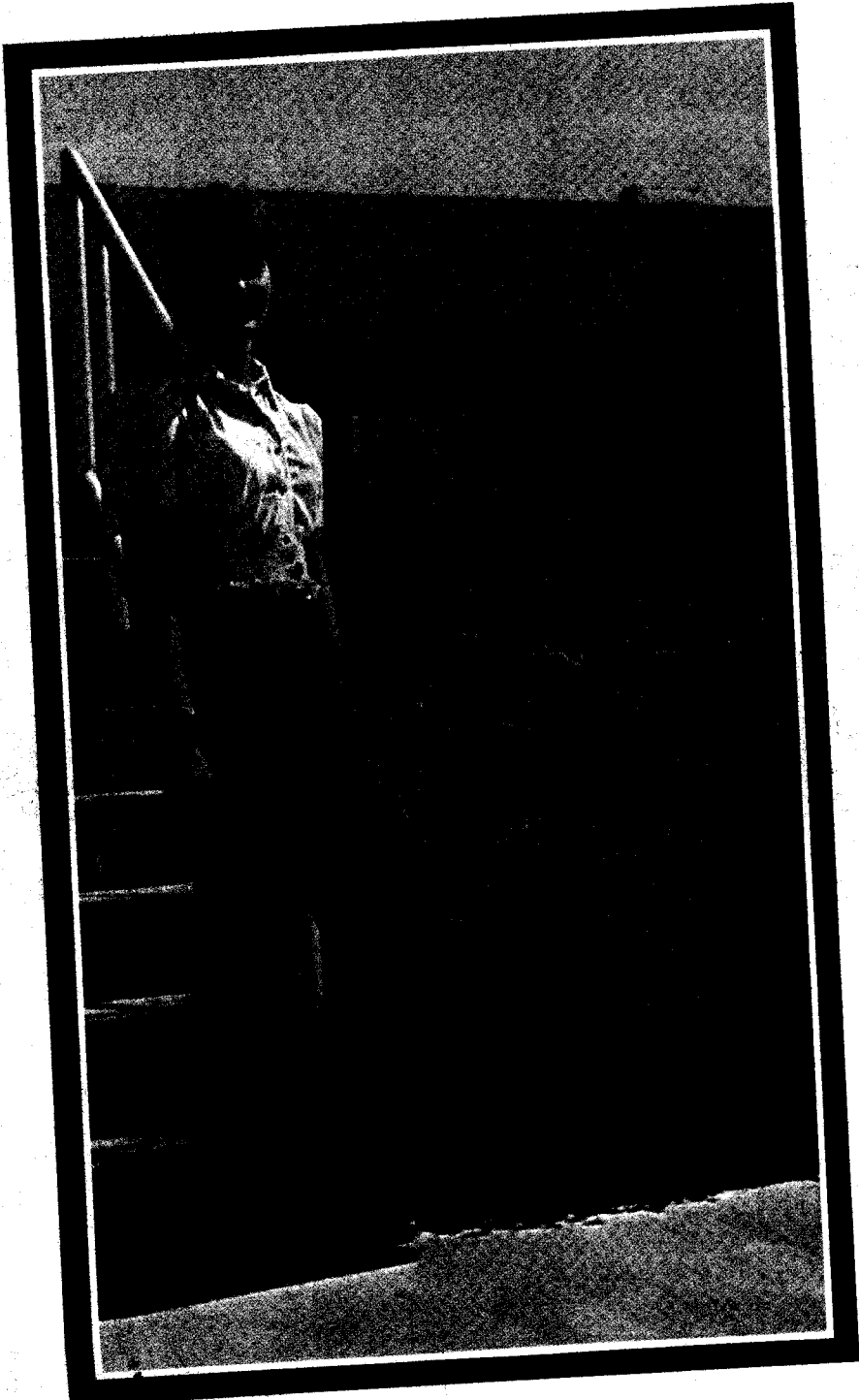


SCIOTO

TECHNICAL

COLLEGE



Bulletin 1973-75

SCIOTO TECHNICAL COLLEGE

OPERATION

The Scioto Technical College is directed by a Board of Trustees. Two members were appointed by the Governor of Ohio on March 11, 1970. Three trustees were appointed by the Portsmouth City Board of Education on February 24, 1970, and two trustees were appointed by the Scioto County Board of Education on February 21, 1970.

SCIOTO TECHNICAL COLLEGE

BOARD OF TRUSTEES 1972-1973

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Robert L. Stevens, Vice Chairman.....	Sciotoville
J. R. Sheets, M.D.	Portsmouth
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Faculty

DR. SAMUEL ADAMS
Director, Dental Hygiene
M.S.D. Dentistry, Northwestern University
Orthodontist

KRISTINE AGGERTT
Instructor, Mathematics
B.S., Indiana State University
M.S.T.M., University of Illinois

NANCY BARNETT
Instructor, Communication Skills
B.S., Ohio University
M.A., Marshall University

DAVID CLEAVES
Instructor, Park and Recreation Administration
B.S., Michigan State University
M.A., Michigan State University

CHARLES COOK
Instructor, Electrical Fundamentals
B.E.E., Morehead State University

LILLIAN DAVIS
Instructor, Business Education
B.S., Miami University
M.A., Marshall University

ROBERT DECKER
Instructor, Data Processing and Computer
B.S., Indiana University

LARRY ESTEPP
Instructor, Retail Mid-Management
B.B.A., Ohio University

ORVILLE FERGUSON
Instructor, Civil Engineering
B.S., West Virginia State College

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Department Chairman, English
A.B., Marshall University
M.A., Marshall University

GARY GEMMER

Department Chairman, Chemistry
B.S., Morehead State University
M.A.T., Miami University

ALI A. GOLJI MT(ASCP)

Director, Medical Lab Program
B.S., Wayne State University
M.S., Marshall University

PATRICIA GRIFFITHS, R.D.H.

Instructor, Dental Hygiene
Certificate of Dental Hygiene, Univ. of Michigan

DR. LYNN HOLTZMEIER

Instructor, Plastics Engineering
Ph.D. Chemical Engineering, Purdue University

CHARLES RAY IRWIN

Instructor, Electrical Engineering
B.S.E.E., Ohio University

JACK JAMES

Instructor, Psychology and Sociology
A.B., M.S., M.Div., Marshall University

DENNIS KIRSCH

Instructor, Chemistry and Physics
B.Che., Ohio State University
M.S.Che., Ohio State University
M.B.A., Ohio State University

JOYCE KISER

Instructor, Business Education
B.A., Morehead State University
M.B.E., Morehead State University

SHANNON KISER

Instructor, Speech and Communication Skills
B.S., Morehead State University
M.A., University of Kentucky

CHARLA LAUTAR

Instructor, Dental Hygiene
B.S., Ohio State University

PAM MARKEY

Instructor, Medical Laboratory
A.B., M.S., Indiana University

RONALD MILLER

Instructor, Electrical Fundamentals
B.S.E.E., Indiana Institute of Technology

SALLY REAM, R.D.H.

