	5
1028	Math 22	5
1032	Math 32	5
1150	*Physics I	3
1151	*Physics II	3
2045	*Descriptive Geometry	3

Course No.	*Technical Requirements*	*Cr.*	*Pre-Req.*
1140	*Engineering Drawing I	3	
1141	*Engineering Drawing II	3	1140
1142	*Engineering Drawing III	3	1141 & 1140
1120	*Manufacturing Process I	3	
1121	*Manufacturing Process II	3	1120
1125	*Manufacturing Process III	3	1120 & 1121

1198	Internship	12	
1199	Special Problems	3	
2110	*Graphics I	4	
2130	*Intro. to Electricity	4	
2168	*Plant Engineering	3	1140 & 1141
2184	*Die Design	4	1140, 1141, & 1142
2114	*Architecture I	3	1140 & 1141
2115	*Architecture II	3	2114
2135	*Plastics	3	
2143	*Electrical Drafting	3	1140 & 1141
2195	*Fortran	3	1032
2149	Industrial Supervision	3	
2117	*Topographic Drawing	3	1140 & 1141

*These courses will be assigned a lab time.

DRAFTING & DESIGN TECHNOLOGY

1140 *Engineering Drawing I:* Basic concepts of mechanical drawing with emphasis placed on developing student's power of visualization; understanding of orthographic projection; use of instruments in making working drawing; isometric and section drawings; lettering; dimensioning; freehand sketches.

1141 *Engineering Drawing II:* A continuation of Engineering Drawing I, plus screw threads and fasteners; detail and assembly drawings; an introduction to structural and architectural drawings.

1142 *Engineering Drawing III:* This course covers descriptive geometry; engineering drafting practices; welding drawings, gears and cams; introduction to electrical-electronic drafting.

1120 *Manufacturing Process I:* The first of a series of three courses designed to give the student an understanding of present-day manufacturing processes and the materials and manufacturing methods employed in cold and hot working processes. Included are lectures, demonstrations, and practical applications, machine tools, tooling, measuring ,inspection procedures, welding operations, special milling procedures and bonding practices, metal casting and foundry practices, and basic metallurgy.

1121 *Manufacturing Process II:* A continuation of Manufacturing Process I.

1125 *Manufacturing Process III:* A continuation of Manufacturing Process I and II.

1198 *Internship:* This course will provide the student with practical on-the-job training relative to the mechanical engineering field.

1199 *Special Problems:* A course by special arrangement with an instructor of Drafting and Design, with individual study or research relative to the student's major area of study.

2110 *Graphics I:* Includes the application of principles of graphics, including color, harmony, balance & proportions as applied to visual graphic & advertising media.

2130 *Introduction to Electricity:* This course is intended to introduce students to electricity and electronics. Laboratory experiments are designed to familiarize the student with the use of test equipment.

2168 *Plant Layout:* Theory and practice of industrial layout for optimum economic production and handling of goods; selection and arrangement of equipment; basic packaging and materials protection methods; location and arrangement of departments and service centers; and materials handling and transportation facilities.

2184 *Die Design:* An introduction to the design of dies used in blanking, piercing, and trimming, of various materials currently used in industry. Attention is given to the manufacturers' catalog and data material for selection of material and equipment.

2114 *Architecture I:* This course introduces the student to basic drafting techniques applied to architectural sketching, pictorial drawing, shades and shadows, residential planning and design, and presentation drawings.

2115 *Architecture II:* This course is a continuation of Architectural Drawing I. It teaches the student to prepare working drawings of light structures from preliminary sketches. Principles of woodframe construction are introduced. The student also acquires experience in using structural tables and manufacturer's literature. A complete set of working drawings for a light structure are developed by the student.

2135 *Plastics:* A course intended to familarize the technician with the classification, type and uses of plastics. Laboratory work will afford students the opportunity to gain insight into many processes involved in the plastics field.

2143 *Electrical Drafting:* This course is designed to give students an understanding of electrical drawings and chematics. Drawings will cover basic electrical circuits, symbols and equipment.

2195 *Fortran:* Fundamental principles of programming a computer, using scientific language (Formula Translation), are learned and applied toward the solution of engineering problems. Students learn the basic Fortran language, the logic of planning the program, flow charting, and computer operation techniques.

2149 *Industrial Supervision:* The ground work is presented to help the students understand themselves and the behavior of others. Terminology and language in the field are constantly directed toward industrial application. Industrial situations are cited and diagnosed as related to the causes and possible solutions.

2117 *Topographic Drawing:* This course provides the student with the basic requirements for translating survey notes into topographic maps. Foundation layout, leveling, map and compass use will also be offered.

ELECTRONIC ENGINEERING TECHNOLOGY

Description of Technology

Electronics is a diversified field of technology that touches nearly every type of industrial, commercial and military activity. An electronic technician may be employed in one of many areas—typical are communications, computer, industrial electronics and instrumentation.

This diversity is reflected in a curriculum that includes a strong base in physics and mathematics as well as courses in electronic theory.

Possibility of Future Employment and Advancement

There are many career opportunities available to the trained technician in the electronic and related field.

A technician may aid in research and design. He may work in production, testing, sales, or customer service application.

Advancement in any area is offered to the technician who is willing to grow in technical ability.

Equipment Provided

Student work stations equipped with AC and DC power supplies, function generator, oscilloscope, meter, and all necessary components required for experiments.

ELECTRONIC ENGINEERING TECHNOLOGY

Course No.	General Requirements	Cr.
1010	Communications I	3
1011	Communications II	3
1012	Communications III	3
0050	Psychology	3
0053	Sociology	3
2070	Technical Writing	3
0040	Economics I	3
0080	Political Science	3

Course No.	Basic Requirements	Cr.
1020	Math 02	1
1024	Math 12	5
1028	Math 22	5
1032	Math 32	5
2042	Math 42	5
1150	*Physics I	3
1151	*Physics II	3

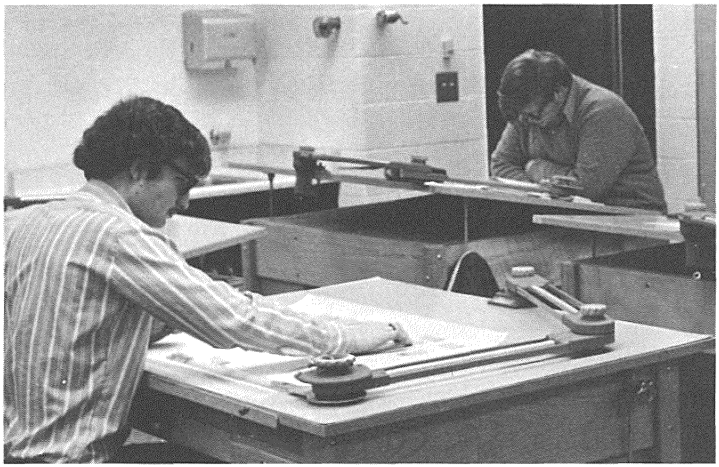
Course No.	Technical Requirements	Cr.	Pre-Req.
1131	*Ele. of D. C. Circuits	6	
1132	*A. C. Circuits	4	1131
1140	*Eng. Drawing I	3	
1145	*Elec. Measurement	3	1131 & 1132
1152	*Electronics I	4	1131 & 1132
2153	*Electronics II	4	1152
2154	*Electronics III	4	2153
1108	Internship	12	
1107	Special Problems	3	
2137	*Electrical Process I	2	2143 & 1152
2138	*Electrical Process II	2	2137
2195	*Fortran	3	1032
2170	*Communications Systems	4	2153
2143	*Electrical Drawing	3	1140
2146	*Instrumentation & Controls	3	2154
2139	*Digital Logic	4	2154
2127	*Microwave Theory	4	2154
2147	*Advanced Communications	4	2154

***These courses will be assigned a lab time.**

ELECTRONIC ENGINEERING TECHNOLOGY

1131 *Elements of D. C. Circuits:* A study of electrical concepts and units; Ohm's Law; Krichhoff's Laws; circuit analysis; networks; magnetic circuits; electromagnetics; capacitance; and electronstatics.

1132 *A. C. Circuits:* introduction to single phase alternating current generation; vectors and complex quantities; vector and phase relationships; capacitive and inductive reactance; impedance; single phase A. C. circuit analysis; resonance; basic transformer theory and applications.



1140 *Engineering Drawing I:* Covers the basic concepts of mechanical drawing with emphasis placed on developing student's power of visualization; understanding of orthographic projection. Includes the use of instruments in making working drawings; isometric and section drawings; lettering; dimensioning; freehand sketches.

1145 *Electrical Measurement:* A concentrated study of the devices used in the measurement of resistance, capacitance, inductance, current, and voltage; operation, repair and calibration of measuring instruments; mathematical analysis with extensive use of vector algebra and trigonometry.

1152 *Electronics I:* Introduction to electron devices; vacuum tube and solid state device theory; half and full wave rectifiers, power supply filters, and voltage regulation.

2153 *Electronics II:* Covers the application of tube and transistor in amplifier circuits; bias and stabilization, coupling method, classes of operation, push-pull, distortion, and feedback circuit.

2154 *Electronics III:* Includes pulse and switching circuits and their application; multivibration, shaping, and introduction to logic circuit.

1108 *Internship:* This course will provide the student with practical on-the-job training relative to training opportunities and future employment.

1107 *Special Problems:* This course will be held by special arrangement with an instructor in the student's particular technology. It will provide an opportunity for individual research in the student's major area of study.

2137 *Electrical Process I*: A study of electronic manufacturing practices in which a printed circuit project will be assigned to each student, completion of which will be the student's responsibility. At the completion of the project the student will submit a project report.

2138 *Electrical Process II*: As in Process Lab I, this is a student project course culminating in a formal project report. Project will be of a more complex nature than the one submitted in Process Lab I.

2195 *Fortran:* Fundamental principles of programming a computer, using scientific language (Formula Translation) are learned and applied toward the solution of engineering problems. Students learn the basic Fortran language, the logic of planning the program, flow charting, and computer operation techniques.

2170 *Communications Systems:* An introduction to the principle of communication systems with a study of the transmission, radiation, and reception of electromagnetic energy. Also includes transmitter receivers, antenna and transmission lines.

2143 *Electrical Drawing*: Templates and symbols will be used to construct block and schematic diagrams. Also, assembly drawing of component mounting, wire cable, and printed circuit boards will be constructed.

2146 *Instrumentation & Controls:* A study of pressure-vacuum equation; liquid-column manometers; pressure measuring instruments; inductance-bridge; resistance rod; meter; McLeod, Parani, thermocouple, vacuum gauge meters; Thermo-millivoit tables; speed of response of thermocouple; millivoltmeter; null potentiometer circuit; resistence thermometers; wheatstone bridge theory; optical pyrometer theory; total radiation pyrometer; bolometer; bimetallic indicator; pressure thermometers.

2139 *Digital Logic:* Introduces logic in electrical circuits. Binary arithmetic, Boolean algebra, logic circuit operation, computer elements are included.

2127 *Microwave Theory:* Familiarization in the transmission and reception of electro magnetic energy in the micro wave range. Resonators, wave guides, coaxial component, attenuators, complers, and antenna will be studied. Laboratory tests will be made using slotted lines, detectors, standing wave ration and power meters, and frequency meters.

2147 *Advanced Communications:* Covers typical communication circuits and facilities, and F. C. C. preparation.

INDUSTRIAL ENGINEERING TECHNOLOGY

Description of Technology

The American Institute of Industrial Engineers has defined Industrial Engineering as being, "concerned with the design, improvement, and installation of integrated systems of men, materials, and equipment. It draws upon specialized knowledge and skill in the mathematical, physical, and social sciences together with the principles and methods of engineering analysis and design to specify, predict, and evaluate the results to be obtained from such systems." The Industrial Technician will support the Industrial Engineer in these fields.

Possibility of Future Employment

Draftsman
Plant Layout
Quality Control
Tool Designer
Production Foreman
Production Scheduling
Trouble Shooting

Equipment Provided

Design Lab
Testing Lab
Machine Lab
Welding Lab

INDUSTRIAL ENGINEERING TECHNOLOGY

Course No.	*General Requirements*	*Cr.*
1010	Communications I	3
1011	Communications II	3
1012	Communications III	3
0040	Economics I	3
0050	Psychology I	3
2070	Technical Writing	3
0080	Political Science	3
0053	Sociology	3

Course No.	*Basic Requirements*	*Cr.*
1020	Math 02	1
1024	Math 12	5
1028	Math 22	5
1032	Math 32	5
1150	*Physics I	3
1151	*Physics II	3
2136	Industrial Safety	2

Course No.	*Technical Requirements*	*Cr.*	*Pre. Req.*
1140	*Eng. Drawing I	3	
1141	*Eng. Drawing II	3	1140
1142	*Eng. Drawing III	3	1140 & 1141
1120	*Manufacturing Process I	3	
1121	*Manufacturing Process II	3	
1125	*Manufacturing Process III	3	
1104	Internship	12	
1103	Special Problems	3	
2130	*Intro. to Electricity	4	2032

2168	*Plant Engineering	3	1140 & 1141
2187	*Production I	3	
2188	*Production II	3	2187
2189	*Production III	3	2188
2135	*Plastics	3	
2190	Seminar Indus. Prob.	1	
2149	Industrial Supervision	3	
2186	*Stat. Quality Control	4	2032
2181	*Tool Design	4	1140, 1141, & 1142
2184	*Die Design	3	1140, 1141, & 1142
2163	*Hydraulics & Pneumatics	3	2032
2195	*Fortran	3	2032

*These courses will be assigned a lab time.

INDUSTRIAL ENGINEERING TECHNOLOGY

1140 *Engineering Drawing I*: This course covers the basic concepts of mechanical drawing with emphasis on developing the student's power of visualization and understanding of orthographic projection. Included will be the use of instruments in making working drawings, isometric and section drawings, lettering, dimensioning, & freehand sketches.

1141 *Engineering Drawing II*: This is a continuation of Engineering Drawing I, including screw threads and fasteners, detail and assembly drawings, and an introduction to structural, architectural, and pipe drawings.

1142 *Engineering Drawing III*: Engineering Drawing II continued, covering descriptive geometry, engineering drafting practices, welding drawings, gears and cams, and an introduction to electrical-electronic drafting.

1120 *Manufacturing Process I*: The first of aseries of three courses designed to give the student an understanding of present-day manufacturing processes, the materials and manufacturing methods employed in cold and hot working processes. The course will include lectures, demonstrations, & practical applications of machine tools, tooling, measuring; inspection procedures, welding operations; special milling procedures and bonding practices; metal casting and foundry practices; and basic metallurgy.

1121 *Manufacturing Process II*: A continuation of Manufacturing Process I.

1125 *Manufacturing Process III:* A continuation of Manufacturing Process II.

1104 *Internship*: This course will provide the student with practical on-the-job training in the industrial engineering field.

1103 *Special Problems:* A course by special arrangement with an instructor in Industrial Engineering, with individual study and research relative to the student's major area of study.

2130 *Introduction to Electricity:* This course is intended to introduce students to electricity and basic electronics, but will not attempt to go deeply into the subject. Laboratory experiments are featured to demonstrate learned theory and to familiarize the student with the use of test equipment.

2168 *Plant Layout:* The nature of this course is a study of the theory and practice of industrial layout for optimum economic production and handling of goods, selection and arrangement of equipment, basic packaging and materials protection methods, location and arrangement of departments and service centers and transportation facilities.

2187 *Production I:* This is an introduction to production control and production methods. Production control concepts and objectives will be covered for various types of control systems. Cost and inventory systems are also covered. Operation analysis approach and procedures conclude the course.

2188 *Production II:* This is a continuation of Production I. Emphasis is placed on motion and time study, with laboratory manual problems used to illustrate situations covered in Production I and II lectures.

2189 *Production III:* A continuation of Production II. Emphasis is placed on performance rating, allowances, standard time and data. A portion of this course is devoted to in-plant problems in cooperation with local firms. Laboratory manual problems are continued with emphasis upon time study situations.

2135 *Plastics:* A course to familiarize the Industrial Technician with the classification, types and uses of plastics. Laboratory work will afford students the opportunity to gain insight into many of the processes involved in the plastics field.

2190 *Seminar Industrial Problems:* Students will be assigned problems in the area of particular interest, to conduct individual investigations. Seminars will be held periodically to discuss the problems and the steps industry is taking to meet the problems.

2149 *Industrial Supervision:* The ground work is presented to help the students understand themselves and the behavior of others. Terminology and language in the field will be constantly directed toward industrial application. Industrial situations will be cited and diagnosed as related to the cause and possible solutions.

2186 *Statistical Quality Control:* This is the application of the statistical techniques of quality control, and the introduction of refined inspection devices.

2181 *Tool Design:* This course covers all aspects of the design and use of jigs and fixtures with emphasis on their economical use and the principles of their design and construction.

2184 *Die Design:* An introduction to the design of dies used in blanking, piercing, and trimming of various materials currently used by industry. Attention is given to the manufacturer's catalog and data material for selection of material and equipment.

2163 *Hydraulics & Pneumatics:* A study of the fundamentals of fluid flow as applied to industrial power generation, distribution and hardware. Lab time concentrates on hydraulic and air circuits and hardware.

2195 *Fortran:* The fundamental principles of programming a computer using scientific language (Formula Translation) will be learned and applied toward the solution of engineering problems. Students learn the basic Fortran language, the logic of planning the program, flow charting, and computer operation techniques.

2136 *Industrial Safety:* This course is intended to introduce the Industrial Technician to the various aspects of safety, as applied to the employee and employer with an industrial firm or business.

MECHANICAL ENGINEERING TECHNOLOGY

Description of Technology

A specialized area of engineering with emphasis on mathematics, drafting, machine design and engineering mechanics. The technician will assist an engineer in the area of sketching, drafting, design, problem solution, and laboratory data acquisition. He may assist in planning and production supervision and the testing of mechanical systems.

Possibility of Future Employment and Advancement

Advancement to engineer may be possible in some cases.

Equipment Provided

Complete design lab
Complete metallurgical lab
Universial testing machine 60,000 pounds capacity
Complete hydraulic and pneumatic set up and test sets

MECHANICAL ENGINEERING TECHNOLOGY

Course No.	General Requirements	Cr.
1010	Communications I	3
1011	Communications II	3
1012	Communications III	3
0040	Economics I	3
0050	Psychology I	3
2070	Technical Writing	3
0080	Political Science	3
0053	Sociology	3

Course No.	Basic Requirements	Cr.
1020	Math 02	1
1024	Math 12	5
1028	Math 22	5
1032	Math 32	5
2042	Math 42	5
1150	*Physics I	3
1151	*Physics II	3

Course No.	Technical Requirements	Cr.	Pre-Req.
1140	*Engineering Drawing I	3	
1141	*Engineering Drawing II	3	1140
1142	*Engineering Drawing III	3	1141
1120	*Manufacturing Process I	3	
1121	*Manufacturing Process II	3	1120
1106	Internship	12	
1105	Special Problems	3	
2130	*Intro. to Electricity	4	1032
2159	*Strength of Materials	4	1032
2165	Engineering Mechanics I	5	1032
2166	Engineering Mechanics II	5	2042 & 2165
2155	*Basic Metal	3	
2181	*Tool Design	4	1142
2195	*Fortran	3	1032
2182	*Machine Design	5	2042 & 2166
2191	*Heating & Air Conditioning	4	1032
2163	*Hydraulics & Pneumatics	3	1032

*These courses will be assigned a lab time.

MECHANICAL ENGINEERING TECHNOLOGY

1140 *Engineering Drawing I:* A study of the basic concepts of mechanical drawing with emphasis placed on developing student's power of visualization, and understanding orthographic projection. Included will be the use of instruments in making working drawings, isometric and section drawings, lettering, dimensioning, and freehand sketches.

1141 *Engineering Drawing II:* A continuation of Engineering Drawing I, plus screw threads and fasteners, detail and assembly drawings, introduction to structural, architectural, and pipe drawings.

1142 *Engineering Drawing III:* Includes descriptive geometry, engineering drafting practices, welding drawings, gears and cams, and an introduction to electrical-electronic drafting.

1120 *Manufacturing Process I:* The first of a series of three courses designed to give the student an understanding of present-day manufacturing processes, and the materials and manufacturing methods employed in cold and hot working processes. Included will be lectures, demonstrations, and practical applications of machine tools, tooling, measuring, inspection procedures, welding operations, special milling procedures and bonding practices, metal casting and foundry practices, and basic metallurgy.

1121 *Manufacturing Process II:* A continuation of Manufacturing Process I.

1106 *Internship:* This course will provide the student with practical on-the-job training, relative to the mechanical engineering field.

1105 *Special Problems:* A course by special arrangement with an instructor in Mechanical Engineering, with individual study or research relative to the student's major area of study.

2130 *Introduction to Electricity*: This course is intended to introduce Mechanical Technology students to electricity and electronics, but will not attempt to go deeply into the field. An understanding of basic ideas is the object of the course. Laboratory experiments are designed to demonstate learned theory and to familiarize the student with the use of test equipment.

2159 *Strength of Materials:* A study is made of the internal stresses and deformation of elastic bodies resulting from the action of external forces. Emphasis is given to the analysis of the simple and combined stresses and properties of material to meet the functional requirements in design. Strength of such elements as rivited joints, beams, columns, shafts, and keys will be determined.

2165 *Engineering Mechanics I:* The objectives of this course are to develop in the engineering student, the ability to analyze any problem in a simple and logical manner and to apply to its solution a few well-understood basic principles. This course will cover the analytical and graphical study of forces, movement and couples, and the determination of resultants and equilibrium of all types of force systems.

2166 *Engineering Mechanics II:* This course offers an analytical and graphical study of the motion of rigid bodies. Friction, mass, Newton's laws of motion, equation of motion, rotation, plane motion, moment of inertia, and radius of gyration will be applied to the solution of problems. A greater emphasis will be placed on the formulation of problems through use of the equation of motion.

2155 *Basic Metal:* The study of the basic principles of metallurgy as applied to the heat treating of steel. The student will investigate equilibrium diagrams, plastic deformation, recrystallization and grain growth, mechanics of heat treating, solid state phase changes, and laboratory testing procedures. In the lab, the student will learn to section, mount, etch and photograph metal samples, along with running hardness tests and performing various heat treats.