Instructor, Dental Hygiene
Certificate of Dental Hygiene, Ohio State University

LOIS SHUMWAY

Professor, Accounting
B.A., Ohio Wesleyan University
M.A., New York University

JOHN SHUPERT

Department Chairman, Mathematics
B.S., Ohio University
M.A., Louisiana State University
M.A., University of Illinois

KATHLEEN SIMON

Instructor, Communication Skills
A.B., Eastern Kentucky University
M.A., Eastern Kentucky University

CHARLES STAGGS

Instructor, Engineering Drawing
B.S., University of Kentucky

HERB STOTZ

Instructor, Civil Engineering
B.S.C.E., Ohio University
M.S.C.E., University of Michigan

RALPH VANZANT

Instructor, Park and Recreation Administration
B.S., Ohio State University

LARRY WALTERS

Instructor, Retail Mid-Management
B.S., Kent State University
M.A., University of Akron

DANIEL WEDDINGTON

Instructor, Accounting
B.B.A., Marshall University

ADMINISTRATIVE STAFF

Frank C. Taylor
President
B.S., Wilmington College
M.A., Marshall University

Thomas F. Foti
Vice President
B.S., Concord College
M.A., Marshall University

Michael Gampp
Dir. of Business Affairs
B.S., Morehead State University

STUDENT SERVICES STAFF

Arnold V. McCoy
Director of Student Services
B.S., Ohio University
M.A., Marshall University

Richard R. Howard
Counselor
B.S., Ohio State University
M.A., Eastern Kentucky Univ.

Tom Davidson
Placement Director
B.S., Marshall University
M.A., Marshall University

PRESIDENT'S ADVISORY BOARD

The Scioto Technical College, attempting to follow its philosophies and policies, has established an advisory to the President. The members of this board are outstanding leaders in both business and community affairs. We feel this board can do much to keep us abreast of the current needs, trends, and problems of the world in which our graduates will find themselves.

Ernest E. BrayshawEmpire-Detroit Steel
George L. DavisFarmer
Richard Diehl.....Ohio Stove
Richard Flannery.....USS Chemical Corporation
Edward LeviLevi Furniture Company
Lloyd FullerAtomic Goodyear Corp.
Edward GlocknerChamber of Commerce
George StowellPortsmouth Times
Frank Tiedge.....Tiedge Ford Company
Jack Monroe.....Williams Mfg. Company
Rick KlingenbergerOhio Power Company

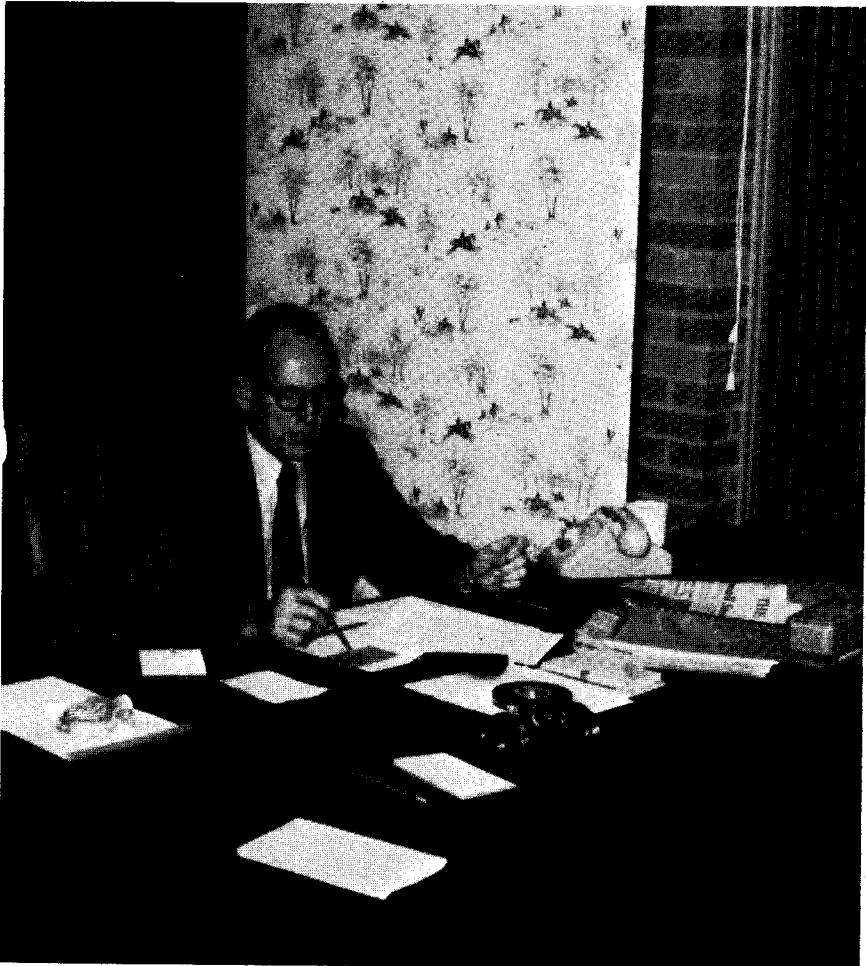
TECHNICAL ADVISORY COMMITTEES

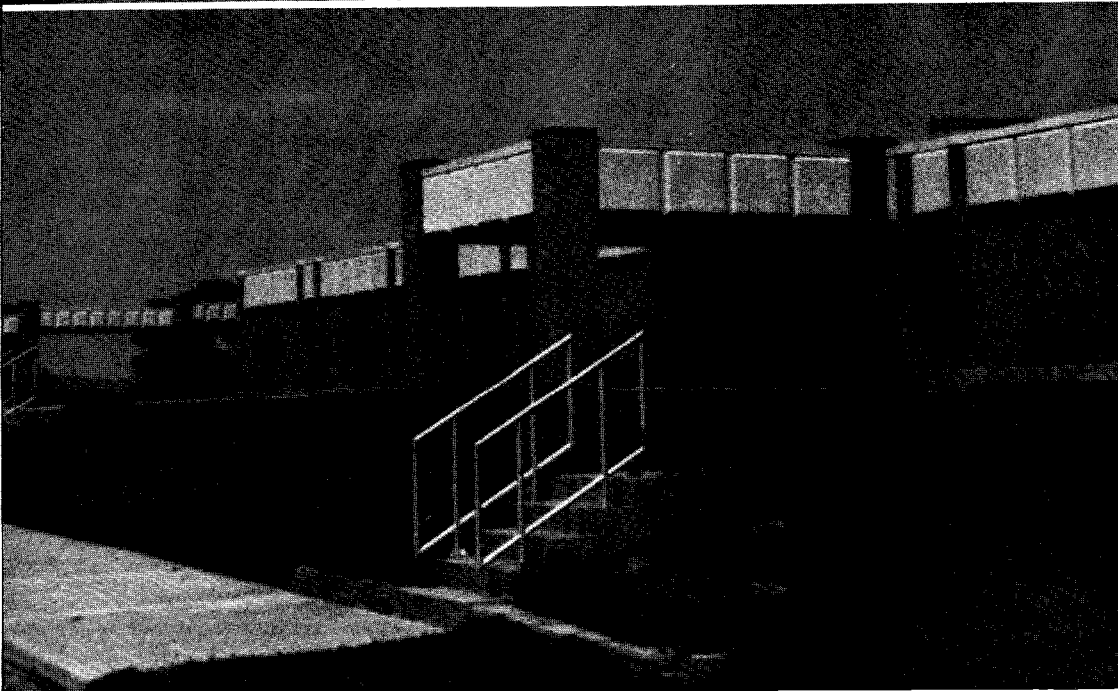
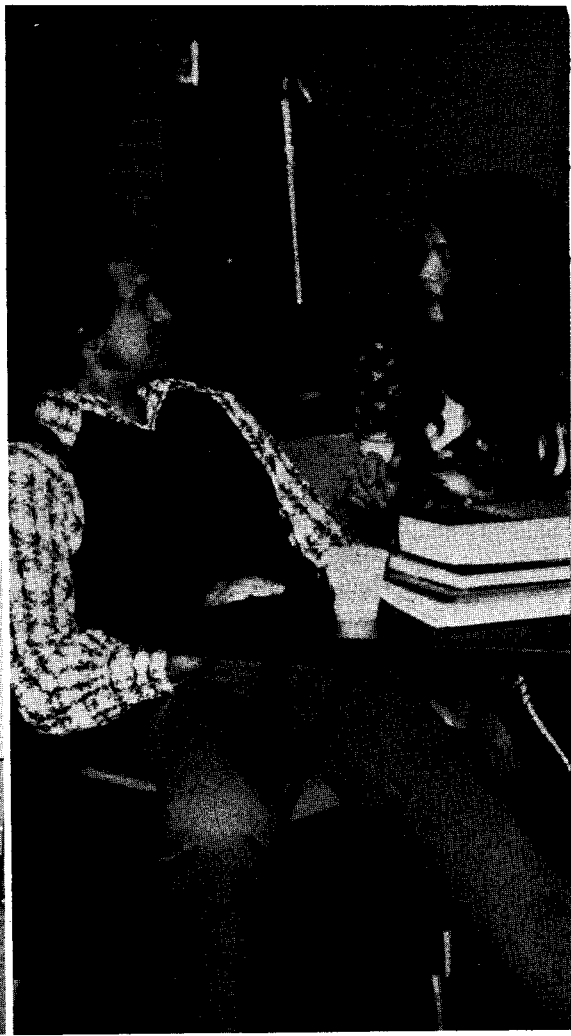
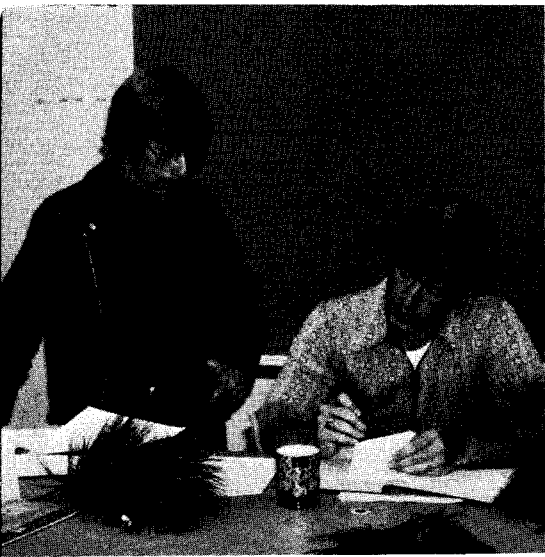
A technical Advisory Committee has been named for each technical area or cluster of technical areas. These committees, like the general committee are advisory only, not policy-making. These committees, made up of professional and technical people competent in their fields of specialty, work directly 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.

ACCREDITATIONS

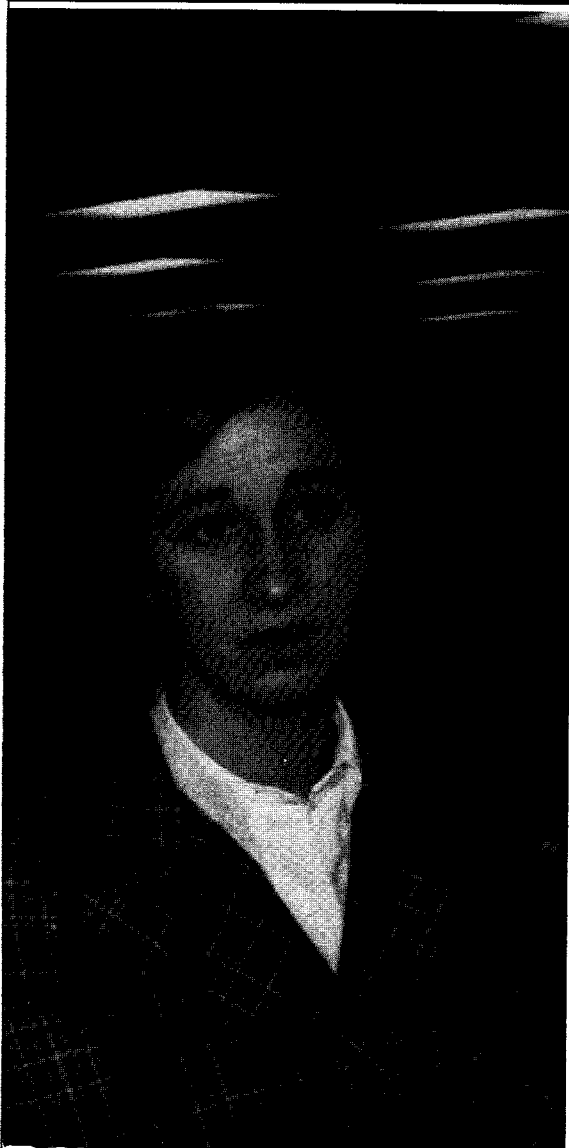
Scioto Technical College is approved by the following agencies:

Ohio Board of Regents
Ohio State Department of Education
Veterans Administration
Bureau of Vocational Rehabilitation
Social Security Department
North Central Association of Colleges
and Secondary Schools
U.S. Office of Education
American Association of Junior Colleges
American Dental Association
College Entrance Examination Board
American Medical Association





**ADMISSIONS
FINANCIAL AID
AND
GENERAL INFORMATION**



ADMISSION PROCEDURES

ENTRANCE REQUIREMENTS

Admission to Scioto Technical College requires a high school diploma or its equivalent. No specific subjects or course of study are required.

APPLICATION

An application for admission may be submitted after completion of the junior year of high school. The prospective student should write to the Admissions Office for the necessary application forms. The applicant is responsible for the following:

Completing and returning the formal application for admission. A non-refundable fee of \$10 must accompany the application.