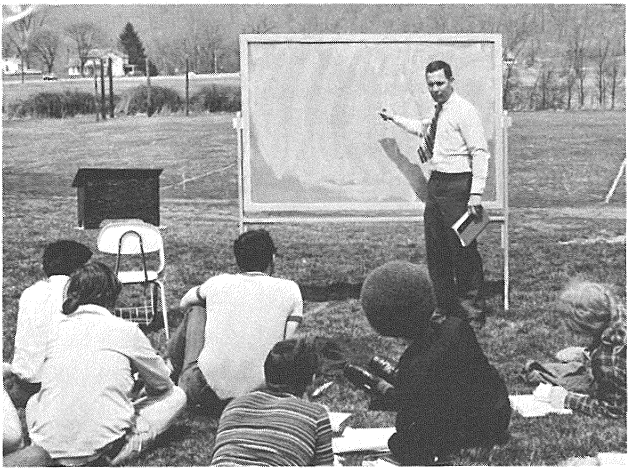
2181 *Tool Design:* This course covers all aspects of the design and use of jigs and fixtures, with emphasis on their economical use, and the principles of their design and construction. The purpose of this course is to indoctrinate the student in tool design for economical duplicate parts.

2195 *Fortran:* The fundamental principles of programming a computer, using scientific language (Formula Translation) will be earned and applied toward the solution of engineering problems. Students learn the basic Fortran language, the logic of planning the program, flow charting, and computer operation techniques.

2182 *Machine Design:* A course in which the design principles of machine elements are taken up, and calculations are made to determine the size and shape of various machine parts. It includes factors which influence the selection of the materials to be used in designing such elements as beams, bearings, clutches, brakes, shafts, busings, screws, rivets, gears, belts, and flywheels. Attention is given to various types of loading conditions, stresses, deformations, fits, finishes, and other factors which must be considered in the design of machine elements.

2191 *Heating and Air Conditioning:* The study of the basic principles of conditioning large masses of air. The course will include the study of first and second laws of thermodynamics, elementary heat transfer, the refrigeration cycle, air and human comfort, plus building codes for heating and air conditioning.

2163 *Hydraulics & Pneumatics:* A study of the fundamentals of fluid flow as applied to industrial power generation and hardware. Lab time concentrates on hydraulic and air circuits and hardware.



HEALTH TECHNOLOGIES

Medical Assistant

Medical Record

Practical Nursing

Nursing

MEDICAL ASSISTANT TECHNOLOGY

The medical assistant will be trained in skills that will insure the best use of the physician's time and efforts. These skills will be managerial, secretarial and medical in nature. Positions are available in:

Doctors' Offices
Clinics
Hospitals
Government Agencies

MEDICAL ASSISTANT TECHNOLOGY

General Requirements	*Cr.*	*Basic Requirements*	*Cr.*
1010 Communications I	3	1026 Math 21	5
1011 Communications II	3	0455 *Physiological Sci. V	3
1012 Communications III	3	0456 *Physiological VI	3
0080 Political Sci. I	3	0040 Economics I	3
0050 Psychology I	3	0041 Economics II	3
0054 Sociology III	3	0291 *Accounting I	3
0075 Speech	3	0292 *Accounting II	3

Technical Requirements	*Cr.*
1240 *Typing I	3
1241 *Typing II	3
1248 *Typing III	3
1245 *Shorthand I	4
1246 *Shorthand II	4
1247 *Shorthand III	4
0470 Health Terminology	2
0471 *Medical Assistant Orient.	1
0472 Medical Assistant Ethics	3
1242 *Business Machines	2
1215 *Sec. Office Procedures	2
0242 *Business Machines & Duplicat.	3
0473 *Medical Office Procedures I	3
0474 *Medical Office Procedures II	5
2283 *Financial Records & Reports	3
2280 *Office Organiz. & Mgmt.	3
0475 *Med. Lab Procedures	5
0476 *Pharmacology	3
0477 Medical Legal Aspects	3
0468 Special Problems	3
0468 *Internship	12

*These courses will be assigned a lab time.

Typing I: This course is planned for beginning typing students at college level. Those who have had no previous training in typing begin by learning the keyboard. The course offers a quick review of elementary typing knowledge to students with previous training and then allows them to progress, as much as possible, at their own rate.

Typing II: A continuation of Typing I, to improve speed and accuracy and increase skill in production of business letters, tables, forms and reports.

Typing III: This course stresses typing of numbers and symbols. It increases speed by intensive practice in preparing statistical tables and accounting problems.

Shorthand I: This course is planned for the beginning shorthand student at college level. The student with no knowledge of shorthand begins by learning to construct basic shorthand outlines. Those with prior training begin with the basic principles and progress at their own rate. This is possible with the use of an eight-channel dictating system (EFI Audion Notebooks).

Shorthand II: A continuation of Shorthand I, this course includes brief form review, timed dictation, theory review, and transcription of business letters. The wireless shorthand laboratory is extensively used in speed development.

Shorthand III: By use of the shorthand laboratory, speed is further increased in this course. Included are longer and more difficult business letters for transcription.

Medical Terminology: A study of vocabulary and terms used by medical personnel. Includes spelling and usage of medical terms and measurement systems.

Medical Assistant Orientation: An introduction to the realm of the medical office assistant. Includes the function of the medical office assistant and his/her relationship to a variety of people in numerous health and non-health settings.

Medical Assistant Ethics: Emphasis on the development of professional attitudes and responsible behavior.

Business Machines: A general survey of office equipment, including adding, calculating, transcribing and duplicating machines. This course develops a working knowledge of their basic operation.

Secretarial Office Procedure: A course to acquaint the student with the duties and behavior of a secretary in a modern office. Appropriate conduct and dress are included.

Business Machines & Duplicating: An advanced course which gives the special applications of various business machines, and stresses the use of duplicating machines including the offset duplicator.

Financial Records & Reports: A course giving the various filing procedures commonly used in business and industry, such as alphabetic, numeric, Kardex, and geographic systems. Methods of handling financial records and reports are included.

Office Organization and Management: A study of the basic principles of office management as applied in the small or large office; function of the office manager, organization of the office, office layout; manuals and reports; office forms and budgeting control.

Medical Lab Procedures: A study of the theory, principles, and techniques of routine laboratory procedures performed in a physicians office or clinic. Laboratory experience provides the students with the opportunity of relating instruction to practice.

Pharmacology: This course is concerned with the principles and techniques utilized in administering medications. Emphasis is placed on the understanding of principles underlying the use of drugs, as well as, the necessary, safe, and efficient techniques used in administering all medications.

Special Problems: Special Medical Assistant problems confronted by the students are reported on and submitted to the coordinator for evaluation.

Internship: This course will provide the student with practical on-the-job training for future employment.

MEDICAL RECORD TECHNOLOGY

This program is designed to produce trained persons who can fill responsible positions in working with vital information. The student will receive extensive training in medical record procedure, terminology and standards as well as basic organizational skills.

Positions exist in:

Hospitals
Clinics
Public Health Agencies

MEDICAL RECORD TECHNOLOGY

General Requirements	*Cr.*	*Basic Requirements*	*Cr.*
1010 Communications I	3	1026 Math 21	5
1011 Communications II	3	0455 *Physiological Sci. V	3
1012 Communications	3	0456 *Physiological Sci. VI	3
0080 Political Sci.	3	0291 *Accounting I	3
0050 Psychology I	3	0292 *Accounting II	3
0050 Psychology	3	0040 Economics I	3
0054 Sociology III	3	0041 Economics II	3

Technical Courses	*Cr.*
1240 *Typing I	3
1241 *Typing II	3
1248 *Typing III	3
Health Team	4
0459 *Transcription	4
*Health Statistics	4
Health Terminology II	2
*Medical Record Orientation	1
1242 *Business Machines	2
0461 *Medical Records I	3
0462 *Medical Records II	5
0463 *Medical Records III	5
0464 *Medical Records IV	5
0465 *Medical Records V	5
0467 *Dictation & Transcription	3
0242 *Bus. Machines & Duplicat.	3
2283 *Financial Rec'ds. & Reports	3
0221 *Survey of Data	3
0468 *Internship	12
0468 Special Problems	3
Option-Intro Pharmacology	

MEDICAL RECORD TECHNOLOGY

Typing I: This course is planned for beginning typing students at college level. Those who have had no previous training in typing begin by learning the keyboard. The course offers a quick review of elementary typing knowledge to students with previous training and then allows them to progress, as much as possible, at their own rate.

Typing II: A continuation of Typing I to improve speed and accuracy and increase speed in production of business letters, tables, forms and reports.

Typing III: This course stresses typing of numbers and symbols. It increases speed by intensive practice in preparing statistical tables and accounting problems.

Shorthand I: This course is planned for the beginning student at college level. The student with no knowledge of shorthand begins by learning to construct basic shorthand outlines. Those with prior training begin with the basic principles and progress at their own rate. This is possible with the use of an eight-channel dictating system (EFI Audion Notebooks.)

Shorthand II: A continuation of Shorthand I, this course includes brief form review, timed dictation, theory review and transcription of business letters. The wireless shorthand laboratory is extensively used in speed development.

Shorthand III: By use of the shorthand laboratory, speed is further increased in this course. Included are longer and more difficult business letters for transcription.

Health Terminology: A study of vocabulary and terms used by medical personnel. Includes spelling and usage of medical terms and measurement systems.

Medical Records Orientation: Introduction to the role and responsibility of the Medical Record Technician as she relates to the health team and the work environment. Includes professional attitudes and responsible behavior.

Business Machines: A general survey of office machines, including adding, calculating, transcribing and duplicating, this course develops a working knowledge of their basic operations.

Medical Records I: Introduction to record keeping in a hospital setting; sources of information for medical records; methodology used to secure information for records; and practice in completing medical record forms.

Medical Records II: A study of the uses of records by various hospital personnel; standard nomenclature of diseases and operations, and the basic indicies such as disease, operation, patient, physician and the purpose. Actual performance of such duties as admitting procedures and filing in an institutional

Medical Records III: A study of medical record procedures, including statistical and medical legal aspects of records, cataloging of all information on a patient, including laboratory findings, x-ray operations, doctor's orders and proper reports; and assembling and analyzing charts.

Medical Records IV: A study of the procedures for preparing index cards, chart folders, daily census, birth and death certificates; preparation of records for referral to hospital record-keeping committee; indexing diagnostic reports, indexing patient monthly and annual reports as reveiwed and practiced.

Medical Records V: A study of medical records and reports and their legal aspects. Includes principles of law applied to health field; the use of records as evidence, release of information, subpoena, testimony, settlement of claims, legal consent. Research and statistical procedures will be reviewed and practiced. Abstracting and transcribing case histories will be required.

Dictation and Transcription: A continuation in shorthand offering more advanced training by using office style dictation and material requiring editing and revising.

Business Machines & Duplicating: An advanced course which gives the special applications of various business machines and stresses the use of duplicating machines, including the offset duplicator.

Financial Records & Reports: A course giving the various filing procedures commonly used in business and industry, such as alphabetic, subject, numeric, Kardex and geographic systems. Methods of handling financial records and reports are included.

Survey of Data: This course covers the gathering, handling, and converting of data to an automatic system. Various base numbering systems and logic are stressed.

Internship: This course will provide the student with practical on-the-job training, relative to future employment.

Special Problems: Special medical record problems confronted by the students are reported on and submitted to the coordinator for evaluation.

PRACTICAL NURSING

SOUTHEASTERN OHIO SCHOOL OF PRACTICAL NURSING

a one-year program for high school graduates —

America's rapidly expanding population, the longer life span of the individual, the emphasis on health and preventive measures, the increase in chronic illness among aging people, and the attractive health insurance plans now offered to the public have shown it to be imperative that greater provision be made for increased health facilities and nursing services. To meet the needs of the community and the area for more and better prepared nurses, the following program has been prepared.