HIGH SCHOOL TRANSCRIPT

Filling in Section 1 of the High School Transcript Request Form and submitting it to a high school counselor or the high school administrative office for completion of Section II. The request form and the transcript should be returned to the Scioto Technical College Office by the high school.

COLLEGE TRANSCRIPT

A college transcript is required of all applicants who have attended other colleges, universities, or institutes.

ADMISSION TEST

The American College Test (ACT) is required of all applicants. If a student applies for admission after the last ACT test date for the year, he will be required to write the test during the first test date of the next year.

INTERVIEWS

Interviews may be required of applicants for programs that include internship employment. In addition, counselors are available to any applicant desiring help in selection of a technology. The Counseling Office is

open to visitors Monday through Friday, 8:00 a.m. to 4:00 p.m. except holidays.

REGISTRATION FOR ENROLLMENT

Approval of the application for admission issued by the Admissions Office after the applicant has completed the requirements stated above. After receiving a letter of acceptance, the student indicates his understanding of the policies and regulations of the College and his intent to enroll by submitting the \$25 payment toward first quarter tuition. This payment completes his registration for enrollment.

FEE PAYMENT AND REGISTRATION FOR CLASSES

Before the beginning of each quarter the student receives a fee card which indicates instructional fees and all charges due. All fees should be paid before the first day of classes unless satisfactory arrangements are made with the financial officer of the College.

LATE REGISTRATION FEE

A fee of \$5 will be charged to students who register after the announced registration period.

RE-ADMISSION

A student whose work at the Scioto Technical College has been interrupted should write to the Admissions Office for the necessary forms several weeks before the beginning of the quarter for which re-admission is desired. He must file transcripts of any college work taken after separation from the College if he has not been enrolled during the previous two years.

ADMISSION BY TRANSFER

Any student who is in good standing at another accredited institution may apply for admission to the Scioto Technical College. This student must follow the application procedures outlined above. In addition he must submit an official transcript from the previous school. Official evaluation for transfer credit is made when requested, after the application for admission is completed. Only courses with grades of C or better are considered for transfer.

FEES FOR ACADEMIC YEAR (THREE QUARTERS)

	IN COUNTY	OUT OF COUNTY	OUT OF STATE
Application Fee*	10.00	10.00	10.00
Tuition	450.00	450.00	450.00
General Fee	75.00	75.00	75.00
Surcharge**	.00	15.00	75.00

The fee for part-time students is \$10.00 per quarter hour.

Fees are subject to change by action of the Board of Trustees.

Approximate cost of books and supplies for one academic year are \$125.

LABORATORY FEES

Data Processing	\$20.00 per quarter for 6 quarters
Accounting & Exec. Sec.	5.00 per quarter for 6 quarters
Dental Hygiene	\$20.00 per quarter for 6 quarters
Medical Laboratory	20.00 per quarter for 6 quarters
Plastics Engineering	\$15.00 per quarter for 6 quarters
Electro-Mechanical	10.00 per quarter for 6 quarters
Civil Engineering	10.00 per quarter for 6 quarters

The student activity fee is \$5.00 per quarter.

FINANCIAL AID

The financial aid program at Scioto Technical College is predicated upon the belief that the prime responsibility for assisting a student in meeting college expenses lies with the individual student and his family. However, it is recognized that in spite of prudent financial planning many individuals and families of students may require some assistance in financing an education. Financial assistance from the College should be considered as supplemental to the family effort, but the Technical College stands ready to help the student who is willing to help himself, and whose family will help him as income and assets permit.

Students are expected to contribute toward the cost of their education through family support and their own earnings and savings. Students

*Application fee is paid only the first quarter of enrollment.

**Section 3357.09(G) of the state laws requires that a distinction be made between the fees charged to a student whose permanent home address is within the district and the fees charged to a resident of Ohio but not of the district.

should consider summer employment to defray the costs of their educational expenses. Student assets are counted as part of family resources and assessed over the two-year program.

The Scioto Technical College is a state institution and receives funds from Ohio taxpayers through the state legislature. As a result, every student receives some assistance in addition to his own contribution.

The following types of financial aid are available:

Scholarships are monetary gifts which do not involve repayment. Selection is based on the student's academic performance or potential and the amount ordinarily varies with the student's financial need.

Grants are awarded to students in need of financial aid and capable of meeting normal academic requirements. These programs, funded primarily by the State and Federal Government, do not imply academic distinction. Grants are non-repayable.

Employment opportunities are available for part-time work through the employment referral service of the Student Employment Office as well as through the College Work-Study Program. The latter program, funded primarily through Federal resources, is available to students with need from low income families.

Loans are financial aids which have the requirement that they be repaid at a specific time. Most loans administered by The Student Financial Aids Office also have a minimal interest charge.

The Student Financial Aids Office welcomes inquiries from students, parents, and friends of the College.

Address: Scioto Technical College
 Box 766
 Lucasville, Ohio 45648

Phone: 614 — 259-5566

VETERANS

All students who plan to attend Scioto Technical College under the provision of a Veterans Educational Program must submit an application in advance of their registration date. The V.A. authorization must then be presented at the time of registration. Veterans receiving educational benefits should be prepared to pay all expenses, inasmuch as tuition payments are made directly to the veteran by the Veterans Administration. Veterans that submit applications too late to receive authorization before registration will be required to sign a note for institutional cost.

COUNSELING

Students are encouraged to make use of the available professional counseling services. These services include both individual and group counseling. The counseling staff assists students with educational and occupational planning, changing educational goals, and personal problems. Students desiring more information concerning this service should contact one of the student services counselors.

Office hours for counselors and student services staff are between the hours of 8:00-4:00 or by appointment.

PLACEMENT SERVICES

Scioto Technical College assumes that students will be employable at a job related to the particular technology upon completion of two years training. Contacts and interviews will be set up at various times for second year students.

This does not mean that a student will be guaranteed employment, but an opportunity will be given to students to talk with prospective employers.

Students attending the college are entitled to the placement service at no cost.

PARKING AND AUTO REGISTRATION

Adequate parking facilities are adjacent to the College. Students should park in designated areas only and should exercise proper driving courtesy. The College assumes no responsibility for any losses which may occur in its parking area, including both personal and property damages. Nevertheless, the College will make every effort to police the campus. Violators of College regulations or civil regulations will be prosecuted.

NEWSPAPER

The school newspaper is published to keep students informed about events and other information. The staff consists of a faculty advisor and students who serve on a volunteer basis. The paper is made available to all students at a minimal cost.

STUDENT GOVERNMENT

The student government will be the governing body for students on campus. The officers of the student government will be elected by the entire student body.

TECHNICAL CLUBS

Clubs may be established for students in each technology as they decide. The purpose of the clubs is to help the student grow professionally and provide service opportunities as well as social events.

In addition to technical clubs, other clubs for various purposes may be opened by students.

INTRAMURALS

Intramural programs may be participated in by any student at the college. The program is provided as a release from the classroom and academic studies.

TRANSCRIPT

Students who wish to have a transcript of their work at Scioto Technical College sent to another institution or to a prospective employer must submit a request for same in writing. There is no charge for the first transcript requested by a student. Each additional transcript will require a \$1 transcript fee charge.

ADMINISTRATIVE OFFICE HOURS

Administrative offices are generally open from 8:00 a.m. to 4:00 p.m. on a walk-in basis. It is preferred that students arrange appointments for extended conferences.

FACULTY OFFICE HOURS

Hours when members of the faculty are available for conference with their students are arranged individually by each faculty member and are posted on faculty office doors.

HOUSING

Students desiring information on housing in the Portsmouth Area should contact the Housing Director at the College. A list of available housing will be comprised during the summer quarter and will be mailed to students.

The College does not accept responsibility for agreements, leases, or contracts between students and landlords. Housing is the responsibility of the student and parents.

BOOKSTORE

The College operates a bookstore where students may purchase books and other required material for each quarter's classes. Bookstore hours will be posted on the door.

SMOKING

Smoking is confined to the lounges.

IDENTIFICATION CARDS

Identification cards are required and provided free for all students. They should be obtained as instructed during registration or by contacting the Student Activities Office. The identification card serves as an admission pass to many college activities, and students without them may be denied admission to college activities or to campus.

PART-TIME EMPLOYMENT

Students interested in part-time employment should register in the placement office. As employment becomes available, the student will be notified.

EVENING SCHEDULE

The Scioto Technical College offers a broad curriculum for students that desire to attend college during the evening. Fees for evening classes are the same as day classes. An evening schedule is available upon request from the Student Services Office.

LIBRARY

The library provides an excellent atmosphere for either leisure, reading or serious study. If you have any questions concerning this facility, the librarian will be happy to assist you.

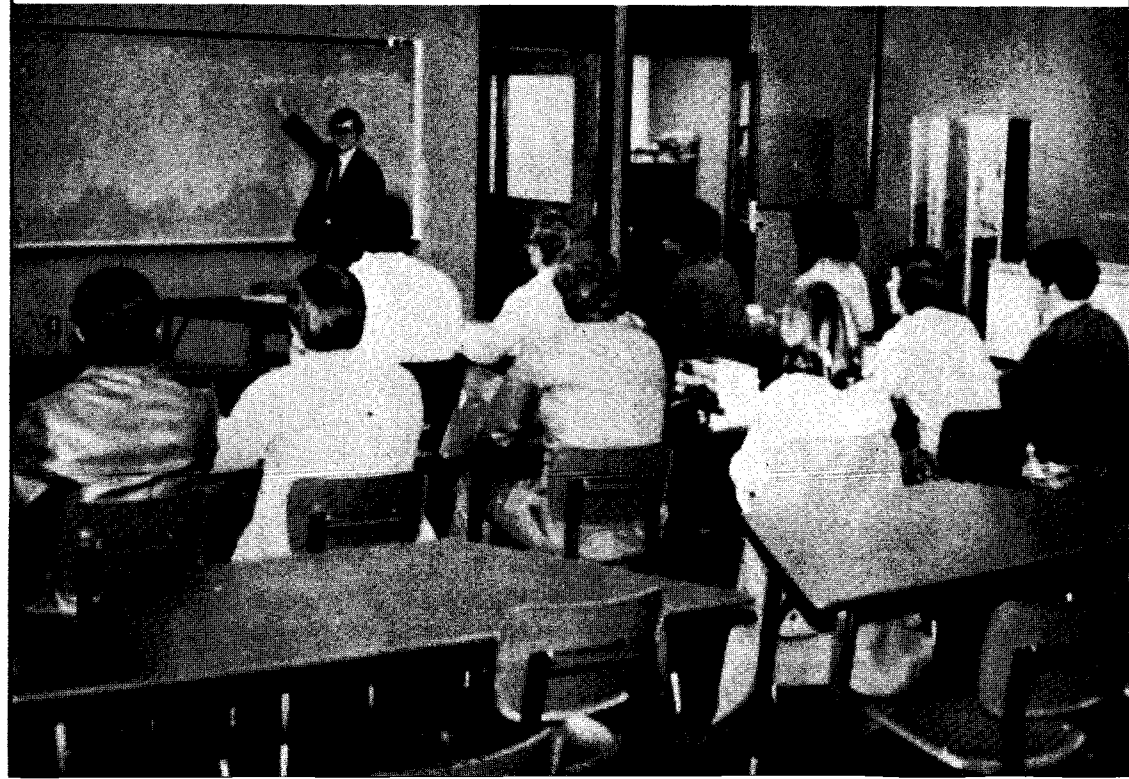
FOOD SERVICE AND LOUNGE

A cafeteria is available for Scioto Tech students in the central building. Hot lunches will be provided at a reasonable cost. There are also food service machines available in the student lounge where food and beverages can be purchased. Food and beverages will be consumed only in the lounge or patio area.