DESCRIPTION

A one-year program, based on four quarters of eleven weeks each, plus a four-week post-quarter, the Practical Nursing Program is approved by the Board of Nursing Education of the State of Ohio, and has been developed to prepare the student to perform nursing services in the care of the sick, in rehabilitation, and in the prevention of illness under the direction of a licensed physician or registered nurse. Such preparation includes nursing theory and planned clinical experiences in a variety of health agency settings. Upon the satisfactory completion of the program, the student will be eligible to take the Ohio examination to become a Licensed Practical Nurse.

POSSIBLE FUTURE EMPLOYMENT

1. General Hospitals
2. Nursing Homes
3. Doctor's Offices
4. Special Hospitals
5. Public Health Agencies
6. Industry
7. Private Duty Nursing

COLLEGE FACILITY

A modern, simulated clinical laboratory is provided for student learning.

DEGREE RECEIVED

Diploma in Practical Nursing.
Following graduation the individual must take the Ohio State Board of Nursing Education and Nurse Registration Examination, in order to receive a license to practice Practical Nursing and to be designated as a Licensed Practical Nurse.

ADMISSION REQUIREMENTS

Age: 17-50 years old and over.

Education: High School graduation or High School Equivalency Exam

Pre-Entrance Test: The Pre-Entrance Test for Schools of Practical Nursing is given to assess the ability of the applicant.

A personal interview and three references are required, as well as physical, dental, and laboratory reports.

RECOMMENDED HIGH SCHOOL COURSES

While there is no required pattern of high school subjects, prospective students will find the following helpful:

1. Four years of English with an emphasis on reading ability and writing skill.
2. Basic arithmetic, with an emphasis on use of decimals and fractions and ratio/proportion.
3. Biology.
4. Social sciences such as sociology, psychology, marriage and the family, child development.

The Practical Nursing Program is based on the following curriculum:

1st quarter
Physiological Science
Principles of Nursing Techniques
Social Science
Nursing Dynamics
Nursing Care Experience
A. School Lab
B. Clinical Lab

2nd quarter
Physiological Science
Principles of Nursing Techniques
Social Science
Nursing Dynamics
Nursing Care Experience
A. School Lab
B. Clinical Lab

3rd quarter
Physiological Science
Principles of Nursing Technology
Social Science
Nursing Dynamics
Medical-Surgical Nursing
Maternal Child Nursing
Nursing Care Experience
A. Clinical Lab

4th quarter
Physiological Science
Principles of Nursing Techniques
Social Science
Nursing Dynamics
Maternal Child Nursing
Nursing Care Experience
A. Clinical Lab

4 Week Post Quarter
Geriatric Nursing and
Care of the Chronically Ill

NURSING TECHNOLOGY

Graduates from this two-year program are qualified to take the Ohio State Board of Nursing Examination for the designation Registered Nurse.

Opportunities exist in:

Hospital
Clinics
Public Health Agencies
Doctors' Offices

NURSING TECHNOLOGY

General Requirements		*Cr.*	*Basic Requirements*		*Cr.*
0050	Psychology I	3	0075	Speech	3
0053	Sociology III	3	0451	*Physiolog. Sci. I	4
1010	Communications I	3	0452	*Physiolog. Sci. II	4
1011	Communications II	3	0453	*Physiolog. Sci. III	4
1012	Communications III	3	0454	Physiolog. Svi. IV	4
0040	Economics I	3	0050	Psychology	3
0041	Economics II	3	0050	Psychology	3
0080	Political Science I	3	0469	Health Trends & Issues	3
0081	Political Science II	3	0054	Sociology IV	3

Technical Requirements		*Cr.*
0400	*Nursing I	9
0405	*Nursing II	9
0410	*Nursing III	9
0416	*Nursing IV	9
0430	*Nursing V	9
0440	*Nursing VI	6
0450	*Nursing VII	8
0404	Nursing Dynamics I	2
0409	Nursing Dynamics II	2
0415	Nursing Dynamics III	2
0422	Nursing Dynamics IV	2

*These courses will be assigned a lab time.

NURSING TECHNOLOGY

Nursing I: The course content concerns the principles of basic techniques and the use of equipment essential for meeting the nursing needs of the ambulatory and the mildly ill patient. Clinical lab is an integral part of this course and will provide the student with the opportunity to obtain skill in the use of equipment and in implementing the principles of basic nursing techniques, psychology and the physiological sciences.

Nursing II: This is a continuation of Nursing I. Content is focused on the principles of more advanced techniques and the use of equipment for providing care to patients with more complex nursing needs. The clinical lab will provide the student with the opportunity to obtain skill in the use of equipment and in implementing the principles of more advanced nursing techniques, the social sciences, and the physiological science.

Nursing III: Content is directed toward selected medical-surgical conditions and the techniques essential for providing nursing care to individuals with these medical surgical conditions. Clinical lab provides the student with the opportunity to implement principles of nursing care for patients with selected medical surgical conditions.

Nursing IV: The course is concerned with the nursing care of the mother during the three phases of pregnancy and the care of the child experiencing health or illness.

Nursing V: Content focuses on the concepts, principles and techniques essential for providing nursing care for individuals with more complex medical surgical problems. Clinical lab provides the student with the opportunity to implement principles of nursing care for patients with selected medical-surgical conditions.

Nursing VI: The course focuses on the principles of practice in nursing care of patients with psychological and/or emotional disorders. Clinical experience will permit the student the opportunity to relate instruction to practice.

Nursing VII: A study of nursing care planning, implementation of care plans, and evaluation of care plans for individual groups of patients including an overview of various methods of organizing patient care and an analysis of the technical nurse's role of each.

Nursing Dynamics, I, II, III, IV: These are student-faculty seminars with emphasis on student involvement. Course is directed toward demonstrating the interrelationship of the classroom and clinical areas of the curriculum and affords students the opportunity to investigate areas of special interest within the field of nursing.

Natural Resources Technologies

- *Environmental*
- *Forestry*
- *Recreation & Wildlife*

ENVIRONMENTAL TECHNOLOGY

Description of Technology

There is an increasing need for personnel trained in the application of sanitary control measures to man's environment. The Environmental Health Technician will be responsible for conducting inspectional and investigational activity, reporting on environmental conditions for professional health and management personnel. In many instances he will be called upon to assist in the education of the community in which he works to increase its understanding of what the environmental problems are and what practical solutions are available.

Possibility of Future Employment and Advancement

The Environmental Health Technician is a new job classification that will provide mid-management opportunities with federal, state and local health agencies. Other areas of opportunity should be voluntary health agencies such as the Tuberculosis and Respiratory Disease Association, industry that has waste treatment services, and municipal water and sewage treatment plants. Because of its newness, the field is open for advancement as the individual can develop.

Equipment Provided

Chemistry Lab
Biology Lab
Bacteriology Lab
Library
Audio Visual Aids
Water Testing Equipment
Practical Equipment

ENVIRONMENTAL TECHNOLOGY

Course No.	*General Requirements*	*Cr.*
1010	Communications I	3
1011	Communications II	3
1012	Communications III	3
0080	Political Science	3
0050	Psychology	3
0053	Sociology	3
0040	Economics I	3
0041	Economics II	3
0075	Speech	3

Course No.	*Basic Requirements*	*Cr.*
1022	Math II	5
1385	*Agronomy	3
1826	*Intro. to Phys. Science	3
1802	*Chemistry I	3
2825	*Intro. to Nat. Science	5
2801	*Draw. & Blueprint Read.	3
1827	Physical Science II	5

Course No.	*Technical Requirements*	*Cr.*	*Pre-Req.*
1831	*Community Health	3	
1806	*Environmental Health I	5	
1816	*Environmental Health II	5	
1821	*Environmental Engineer. I	5	
2836	*Public Health I	5	
2837	*Environmental Engineer. II	5	
2856	*Public Health II	5	
1850	Public Health Law	2	
1870	*Occupational Safety	3	
1891	Internship	12	
1890	Special Problems	3	
2851	*Epidemiology	5	
2840	*Bacteriology	4	2825
0354	*Entomology	2	2825
1810	*Environmental Problems	2	

*These courses will be assigned a lab time.

ENVIRONMENTAL TECHNOLOGY

1832 *Community Health*: A study of the history of public health, the areas of responsibility now covered by public health agencies and the approach to new public health areas. The need and effect on the public by the local, state, national and volunteer health agencies are discussed. Also included are discussions of the individual inspector and his role and responsibility in the above.

1806 *Environmental Health I:* A general survey course in environmental health including basic principles in water contact, air contact, etc. Course includes many field trips to various facilities to observe various control principles in actual use.

1816 *Environmental Health II:* An indepth study of food protection, including local, state and federal regulations concerning food production, food processing, and food service operations.
Field trips to various aspects of food protection are planned and practical applications of food protection and food equipment inspections are scheduled.

1821 *Environmental Engineering I:* A study of air, water and solid waste problems and their cause, effects and prevention methods. Labs will include practical application of water, air, sewage and solid waste management, inspection and control.

2837 *Environmental Engineering II:* A study of commonly encountered pests and their eradication. Course will identify various types of rodents, insects and other pests; the material available for control; the safety and precautions necessary in handling materials and infected pests. Also covers identification of diseased rodents and carriers of communicable diseases.

2836 *Public Health I:* A comprehensive study of requirements and standards of shelter, space and individual home sewage disposal. Includes a background of structural limitations, plumbing and electrical requirements, effects of proper heat and lighting and various regulations governing these areas.

2856 *Public Health II:* A study of the recognition of sanitation problems in such areas as swimming pools, camps, trailer parks, and institutional areas. The actions necessary to plan, develop, maintain, inspect and the licensure of these various areas as well as the actions necessary to correct and remove problems will be discussed.

1850 *Public Health Law:* Another general survey course in the fundamentals of public health law. Some legal terms as they apply to public health. Also case studies are used to illustrate relationship of public health problems and their legal complications. An indepth study of the Ohio Revised Code and Ohio Sanitary Code.

1870 *Occupational Safety:* One of the areas in which public health personnel have expended little effort has been in this subject area. Time lost from work due to accidental injury amounts to millions of dollars each year. A concentrated study of the causes, effects, and prevention of injuries and deaths in food service areas, industrial areas, recreational and school environments and other related areas.

1891 *Internship:* This course will provide the student with practical on-the-job training for training opportunities and future employment.

1890 *Special Problems:* This course will be held by special arrangement with an instructor in the student's particular technology. It will provide an opportunity for individual research in the student's major area of study.

2851 *Epidemiology:* A study of the relationships of the various factors which determine the frequency and distribution of an infections process, a disease, or a psychological state in the community. A study of various communicable diseases with emphasis on reading and preparing statistical charts and graphs.

2840 *Bacteriology:* The study of microorganisms including bateria molds, and protozoa. Lab procedures will develop an experience in collection, isolation, culture, staining and identification of various microorganisms.

0354 *Entomology:* An introduction to the study of insects. Field collecting will be an important part of the course. Specimens will be identified in the field and in the lab. The major orders and families of insects will be discussed in lecture sessions.

1810 *Environmental Problems:* A course of study in which students will choose a specific area and do some field work, text research, and submission of a term paper on that subject.

FORESTRY TECHNOLOGY

Description of Technology

The program provides technical training for "the scientific management of forests and forest lands." The primary course content emphasizes forestry and the biological sciences. Approximately 50% of the training involves field trips or experiences.

Possibility of Future Employment and Advancement

1. Ranger in state forests and state parks
2. Forestry nursery foreman and assistant superintendent
3. Division and district fire warden
4. Logging or sawmill supervisor
5. Land manager for private and industrial owners
6. Assistant in specialized research with state or federal agencies
7. Industrial timber cruiser, log scaler, concentration yard manager, survey crew chief, land specialist, pulpwood and log buyer.