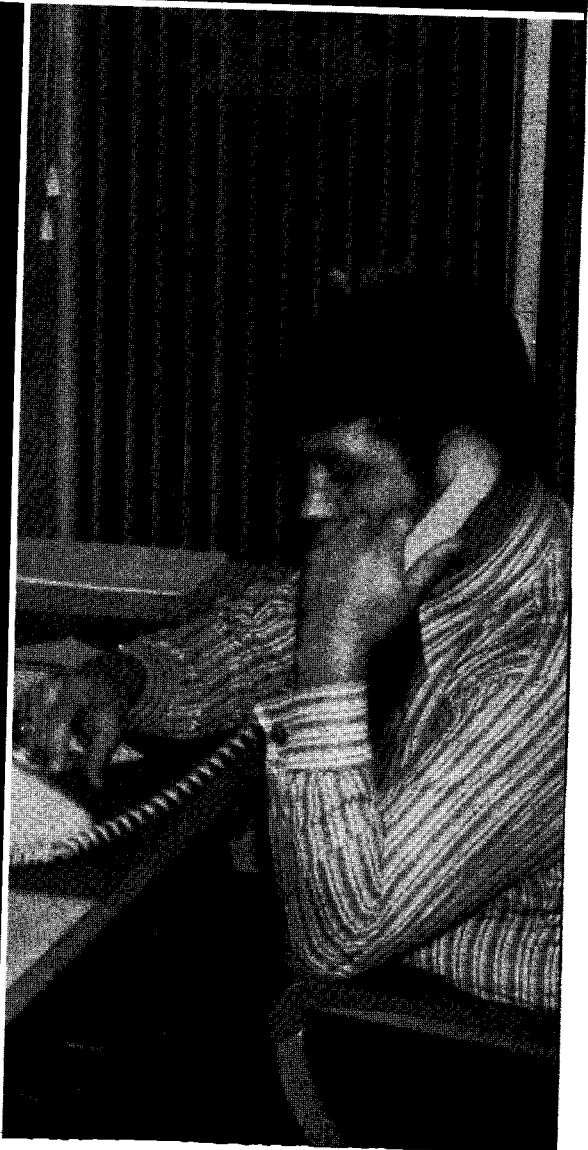
STUDENT RESPONSIBILITIES

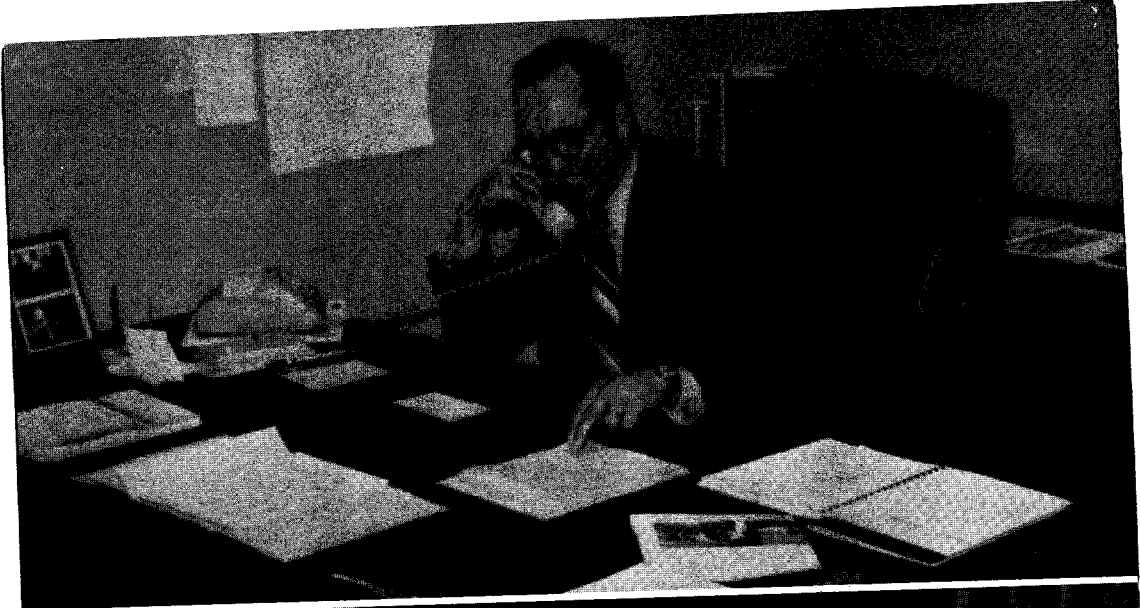
The Scioto Technical College cannot, nor will it attempt to, act in "loco parentis" for any student. A student is expected at all times to show a respect for order, morality, and the rights of others, and to exemplify in his daily living a high sense of personal honor and integrity. The College believes that students are the product of their own experiences and that they should assume certain responsibilities for their own conduct and for that of their fellow students.





ACADEMIC ORGANIZATION





GRADING SYSTEM

Grade	Quality Points
A — Excellent	4.0
B — Good	3.0
C — Fair	2.0
D — Poor	1.0
E — Failing	0
F — Withdrawal Failing	0
G — No Credit	0
H — Withdrawal Passing	0
I — Incomplete	
J — Transfer Credit	
K — Credit by Examination	
L — Audit	

A grade of "E" receives no credit. A student making this grade must repeat the course if he desires credit.

A grade of "I" is given to the student whose work in the course has been generally passing, but some specific assignment or requirement has not been met. If the required work has been completed within six weeks of the following quarter, the passing grade may be substituted. If an "I" is not removed within six weeks it becomes an automatic "E".

In all cases the final grade will be at the discretion of the instructor for the course.

Final grades are mailed to the student after they are recorded in the Registrar's Office. They are not issued orally.

QUALITY POINT AVERAGES

Quality points for a course are determined by multiplying the total credit hours by the numerical equivalent of the letter grades earned in a course. The quality point average for each quarter is obtained by dividing the total number of quality points by the total number of credit hours attempted. For example:

Course	Hours	Grade	Quality
Communication Skills 101	4	A	16
Technical Math 108	4	C	8
Physics III	4	B	12
Surveying CE701	3	C	6
Engineering Drawing 131	<u>3</u>	A	<u>12</u>
	18		54

$54/18 = 3.0$ Quality Point Average

ACADEMIC INTEGRITY

Students at Scioto Technical College are required to do their own work on all tests and assignments they may be given. Any form of cheating may result in the student's being "withdrawn failing" from a particular course or courses, as well as possible dismissal from the College.

ATTENDANCE

Each instructor establishes the policy concerning attendance. Students are expected to meet the attendance requirements for each course. Any student who will be missing classes for an extended period of time should notify his instructors in order that some type of arrangement can be made for meeting course requirements.

FACULTY MEMBER ABSENT FROM CLASS

In the event that a faculty member is not present at the normal time a class begins, students are to remain in the classroom an additional fifteen minutes. At the end of that time if the faculty member has not arrived and no special instructions have been received, the students are permitted to leave class without penalty.

ACADEMIC DISMISSAL

A student who earns a grade average of 1.5 for any quarter will be placed on academic probation. Both the student and his or her parents will be notified if academic probation has been instituted.

A student may be dismissed from Scioto Tech if his cumulative grade point average is below the following:

At the end of one quarter	1.00
At the end of two quarters	1.25
At the end of three quarters	1.50
At the end of four quarters	1.75
At the end of five quarters	1.80

A student having a point average below these will have his records reviewed by a committee composed of the student's advisor, the Vice President, and the Director of Student Services.

If permitted to remain in school, the student will repeat courses already taken rather than enrolling in new courses. The student will continue until the cumulative point average is at or above those listed.

It is recommended that a student repeat all courses in his major field in which he has received a grade of D.

GRADUATION REQUIREMENTS

In order to graduate, a student must have a 2.0 overall cumulative and a 2.0 in his major field. He must also have maintained at least a passing grade (D) in all courses required to complete his program. He must not have any outstanding institution notes or bills.

GOOD STANDING

To be in good standing and entitled to honorable dismissal, graduation, and the issuance of transcripts, a student must not be on probation, or have any fees or disciplinary action outstanding against him.

ACADEMIC HONORS

Full-time students with a quality point average of 3.5 for the quarter are placed on the Dean's list.

Students who have a cumulative grade point average of 3.5 at graduation are given recognition at Commencement by graduating with honors.

WITHDRAWAL FROM COLLEGE

A student who wishes to withdraw from the college in good standing must obtain forms from a student services counselor. Students leaving without proper forms will receive grades of E in all courses and will not be entitled to fee refunds.

COURSE WITHDRAWALS AND REFUNDS

A course can be dropped any time during the first thirty five class days of the quarter with no academic penalty. An H or F is simply noted on the student's records. After the first thirty five class days of the quarter,

a course may not be dropped except for extenuating circumstances and approval of the instructor and a counselor in student services. Refunds will be made on the following schedule:

- A. First through 5th day of classes — full fees less \$10
- B. Sixth through 10th day — 50% of tuition
- C. Tenth through 20th day — 25% of tuition
- D. Twenty-first day to the end of the quarter — no refund
- E. Laboratory fees and student activity fees are not refundable after the 5th day.
- F. If fees are paid under mistake of law or fact, then they are refundable in full.

NO CREDIT

During the first thirty five class days of the quarter, the student has the option of taking a course for no credit. In such case, an NC will be noted on the student's records. A student electing to take an NC in a course will attend and participate in class meetings.

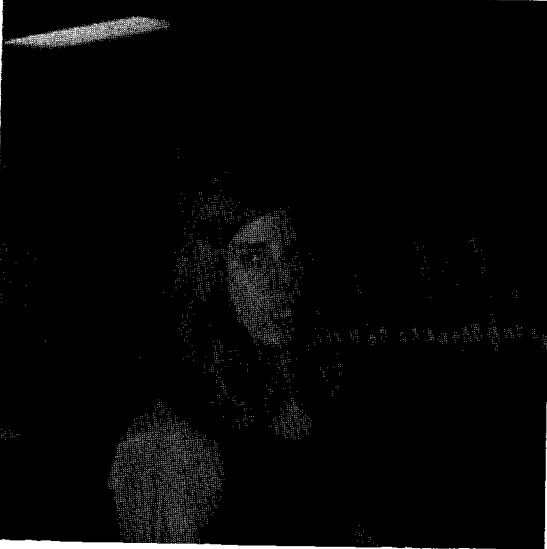
PROFICIENCY EXAM

Credit may be allowed for previous academic work or experience on the basis of a Proficiency Examination administered at the Scioto Technical College. In such cases, tangible evidence of qualifications in specific subject areas must be made available to the Records Office. A service fee of \$10 per examination must accompany each petition. The general policy will be that required courses may be waived and credit toward graduation may be awarded upon department approval.

Course work accepted on this basis of approved proficiency will be recorded on the student's permanent record as a "K". The course credit by examination is granted. The credit report of a course for which credit has been granted will not be included in the calculation of the quarter grade average or in the calculation of the total cumulative grade point average.

No student will be awarded credit by examination for any course in which he is already enrolled after the fourth week of classes during any regular quarter, or after the second week of a summer term.

GENERAL CURRICULUM



COMMUNICATION SKILLS DEPARTMENT

- 101** **Communication Skills I**
This course is to help the student develop or improve the study skills needed to succeed in college. It should help the student in adjusting to college work, developing methods of improving his vocabulary, his reading, and listening skills.
- 102** **Communication Skills II**
A study of the fundamental principles for writing clear, concise exposition. The emphasis is on paragraph writing of all types and critical and logical thinking.
- 103** **Communication Skills III**
This course continues a study of the fundamental principles for writing clearly and effectively. Logic in writing, a relationship between idea, purpose and form, and polishing or revising the writing are emphasized.
- 104** **Communication Skills IV**
The course will cover the nature and function of all forms of mass communication in press, television, radio, film, and the related fields of advertising and public relations. The purpose is to help the student to judge with valid critical standards the performances of the media.
- 105** **Technical Writing**
Technical Writing (Retail) emphasizes the written and spoken communication in the business field. Business communication skills are stressed, including business letters and business forms.
- 106** **Speech I**
Public speaking employing principles of effective oral communications in a variety of practical speaking situations.
- 107** **Speech II**
A concentrated study of conference types, methods, and techniques through examination of theory and practical student application of the principles including the extensive use of audio-visual equipment in oral presentations.

BEHAVIORAL SCIENCE DEPARTMENT

- 121** **Principles of Psychology**
Study of the behavior of the individual in terms of maturation, learning, thinking, emotions, perception, motivation, and individual differences.

- 122 **Principles of Sociology**
An analysis of the relationship of the individual and the group to social institutions. The cultural background of American Civilization. Collective behavior, human ecology, and social change are studied. Emphasis on the social effects of modern technology and the adjustments of man to his culture.
- 123 **Human Behavior**
A basis for the consideration of human behavior problems and an understanding of oneself. Psychological principles and techniques in present-day industry. Analysis of modern socio-industrial society.
- 124 **Principles of Economics I**
Introduction to American capitalism: basic economic concepts, including elementary demand-supply and price system analysis. Macro-economics: national income analysis, employment theory, inflation, business cycle, fiscal policy; American economic growth. Money: role of money, the institutions and functions of the American banking system, monetary policy.
- 125 **Principles of Economics II**
Micro-economics: price determination in various product and resource markets; demand-supply, elasticity, profit maximization and general cost analysis. Current domestic economic problems and policies. International economics: history, institutions, and theory of international trade; foreign exchange; balance of payments; the underdeveloped countries; the Soviet economic challenge.

MATHEMATICS DEPARTMENT

- 108 **Technical Mathematics I**
The choice of topics and the order in which they are presented integrate mathematics with the technical course in the curriculum to their mutual benefit. The course includes: solution of linear equations in one, two, and three unknowns, solution of formulae, and ratio, proportion, and variation. This is followed by functional relationships and an introduction to graphing. The conclusion of the course is a review of plane geometry, introduction to the trigonometric functions, and the graphs of the trigonometric functions.
- 109 **Technical Mathematics II**
A continuation of Technical Mathematics I to include vectors and imaginary and complex numbers. Logarithms are introduced and then applied to trigonometry. Trigonometry is expanded to include the study of fundamental identities and the solution of oblique triangles. Determinants are discussed in relation to the solution of simultaneous linear equations. The course concludes with a discussion of quadratics and higher degree equations.

- 110 Technical Mathematics III**
A continuation of Technical Mathematics II to include plane and solid analytic geometry. The study includes the straight line, circle and conic sections. Algebraic methods are applied to the study of curves and surfaces in three-dimensional space.
- M111 Technical Mathematics IV**
A continuation of Technical Mathematics III to include calculus, limits, and differentiation, and integration of algebraic and trigonometric expressions. Successive differentiation, maxima and minima, differentials and definite integrals.
- DP311 Data Math I**
A study of the mathematics and logic necessary for computer programming. The real numbers and related laws. Operations with signed numbers. Properties of exponents and decimal numbers. Other bases: eight, sixteen, the binary system. Basic algebra: factoring, fractions, radicals, fractional exponents.
- DP312 Data Math II**
Simple inequalities. Solution of quadratic equations. Tables and graphs. Linear, quadratic, hyperbolic, exponential, and logarithmic functions. Common logarithms. Simultaneous systems in two and three variables. Determinants.
- DP313 Data Math III**
Matrix solutions of linear simultaneous systems. Linear programming solutions by graphing, algebraic, matrix, and simplex methods. Series, sequences, arithmetic and geometric progressions, summations.
- 150 Business Mathematics I**
Proficiency in the fundamental skills of mathematics as applied to business. Emphasis will be placed on payroll procedures, business and financial reports, presentation of business data, and computing of interest for money and banking.
- EC416 Business Statistics**
Basic techniques relating to organization of business and economic data and derivation of calculations therefrom. Analysis and interpretation of the results of statistical summaries, comparisons, etc. Statistical descriptions involving use of averages, relatives, and dispersion. Tests relating to significance, probability, sampling, and quality control applications of statistics. Trend analysis and correlation.
- M107 Basic Mathematics**
A review of arithmetic operations including common decimal fractions, and progressing through signed numbers, simple equations and formulas, factoring, algebraic fractions, powers, roots, radicals, simple quadratic equations.