Equipment Provided

Specialized equipment in forest mensuration. Equipment for aerial photo interpretation, timber harvesting, and surveying.

FORESTRY TECHNOLOGY

Course No.	*General Requirements*	*Cr.*	*Course No.*	*Basic Requirements*	*Cr.*
1010	Communication I	3	1330	*Botany	3
1011	Communications II	3	1022	Math II	5
1012	Communications III	3	1385	*Agronomy	3
2070	Technical Writing	3	0354	*Entomology	2
0040	Economics I	3	0291	*Accounting I	3
0080	Political Science	3	0334	*Geology	3
0053	Sociology I	3	2318	*Applied Silviculture	5
	Elective	3	(Pre. Req. 1335, 0321, & 1322)		

Course No.	*Technical Requirements*	*Cr.*	*Pre-Req.*
0320	*Intro. to Forestry	3	
1335	*Dendrology	4	
0321	*Photo Interpretation	4	1022
1322	*Fire Cont. & For. Prot.	3	
0319	*Tech Drawing	3	
1323	*Reforestation	4	1335
1324	*Survey I	3	1022
1357	*Forestry Measurement	5	1022
1390	Internship	12	1022 & 1357
1391	Special Problems	3	
2360	*Forestry Mensuration	5	1022 & 1357
2365	*Timber Harvesting	4	1335 & 1357
2398	*Intro. to Wildlife Mgt.	3	
2317	Orientation to Employment	1	1335, 2318, 2365, 1322,
2319	*Forestry Management	5	0291, 0040, 0321, 0319, 1324, & 1323
2315	*Forestry Prod. Util.	5	0320 & 1335
2314	*Lumber Grading Marketing	5	1357 & 2365

*These courses will be assigned a lab time.

FORESTRY TECHNOLOGY

0320 *Introduction to Forestry:* This course will deal with the interrelationship of all basic courses and technical courses in the science of forestry, the history of the U. S. and in neighboring states, the present resource status, the structure of state and federal forest agencies and the place of the forest technician in this field.

1335 *Dendrology:* Field studies in dendrology are concerned with identification of trees and shrubs both in summer and winter conditions. The use of plant keys, ecological and forest associations, and tolerance factors of different species are also studied in the field. Lecture material covers identification of species not native to Ohio.

0321 *Photo Interpretation*: A basic course in the use of aerial photographs and maps and the construction of maps for the purpose of vegetative cover analysis and control. Techniques learned during this course are applied to other technical courses in Forestry and Recreation & Wildlife.

1322 *Fire Control & Forest Protection:* The protection of forests from fires, insects and disease with special emphasis on fire control—prevention, pre-suppression and suppression activities (70% fire control-30% disease, livestock protection, etc.).

The importance of forest fire protection and the basic principles of forest fire behavior are studied. Pre-suppression activities are covered, including fire detection, travel, public relations, and organization. Fire danger instruments are demonstrated. The various methods, equipment, and crew organization in fire suppression are given.

An introduction to the more important insects and tree disease-causing organisms in the region are considered. Control methods employed against forest insects and disease are discussed. More emphasis is placed on the identification of the insect and disease organisms and their effect on the forest environment than on control methods.

0319 *Technical Drawing*: A beginning course for students who have had little or no previous experience in drafting. The principle objectives are to introduce a basic understanding of orthographic projection; ability to understand detail and assemble working drawings and to produce clear, legible and near drafting work using current drafting tools and techniques. Topographic drawing and freehand lettering is stressed as a requirement for map drafting and forest management activities.

1323 *Reforestation:* This course will cover the fundamentals of good practices in all phases of forest nursery management as well as actual work in the forestry department nursery.

Includes the concept of the need for reforestation; distribution of seedlings and methods of actually establishing these for growth; discussing harvesting and distributing the crop.

1324 *Survey I:* An elementary course in surveying, including the fundamentals of plane surveying and the use and care of equipment. The theory of measurements, solutions of triangles, angles, bearings, and azimuths. Proficiency in the use of the following instruments by completing assigned field exercises: staff and box compass, abney level, engineers and surveyors tapes, Philadelphia rod, engineers transit and level. Field work consists of two four-hour lab periods per week.

Special problems applicable to industrial, forestry and recreational surveys and mapping are included.

Students are responsible for keeping neat and accurate field notebooks which are graded weekly.

1357 *Forestry Measurement:* An introductory measurements course involving the mathematical routines and techniques commonly used in forestry mensuration.

1390 *Internship:* This course will provide the student with practical on-the-job training for training opportunities and future employment.

1391 *Special Problems*: Courses will be held by special arrangement with an instructor in the student's particular technology. It will provide an opportunity for individual research relative to the student's major area of study.

2360 *Forestry Mensuration*: Includes cruising, estimating and mapping of standing timber; construction of local volume tables and collection of data for studies of growth; field problems in timber estimating by the interpretation of aerial photographs. An area will be assigned to be estimated and mapped. A complete report is made for the area which includes topographic and type maps, road and logging plans. Students need to know what log rules there are and how to use them.

Also included are the basic techniques of log and pulpwood scaling, tree measurement, form class and volume determination; the measurement of the volume of all forms of forest products, both after cutting and while still in the log, the tree or the stand, and the measurement of the growth of trees and stands of timber in terms of these products. Methods of taking measurements by direct and indirect systems are covered as are volume computations, type mapping, and graphic presentations.

2365 *Timber Harvesting:* This course investigates the methods used in the harvesting of trees, including the physical layout and the economic, silvicultural, and protection considerations.

2398 *Introduction to Wildlife Management:* This is an introductory course in Wildlife Management. The course class work provides a background of theory in wildlife population dynamics. The laboratory work is to provide the student with the current techniques of habitat manipulation.

2317 *Orientation to Employment*: A course designed to orient the student to the various fields of employment that are available to the graduating technician. Forest organizations at the private and various governmental levels are examined. A survey of the various kinds of occupations is made and the demands and opportunities are stressed. Guest lecturers are invited to participate.

2319 *Forestry Management:* Forest Management is the application of silvicultural techniques, forest measurements, protection, wildlife management, accounting principles, economics, surveying, reforestation, marketing, and aerial photo interpretation in formulating a long term management plan for a forest land area.

The course combines all this technical knowledge to obtain the maximum use and production of all forest resources of which the land is capable.

Field problems will be undertaken to inventory, diagnose, and write long and short term prescriptions for timber stands; to evaluate the primary and secondary uses best suited to the interests of the landowner or, if public land, to the interests of the greatest number of people.

Field exercises involving the preparation of forest management plans, will be made on several separate tracts of land. These tracts have been set aside by agreement between the land owners and the forestry department of the school to be used exclusively for this type of field laboratory use.

2315 *Forestry Products Utilization:* The objective of this course is to give the student an appreciation of how wood is utilized after being harvested. The process of converting logs to lumber and other marketable by-products is considered as well as air and kiln drying methods. Proper lumber stacking procedures and yard layout are discussed. An understanding of the marketing of various forest products is undertaken. Particular stress is placed on mill waste utilization.

2314 *Lumber Grading Marketing:* Cutting logs for grading, log grading systems, and standard hard wood lumber grading systems will be covered, as well as lecture and field work in simple forest engineering, blasting, log scaling and grading and practical work on a logging job. Safe working habits and the care and maintenance of equipment are stressed.

RECREATION AND WILDLIFE TECHNOLOGY

Description of Technology

A field-oriented program designed to provide the student with the necessary background and skills to fill the positions of labor foreman, park ranger, park manager, wildlife area manager, game production foreman, game protector, or assistant naturalist. The technician spends considerable time outdoors and carries out the policies and programs as set forth by the particular supervisory staff.

Possibility of Future Employment and Advancement

Because of the large numbers of park and recreation areas, most employment opportunities are in this field. Employment is about 95% with public agencies. The construction of recreational areas is still increasing and employment opportunities will continue to rise. Excellent opportunities are available with the Ohio Department of Natural Resources, metropoliton park systems, conservancy districts, and certain local and federal agencies.

Equipment Provided

Buses are provided for most field trips, but in certain cases students must furnish their own transportation. Audio-visual aids, lab equipment, field glasses, and some camping equipment is provided by the school. Certain small inexpensive items are purchased by the student.

RECREATION AND WILDLIFE TECHNOLOGY

Course No.	*General Requirements*	*Cr.*
1010	Communications I	3
1011	Communications II	3
1012	Communications III	3
0056	History	3
0040	Economics I	3
0080	Political Science	3
0075	Speech	3
1350	*Archaeology	3

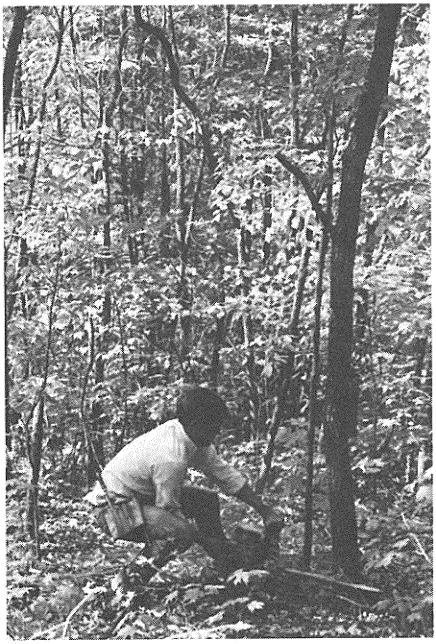
Course No.	*Basic Requirements*	*Cr.*
1331	*Field Biology I	3
1332	*Field Biology II	3
1330	*Botany	3
1022	Tech Math II	5
1355	*Zoology	3
0334	*Geology	3
1307	*Environmental Prob.	3
2308	*Ornithology	3

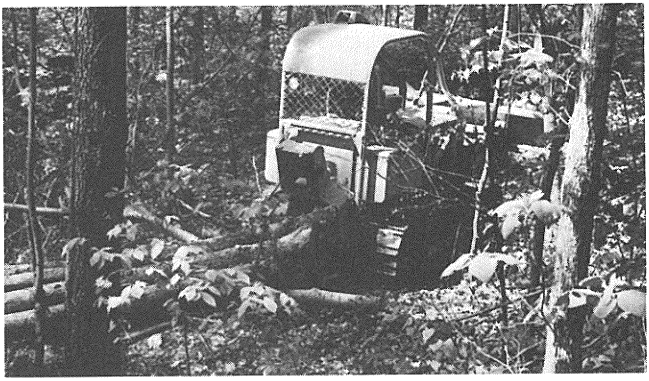
Course No.	*Technical Requirements*	*Cr.*	*Pre-Req.*
1340	*Intro. to Recreation	3	
1301	*Ohio Trees	3	
1324	*Survey	3	1022
1380	*North American Wildlife I	2	
1386	*North American Wildlife II	2	
1302	*Cartography	3	
2361	*Main. of Rec. Areas I	3	
2362	*Main. of Rec. Areas II	3	
2381	*Problems in Ecology	3	1331 & 1332
0320	*Intro. to Forestry	3	
2398	*Intro. to Wild. Mgt.	3	1380, 1386, 1355, 1301, 1331
2382	*Rec. Management Seminar	3	0334
2356	*Soils	3	1332
1354	*Fish Management	2	
0319	*Tech Drawing	2	
2303	*Mgt. of Rec. Areas	3	2361, 2362
2306	*Nature Interpretation RE	3	2381 & 1340
2305	*Rec. & Wild. Plantings	3	1331 & 1330
2399	*Wildlife Management WE	3	2398
2304	Investigations	3	

RE—Recreation Elective

WE—Wildlife Elective

*These courses will be assigned a lab time.





1380 *North American Wildlife:* A study of the life history, habitat, and distribution of Ohio game birds and animals. The use of feathers and teeth as an aging and sexing technique is emphasized, and casts will be made of animal tracks in the field.

1386 *North American Wildlife II:* A continuation of North American Wildlife I, including the major game birds and animals of North America. Lab work consits of the trapping of small rodents, the preparation of skins, and skeletal identification of species.

1302 *Cartography:* The interpretation of aerial photographs and topographic maps. Identification of cover types and physiographic features is emphasized by studying a variety of known locations.

2361 *Maintenance of Recreation Areas I:* Includes field experience in the proper use, care, and cleaning of hand tools, and the arrangement and maintenance of workshops. The materials and supplies used in park maintenance work, and their application to specific problems are discussed.

2362 *Maintenance of Recreation Areas II:* The maintenance and operation of park water and sewer systems will be studied. Also included are maintenance problems dealing with park buildings, camping areas, beaches, and heavy equipment.

2381 *Problems in Ecology:* This is a study of plant communities, plant succession, and plant distribution in Ohio. Lectures will describe the major North American and Ohio ecological communities. Field work emphasizes the use of plot and transect techniques in vegetation analysis.

0320 *Introduction to Forestry*: A study of the history of forest management in Ohio and the United States, and the structure of state and federal forest agencies. Forest resources and their relationship to recreation and wildlife management will be discussed.

2398 *Introduction to Wildlife Management:* This course will cover ecological principles as applied to game animals and habitat control; basic nesting cover, escape cover, and feeding cover requirements; and cultivated plants and their application to wildlife management.

2382 *Recreation Management Seminar:* Outside speakers and staff will discuss the programs, problems, policies, and job opportunities of various conservation and resource oriented agencies.

2365 *Soils:* This course will cover soil formation, classification, physical properties and parent materials; proper tillage and erosion control practices; the use of soil surveys, and the proper use of soil tools.

1354 *Fish Management:* Habitat requirements and identification of Ohio game fishes will be studied. Emphasis will be on pond and lake management techniques.

0319 *Technical Drawing:* Includes layout and design of basic park facilities and structures; blueprint reading; and engineering plans.

2303 *Management of Recreation Areas:* The duties of recreation and wildlife area managers will be discussed in class and in the field. This includes office procedures, public relations, work schedules, correspondence, reports, budgets, etc.

2306 *Nature Interpretation:* A study of the role of informative and interpretive nature programs conducted by public agencies. Students will prepare interpretive publications, plan self-guiding trails, construct displays, and lead field trips.

2305 *Recreation and Wildlife Plantings:* This course covers the role of native and exotic plants in wildlife management and park landscaping. Includes identification, cultural practices, grafting techniques, aesthetic values, pests, and pest control.

2399 *Wildlife Management:* Includes principles and field application of wildlife surveys; habitat improvement procedures and management plans for game and non-game species.

2304 *Investigations:* This course covers state and federal laws in criminal investigations, and the rights of the individual.

1391 *Special Problems:* This course includes individual research and field work in the student's particular area of interest. Request must be approved by the proper instructor.

1390 *Internship:* Internship is practical on-the-job training for a limited number of students at public recreation areas.

PUBLIC SERVICE TECHNOLOGIES

Correction

Police Administration

Police Science

CORRECTIONS TECHNOLOGY

Description of Technology

The program is directed toward developing professional techniques.

This is a two-year college level program designed to insure the proper balance of basic science, liberal studies, and technical training with field and laboratory experience that will prepare the student for employment in government, juvenile or adult correctional agencies.

Students will gain an understanding of the causes of deviant behavior within modern society. Specially designed courses will deal with the problems of correctional law, the prevention, identification, and correction of deviant behavior. In addition, students will study both community and institutionally based corrections program.

Possible Employment

Corrections Officer
Youth Leader
Parole Officer (Adult)
Probation Officer
Detention Home

CORRECTIONS TECHNOLOGY

Course No.	*General Requirements*	*Cr.*
1010	Communications I	3
1011	Communications II	3
1012	Communications III	3
0050	Psychology I	3
0075	Speech	3
0080	Political Science	3
2070	Technical Writing	3
2778	Psychology II	3
0053	Sociology	3

Course No.	*Basic Requirements*	*Cr.*
1022	Math II	5
0291	*Accounting I	3
1711	Physical Science	3
1827	Physical Science II	5
1780	Princ. of Leadership	4
2746	Correctional Psychology	5

Course No.	*Technical Courses*	*Cr.*	*Pre. Req.*
1760	*Intro. to Corrections	3	
1761	*Criminology	2	
1762	*Probation & Parole	5	
1768	*Drug Abuse	3	
1745	*Correctional Interview & Counseling Techniques	3	
1773	*Observation Techniques	3	
1764	*Juvenile Delinquency I	2	
2770	*Juvenile Delinquency II	3	1764
1776	*Correctional Case Eval.	5	

1763	Internship	12
1765	Special Problems	3
1714	*Typing & Bus. Machines	2
2766	*Philosophy of Correction	2
2777	*Research Appreciation	5
2779	*Group Interaction	3
2769	*Correctional Law	5
2771	Correctional Programs	5
2772	*Community Programs	5

*These courses will be assigned a lab time

CORRECTION TECHNOLOGY

1760 *Introduction to Corrections:* This course will allow a person an opportunity to study the history of corrections, concepts of treatment versus punitive measures, and to have an understanding of the objectives of corrections.

1761 *Criminology:* This course will allow the student an opportunity to have a comprehensive understanding of criminal activity in America and how various controls affect the criminal behavior of our society.

1762 *Probation & Parole:* This course will provide an opportunity for a student to study the why, how, and when of probation and parole. The course will provide an understanding of what one could look forward to in the future in relation to probation and parole.

1768 *Drug Abuse:* This course will deal with identification of users, effects of drugs, rehabilitation of drug users, and the role of an institution in combating the internal drug abuse problem.

1745 *Correctional Interview & Counseling Techniques:* A study of interviewing and counseling techniques, in general, and their specific applications to corrections. Some special problems to be considered are: the involuntary client, independence in the closed setting, and relationship building.

1773 *Observation Techniques:* This course will teach an individual how to observe, how to interpret what he is observing, how this would be used in the rehabilitation process, and the value of observation in relation to institutional security.

1764 *Juvenile Delinquency I:* This course will cover an in-depth study of juvenile delinquency, prevention of delinquency, interpretation of the role of society, and the administration of juvenile justice.

2770 *Juvenile Delinquency II:* A continuation of Juvenile Delinquency I.

1776 *Correctional Case Evaluation:* This course will allow a student to first select a certain type of criminal case. Then he will have an opportunity to meet with the individual who is connected with the case and develop a program, along with his supervisor, which would provide an opportunity for rehabilitation.

1763 *Internship:* This course will provide the student with on-the-job training.

1765 *Special Problems:* This course will be held by special arrangement with an instructor in the student's particular technology. It will provide an opportunity for individual research in the student's major area of study.

1714 *Typing & Business Machines:* An introduction course in typing and business machines, such as adding machines, calculators, etc.

2766 *Philosophy of Corrections:* A study of correctional philosophy is intended to aid the correction officer in understanding the organization of which he is a part, and to enhance consistency of job performance.

2777 *Research Appreciation:* The student will select a research project in relation to correction. He will develop the project and explore the various methods of research that would be associated with the project.

2779 *Group Interaction:* A three credit course, the purpose of which is to introduce students to the complexities of interpersonal relationships. The prerequisite is Introduction to Psychology. Students will meet as a group on a regular basis in order to exchange ideas about themselves and others. The aim of the course is for students to gain a greater understanding of themselves, to increase their sensitivity to others, and to facilitate communications.

2769 *Correctional Law:* This course will allow the student to have an understanding of constitutional, criminal, and correctional law. He will study how interaction of these laws control our human behavior.

2771 *Correctional Programs:* This will deal with all of the programs which the correction field uses in its systems—treatment, social services, pre-release, religion, discipline, visitation, education, etc.

2772 *Community Programs:* This course will explore the programs which could bring together the institution and the community, so each would be able to identify its role and understand how, by uniting forces, the rehabilitation process would be expedited.

POLICE ADMINISTRATON TECHNOLOGY

Hocking Technical College's objective will be to educate and train professionals in the field of Police Administration. An accelerated professional tempo in the police services has necessitated the training of qualified personnel to function in a leadership capacity.

POLICE ADMINISTRATION

Course No.	*General Requirements*	*Cr.*
1010	Communications I	3
1011	Communications II	3
1012	Communications III	3
0050	Psychology I	3
0051	Psychology II	3
0080	Political Science	3
0053	Sociology	3
2070	Technical Writing	3
0075	Speech	3

Course No.	*Basic Requirements*	*Cr.*
1826	Police Adm. I	3
1720	Criminal Law	3
1721	Criminal Law II	3
1827	Police Adm. II	5
1802	Police Adm. III	3
2925	Supervision & Leadership	4
0052	Psychology III	3

Technical Requirements	*Cr.*
*Intro. to Law Enforcement	4
*Basic Police Photography	3
*Adv. Police Photography	2
Public Administration	5
*Typing & Business Machines	2
*Public Finances	3
Internship	12
Special Problems	3
*Computer Concepts I	2
Criminal Evidence	4
*Accounting I	3
*Police Administration IV	3
*Computers in Law Enforcement	5
*Police Administration V	3
*Police Adm. Research I	3
*Grantsmanship	3
*Criminology	2
*Traffic Control	4
*Police Adm. Research II	3
Laws of Arrest, Search & Seizure	3

*These courses will be assigned a lab time

POLICE SCIENCE TECHNOLOGY

Description of Technology

This is a program designed to provide the students with the skills and knowledge of law enforcement enabling them to meet the demand of our complex society. The training is directed toward developing a professional technician and a citizen.

Possibility of Future Employment and Advancement

Local: Local police and sheriff's departments.

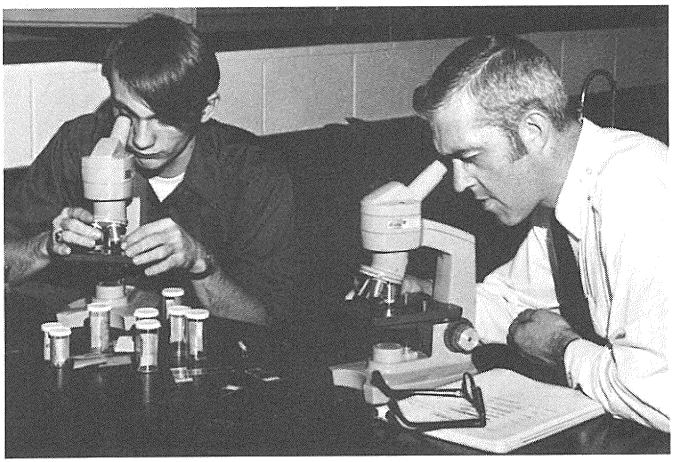
State: State police, highway patrol, crime control commission, fish and wildlife agencies, narcotics bureaus, crime laboratories, and more than 200 other state agencies in the U.S.

Federal: Central Intelligence Agency, U. S. Secret Service, Internal Revenue Service, Border Patrol, Military Police, Office of Naval Intelligence, and over fifty other agencies concerned with some aspect of law enforcement.

Private: Plant protection and industrial security, insurance investigator, retail store security, private police, airline, bus, railroad security, private investigation.

Equipment Provided

Photo lab and equipment
Crime lab and equipment



POLICE SCIENCE TECHNOLOGY

Course No.	General Requirements	Cr.
1010	Communications I	3
1011	Communications II	3
1012	Communications III	3
0050	Psychology I	3
0051	Psychology II	3
0080	Political Science	3
0053	Sociology	3
2070	Technical Writing	3
0075	Speech	3

Course No.	Basic Requirements	Cr.
1826	Physical Science I	3
1720	Criminal Law I	3
1721	Criminal Law II 1720 pre-req.	3
1827	Physical Science II	5
1802	*Chemistry	3
2925	Supervision & Leadership	4
0052	Psychology III	3

Course No.	Technical Requirements	Cr.	Pre-Req.
1713	*Intro. to Law Enforcement	4	
1713	*Basic Police Photography	3	
1717	*Adv. Police Photography	2	1713
1751	Intro. to Investigation	5	
1714	*Typing & Business Machines	2	
2756	*Intermediate Investigation	3	1751
1702	Internship	12	
1701	Special Problems	3	
1299	*Computer Concepts	2	
2752	Criminal Evidence	4	
2750	*Criminalistics I	3	
2731	*Criminalistics II	3	2730 & 1802
2732	*Criminalistics III	5	2730, 2731, & 1802
2735	*Juvenile Procedures I	3	
2799	*Police Administration I	3	
2789	*Police Administration II	3	2799
2740	*Patrol Procedures	2	
2753	*Traffic Control	4	
2754	*Accident Investigation	3	
2755	Laws of Arrest, Search, & Seizure	3	

*These courses will be assigned a lab time

1712 *Introduction to Law Enforcement:* This course acquaints the student with federal, state and local law enforcement agencies and allied agencies, such as narcotics, health and liquor control department and bureaus of prisons, motor vehicle and others.

1713 *Basic Police Photography:* The student will receive a thorough working knowledge of the photographic process from this course.

1717 *Advanced Police Photography*: Goals of this course are: to provide the student with knowledge of the ways in which photography can record various kinds of evidence using the latest materials and techniques: to provide the student with knowledge of the proper preparation of photographs for evidence in court and court testimony by the photographer.

1751 *Introduction to Investigation:* This is a study of the investigative procedure; initial contact by an officer, preliminary investigation primary phase, and follow-up. The laboratory will provide actual investigative situations.

1714 *Typing & Business Machines:* The course is a study of the touch system of typewriting with emphasis on accuracy rather than speed, and report and form typewriting techniques. Introduction to business machines is also included.

2756 *Intermediate Investigation:* A study of proper interviewing procedures and practices, constitutional limitations on interrogations, legal interrogation procedures and practices are included in this course.

1702 *Internship:* This course will provide the student with practical on-the-job training relative to training opportunities and future employment.

1701 *Special Problems:* This course will be held by special arrangement with an instructor in the student's particular technology. It will provide an opportunity for individual research in the student's major area of study.

1299 *Computer Concepts:* This is an introduction to data processing with concentration on applications in law enforcement technology.

2752 *Criminal Evidence:* Goals of this course are: to provide the student with a working knowledge of the kinds and degrees of evidence and the rules governing the admissibility of evidence in court; to provide the student with an appreciation of the importance of proper preserva-

tion and collection of evidence; to provide the student with an understanding of the need to cooperate with prosecuting officials in the gathering of and presentation of evidence, including the recommended legal guidelines in obtaining oral and written confessions.

2730 *Criminalistics I*: This course seeks: to provide the student with knowledge of the importance of application of scientific methods of investigation; to provide the student with practical experience in recognizing, gathering, preserving, evaluating, and processing evidence in the laboratory; to educate the student in the physical technologies used in processing criminal evidence in the police laboratory.

2731 *Criminalistics II*: This is a continuation of Criminalistics I, which will provide the student with knowledge of chemical tests and analyses used in police laboratories.

2732 *Criminalistics III:* The study of identification of fingerprints, identification of firearms and bullets, documents and tool marks, and preparation for court presentation are included in this course.

2735 *Juvenile Procedures I:* This course will provide the student with knowledge of the problems encountered in the control of juvenile delinquency, and acceptable techniques in processing detained juveniles in conformance with the law.

2799 *Police Administration I:* This is a study of the basic problems of police administration, organizational concepts and principles.

2789 *Police Administration II:* A continuation of Police Administration I.

2740 *Patrol Procedures:* This course is designed to educate the student in the fundamental duties of the police officer on the street. The student will learn the procedure and guidelines to follow in answering all types of calls the police officer will face on the street. Patrol Procedures will prepare the student psychologically for a dynamic society.

2753 *Traffic Control:* This course will enable the student to handle traffic situations from reports to incidents, and acquire an understanding of the problems of traffic control. The most frequently used sections of the uniform vehicle code will also be covered.

2754 *Accident Investigation:* The course will cover accident reporting and investigation, the use of template and the accident investigation kit, search for physical evidence, accident diagramming and charting, preparation of statements, and witness interviewing.

2755 *Laws of Arrest, Search and Seizure:* This is a study of the laws of arrest, search and seizure, and the constitutional background of these laws. Also, a study of recent court decisions on criminal law and the necessary changes in police practice and procedure to keep in compliance with the law.

GENERAL REQUIREMENTS

As indicated on specific curriculum

1010 *Communications I:* This course is intended as a development of grammar and mechanical skills through examination of basic problem areas and short writing assignments.

1011 *Communications II:* This course is a continuation of Communications 1010 with emphasis on expository writing and job-oriented correspondences.

1012 *Communications III:* This course continues the study of expository writing with written reports and some experiences in oral communication.

0053 *Sociology:* This course provides an overview of the sociological approach to human interaction in our present cultural surrounding; also taking into consideration various structural or strata systems and social change.

2070 *Technical Writing:* The emphasis of this course is clear and concise writing. Also important are techniques of research and bibliography as well as technical reports and other forms of business communication.

0040 *Economics I*: This is the first course of a two-quarter sequence. It is organized to present the concepts basic to an understanding of business economics with an emphasis on macroeconomics. It covers such areas as economic growth, production, unemployment, the price level and public policy questions.

0041 *Economics II:* This is a continuation of the introductory course in economics. While Economics I conveyed an overview of the macro-aspects of the field, the emphasis in Economics II will be on micro-economics, or the more detailed aspects of the field. Such essential areas as money, credit, competition, monopoly, wages, labor-management relations, business cycles, prices, and government controls and regulations, as well as the interrelation of the American economic system with other systems will be emphasized.

0080 *Political Science:* This is an introductory course in Political Science. The objective of the course is to provide the fundamentals of the operation of the American Political System. A special emphasis will be given to such core aspects as conflict and consensus parties, elections, groups, and the economy, as they relate to national, state and local politics.

0075 *Speech:* The objective of this course is effective speaking for technical personnel. Emphasis is given to the expression of ideas at meetings, group discussions, and informal speaking engagements with stress on proper support of ideas and observations through research.

0050 *Psychology:* A focus upon the practical applications of the principles of human behavior as they relate to interpersonal relations on the job. Psychological techniques and principles in present day industry; selection, placement, training, evaluation of testing procedures, morale problem students, and analysis of modern socio-industrial society will be emphasized.

0051 *Abnormal Psychology:* An overview of the identification, diagnosis and treatment of mental illness and social deviance in our society. Includes discussion of community mental health concepts and applications.

0056 *History:* History of Ohio from earliest inhabitants to the present modern industrialized state is covered .

1350 *Archaeology:* This course includes a survey of prehistoric cultures that inhabited Ohio and how they differed from each other. Field trips to prehistoric sites and museums are included in course work.

2070 *Technical Writing:* The emphasis of this course is clear and concise writing. Also important are techniques of research and bibliography as well as technical reports and other forms of business communications.

BASIC REQUIREMENTS

(As indicated on spring curriculum)

1020 *Math 02:* The study of the basic operations of the slide rule is the content of this course.

1014 *Math 12:* This course presents a brief review of algebraic concepts; an introduction to the concepts of graphing, using rectangular coordinates and solutions of linear equations by determinants; a study of trig functions and their relation to the solution of right triangle and applications of radian measure; and an introduction to the solution of quadratic equations and related operations.

1028 *Math 22:* A continuation of Math 12 trig, using Vector's Law of sines and cosines to solve triangles. Emphasis will be on graphing of trig functions and constructions, with exponents and radicals; a study of complex numbers and their applications; and definitions, graphs, and properties of logarithms.

1032 *Math 32:* The student will work with additional types of equation and systems of equations; determinants, variation, progression, basic trig identities, and an introduction to plane analytic geometry. Math 32 includes a good summary of Math 12 and Math 22 and is essential for Math 42.

1022 *Math 11:* A study of basic algebra through the solution of linear equations and their application to written problems. A study of area and volume problems and their practical application along with solutions by logarithms. An introduction to trigonometry by introducing the trig ratios and their application to solutions of right triangles.

2042 *Math 42:* An introduction to differential and integral calculus and their application to the solution of related problems.

1030 *Introduction to Business:* The purpose of this course is to give the student a general understanding of business methods and terms. Since this is a one-quarter course, aspects of business covered in other required classes, such as accounting and business law, are not discussed here.

1150 *Physics I:* A study of composition and revolution of forces; Newton's laws of force and motion; accelerated motion, circular and simple harmonic motion; molecular forces in liquids and solids.

1151 *Physics II:* This course includes wave motion and vibration; sound and hearing; combination of sound waves; propagation of light by wave motion; mirrors and lenses, reflection, refraction, absorption and dispersion of light diffraction and interference; and optical instruments.

2045 *Descriptive Geometry:* This course is designed to teach the student the theory of engineering drawing. Included in the course are line exercises which will help the student understand the basic principles. Also included are practice problems covering the main fields of engineering.

1385 *Agronomy:* A course designed to study the formation of soils, their chemical and physical composition, and their role in various public health problems. These problems include erosion control, leaching of human wastes, building foundation, and evapo-transportation as an aid to leaching and drainage of soils to remove mosquito problems.

2801 *Drawing and Blueprint Reading:* A comprehensive study of the fundamentals of drawing, having as the objective the understanding of the basic principles and the development of skill in their application. Students will be given the background they need to interpret blueprints and to evaluate them

1826 *Physical Science I:* An introduction to the principles of mechanics, heat, light and sound. Laboratory work is for practical application.

1827 *Physical Science II:* An introduction to principles of magnetism, electricity and atomic structure. Lab work is included.

1720 *Criminal Law I:* This course is designed to give each law enforcement officer an opportunity to study criminal law, which has the same purpose as any other body of law: to guide and regulate the conduct of the individual and the preservation and maintenance of public order. Each officer will have a complete working knowledge of the how, when, where and why of criminal law, which is the basis of all law enforcement problems.

1721 *Criminal Law II:* A continuation of Criminal Law I.

2925 *Supervision and Leadership:* This course will help officers evaluate their own understanding of human relations and pinpoint areas of strength and weakness in relation to leadership skills. Included is how to understand the drives that motivate man in his work, how to praise, etc.

0051 *Abnormal Psychology:* An overview of the identification, diagnosis and treatment of mental illness and social deviance in our society. Includes discussions of community mental health concepts and applications.

1803 *Chemistry II:* A study of chemical stoichiometry, liquids and solids, solutions, chemical reactions, organic chemistry and nuclear chemistry.

2136 *Industrial Safety*: This course will introduce the Industrial Technician to the various aspects of safety.

2308 *Ornithology:* A field study course of resident summer birds in the area. Habitats and nesting habits will be discussed and studied in the field and classroom.

0354 *Entomology:* An introduction to the study of insects. Field collections will be identified in the field and in the lab. The major orders and families of insects will be discussed in lecture sessions.

2318 *Applied Silviculture:* An introductory course in applied silviculture, studying the influence of biological laws on forest culture. The subject matter deals with the science of producing and tending the forest, the nature of forest trees and stands, their growth, reproduction, environment, composition, and various responses.

This course considers the various treatments to maintain and increase forest production, in line with economic objectives. As much practical experience as possible is given students under field conditions, to develop leadership qualities and abilities.

2540 *Merchandising Accounting:* This course is geared to theory and realism in its approach to the financial operating areas of retail establishments, single store companies, and for companies with branch stores. Included will be an insight into the operating methods used to determine main and branch store profits, such as working accounting, leased department accounting, return on investments, gross margin determination, department store systems procedures, and financial management control.

0291 *Accounting I:* This is an introductory course in accounting. It includes basic accounting terms, principles, records, entries, procedures, and reports. The complete accounting cycle is covered. This includes adjustments and end-of-period procedures. Specialized records and procedures for handling frequently recurring transactions are included.

0292 *Accounting II*: Included in this course are: a practice set for application of elementary accounting principles; studies of cash receivables, inventories, fixed assets and liabilities; accounting principles; and manufacturing accounting.

2534 *Marketing:* This course covers a study of marketing fundamentals, consumer behavior, retailing and wholesaling, and manufacturing structures. The functions performed in marketing, marketing policies, and a critical appraisal of the field of marketing will be stressed.

0219 *Business Law*: A survey of the legal framework of our court system with emphasis on business situations. The major topics include: court organization, contracts, sales, warranties, negotiable instruments, insurance and bankruptcy.

1331 *Field Biology I:* This is the first of three courses in field biology and is designed to introduce the student to fundamental concepts of ecology. Special emphasis is placed on the ecology of old field sites and streams.

Included is the identification of insects, birds, shrubs, fruits, and aquatic organisms in relation to their environment. The most important aspect of the course is the study of living organisms in their natural habitats.

1332 *Field Biology II:* This is continuation of Field Biology I with emphasis on plant and animal communities and the interaction between communities. Students are to select a particular field of interest and spend their labs working on these projects. The projects include the study of aquatic life, reptiles and amphibians, birds, general ecology; wildlife, wildflowers and shrubs of particular value to wildlife, etc. Ecological relationships are stressed in each study. A written report of the results of the study is required.

1330 *Botany:* A course which covers the basic aspects of the plant kingdom such as the history of botany, taxonomy, the plant kingdom, mitosis, meiosis, anatomy, cytology, and physiology.

1355 *Zoology:* This is a brief survey of the entire animal kingdom. Emphasis is placed on taxonomy, morphology, and systems in the various phyla of animals.

0334 *Geology:* An introduction to physical and historical geology with lab and field work that emphasizes the identification of rocks and minerals and interpretation of physiographic features. The last third of the course covers the geology of Ohio.

1307 *Environmental Problems:* This course includes a review of current national and local problems in air pollution, water pollution, population growth, rubbish disposal, and habitat destruction. Field trips will pinpoint local problems and possible solutions. Testing and sampling techniques will be emphasized in the lab and field.

1802 *Chemistry I:* An introduction to inorganic chemistry, as it relates to atomic structures; oxidation; solids, liquids; acids and salts.

2825 *Introduction to Natural Science:* A study of the biological sciences to provide a foundation for subsequent studies. Emphasis will be on field and lab identification of plants and animals, and the physiology and morphology of both.

FACULTY

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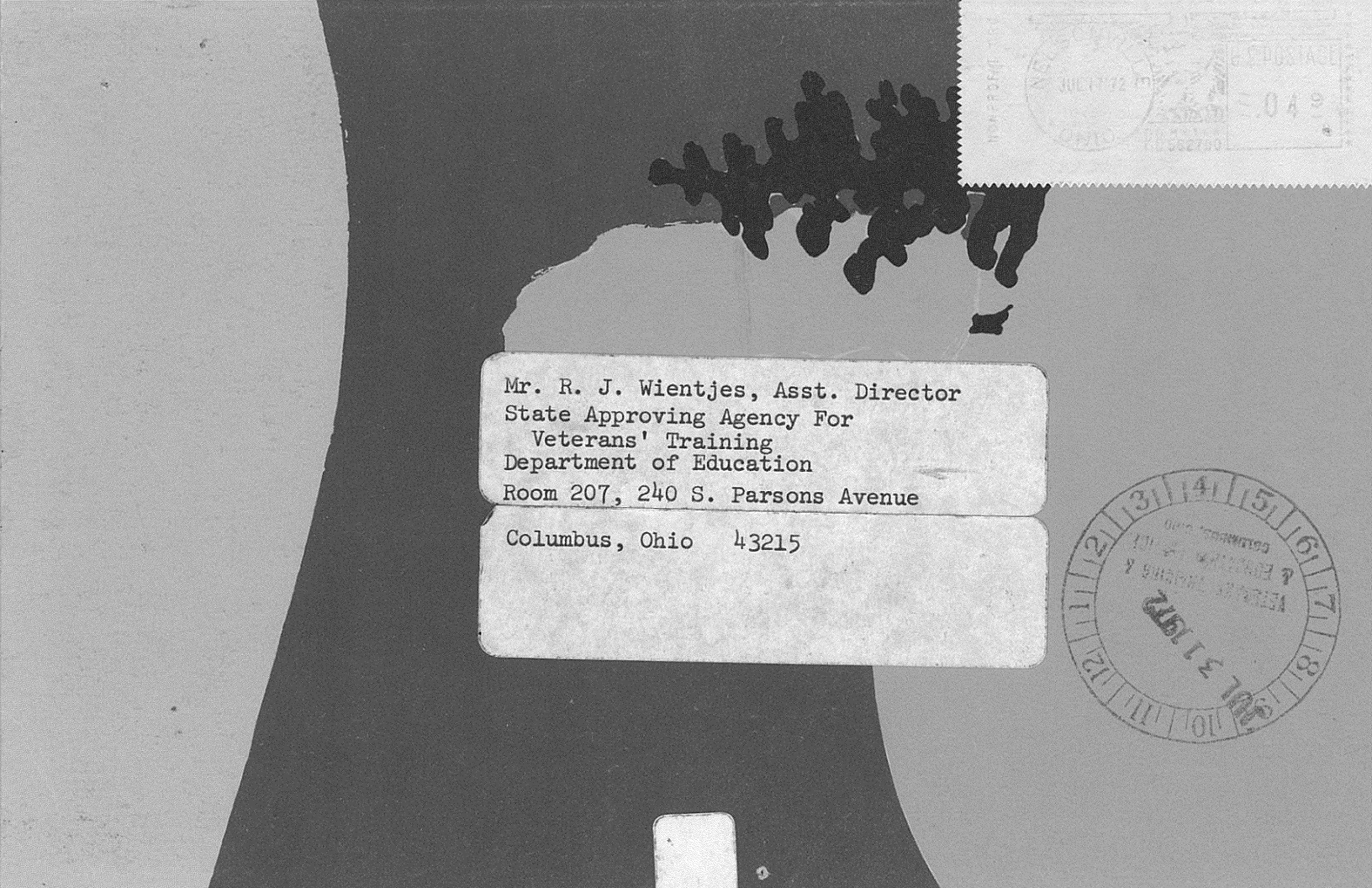

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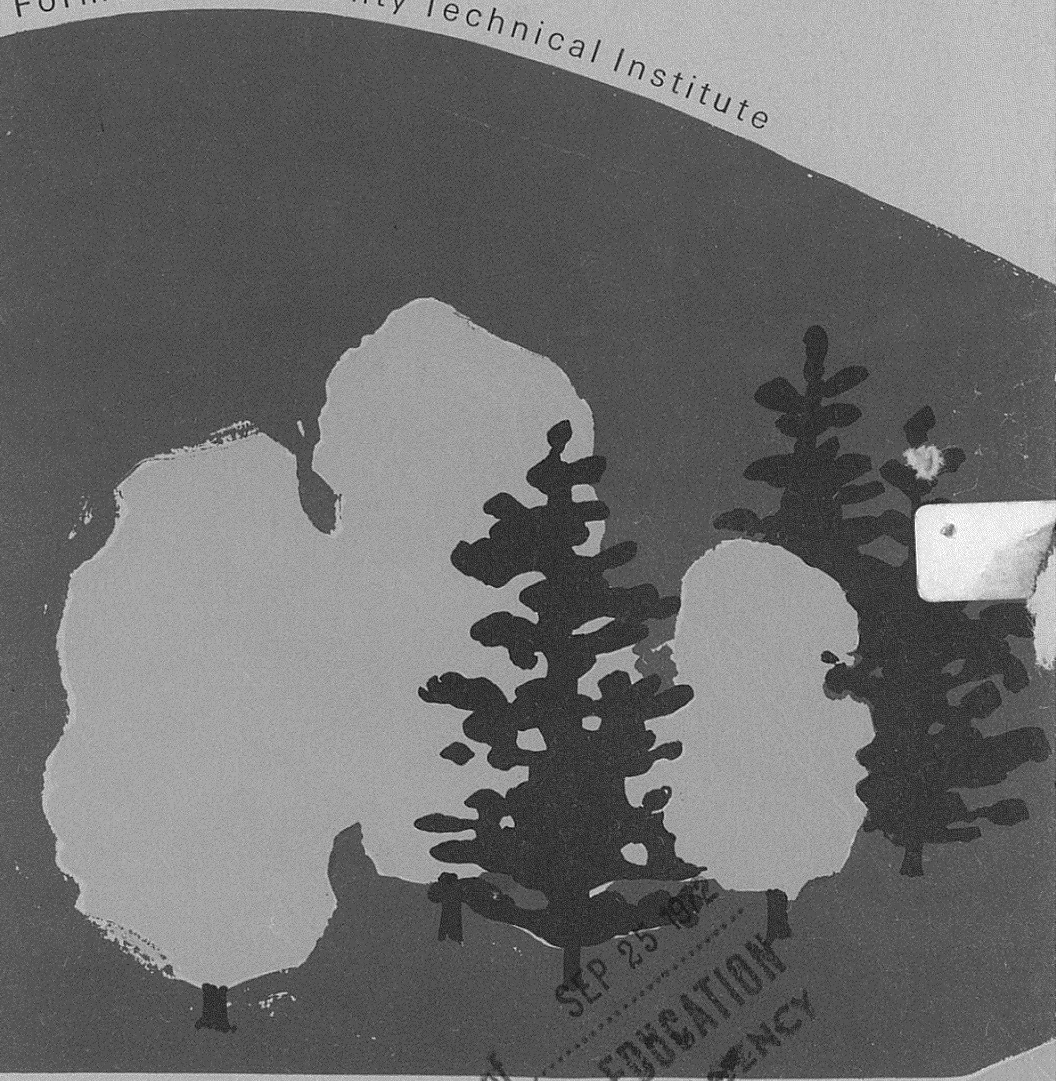
HOCKING TECHNICAL COLLEGE

HOCKING TECH,
Formerly Tri-County Technical Institute



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