BASIC SCIENCES DEPARTMENT

- 117 **Basic Inorganic Chemistry**
An introductory course in fundamental chemical concepts and laboratory techniques. Atomic structure, periodic classification of elements, chemical equations, chemical calculations, solutions, acids and bases, oxidation, reduction, reactions, and the gas laws.
- 118 **Introduction to Organic Chemistry**
A course in fundamental organic chemistry. The study of carbon compounds; aliphatic hydrocarbons, alcohols, ethers, aldehydes, ketones, organic acids, esters, amines, and aromatic compounds. An introduction to carbohydrates, lipids, and proteins. Related laboratory.
- P110 **Physics (Basic)**
A study of the more important principles of mechanics, heat, light, sound, and electricity. Problem solving and qualitative description of physical principles. Lectures and laboratory demonstrations.
- 111 **Physics (Heat, Light, Sound)**
Fundamental properties and basic principles of heat, light and sound.
- 112 **Physics (Mechanics)**
Basic measuring systems, methods and conversions and calculations for physics. Properties of solids, liquids, and gases. Statics and motion. Friction. Work, power, and energy. Simple machines. Laboratory and demonstrations related to lecture.
- 113 **Physics (Electricity)**
An introduction to electrical circuitry with emphasis on the concepts of electrical physics. The nature of magnetism and electrostatics, electrical units. Basic direct-current circuits, Ohm's law, electrical measurement. Sources and effects of electrical currents, cells. Electric power and energy. Electromagnetism and electromagnetic induction. Properties of alternating current, simple A-C circuits. Generators and motors.
- 114 **Chemistry I**
Fundamental principles of chemistry are developed. A study is made of the metric system, the gas laws, chemical notation and equation writing as needed, atomic structure, periodic law, law of mass action, equilibrium, acids, bases and salts. Laboratory work correlates with class work.
- 115 **Chemistry II**
This is a continuation of Chemistry I, and applies the general chemical principles that were developed to the study of the common elements, especially those used in metallurgy.

- 116 Chemistry III**
An individual study of the different groups of the periodic table, and an introduction to the theory and methods of qualitative analysis. Brief study of organic chemistry.
- 119 Field Biology**
Introduction to identification and natural history of our local flora and fauna, with a biotic community approach. Fresh water biology.
- DH559 Microbiology**
A survey of representative types of microorganisms. Emphasis is placed on cellular structure and physiology, nutritional and environmental requirements and methods of reproduction. Introduction to the role of pathogenic organisms in carrying diseases and infections. Principles of immunity and resistance to disease. Laboratory includes methods of sterilization, culture, staining and identification.
- ML582 Physiology & Anatomy**
This course familiarizes the health technology student with the various systems of the body. Systems covered in this course include: skeletal, muscular, circulatory, respiratory, urinary, nervous, digestive, and reproductive.
- 120 General Ecology**
A study of the structure of life processes of seed plants influencing plant behavior. A study of the plant kingdom is included. Emphasis on local flora, plant identification, and plant ecology as it relates to the naturalist or park manager and his responsibility to protect and maintain his area. A study of the animal kingdom, with emphasis on local wild animals, like that which is prevalent in recreation areas, and fresh water ecology.
- DH550 Principles of Medical Science I**
Basic inorganic, organic and bio-chemistry, with emphasis on physiological principles and applications. Includes principles of physics and metric system. Designed principally for Health Technology programs. Study of Chemistry and other related subject matter included in laboratory.
- DH551 Principles of Medical Science II**
Fundamental concepts of cellular structure and physiology. A study of the architectural plan of the body, its skeletal, muscular, and digestive systems. Emphasis is placed on morphological and physiological concepts and applications. Laboratory includes gross anatomy and experiments in physiology.
- DH552 Principles of Medical Science III**
Principles of electrolytes and fluid balance. Structure and function of the circulatory and respiratory systems. Laboratory includes gross anatomy and experiments in physiology.

- DH553 Principles of Medical Science IV**
Structure and functions of the nervous, urinary, and reproductive systems. Laboratory includes gross anatomy and experiments in physiology.

ENGINEERING GRAPHICS DEPARTMENT

- 131 Engineering Drawing I**
This is a beginning course for students who have had little or no experience in drafting. The principal objectives are basic understanding of orthographic projection; skill in orthographic, isometric, and oblique sketching and drawing; ability to produce accurate and complete detail and assemble working drawings; understanding of principles and appropriate applications of descriptive geometry; experience in using handbooks and other resource materials; elementary understanding of design principles in machine parts used as drawing projects and of the simplified drafting practices in industry. American Standards Association standards are stressed. When feasible an interpretation of industrial sketches and prints is introduced to emphasize accepted drawing practices.
- 132 Engineering Drawing II**
The instructional units of this second-year drafting course provides additional understanding of drafting problems, skills and techniques essential to the draftsman; emphasize design applications and background knowledge needed to carry out drafting and design functions; and introduce specialized drafting areas valuable in preparation for work in design and production options.
- 133 Engineering Drawing III**
The practical aspects of dimensioning, cross sections, conventional practices and representations along with exercises in revolutions, developments, and intersections for problems in engineering drawing.

DEVELOPMENTAL COURSES

The developmental program is intended for students who do not have the proper educational background to enter their chosen technologies. Offerings include mathematics, physics, chemistry, and English. Enrollment is made by compliance with regular admissions procedures. Developmental courses are usually offered during the summers as well as during fall quarter.

PRE-TECH BIOLOGY

This course is designed for those students with an inadequate background in biological science. The course should be taken by those students planning to enter one of the allied health fields that have not had biology on the high school level. Topics and material presented is intended to increase the student's familiarity with terms, process, and classification.

PRE-TECH CHEMISTRY

This course is designed for those students with an inadequate background in chemistry. It should be taken by students planning to enter one of the allied health fields or plastics engineering that have not had high school chemistry. Topics and material presented is intended to increase student's familiarity with terms and chemical process.

PRE-TECH MATH

A brief review of the fundamentals used in arithmetic including addition, subtraction, multiplication, and division as applied to integers and rational numbers. An introduction to the elementary concepts of basic algebra with emphasis on manipulations of algebra expressions, solutions to all types of equations, graphs and formula rearrangements.

PRE-TECH PHYSICS

This course is designed for those students with an inadequate background in math or physics. This course should be taken by those students before taking Physics 114. Several physics topics and the mathematical methods to study these topics are covered. Topics include metric system, unit conversion, and vector analysis of forces and motion. An introduction to laboratory procedures and report writing is included.

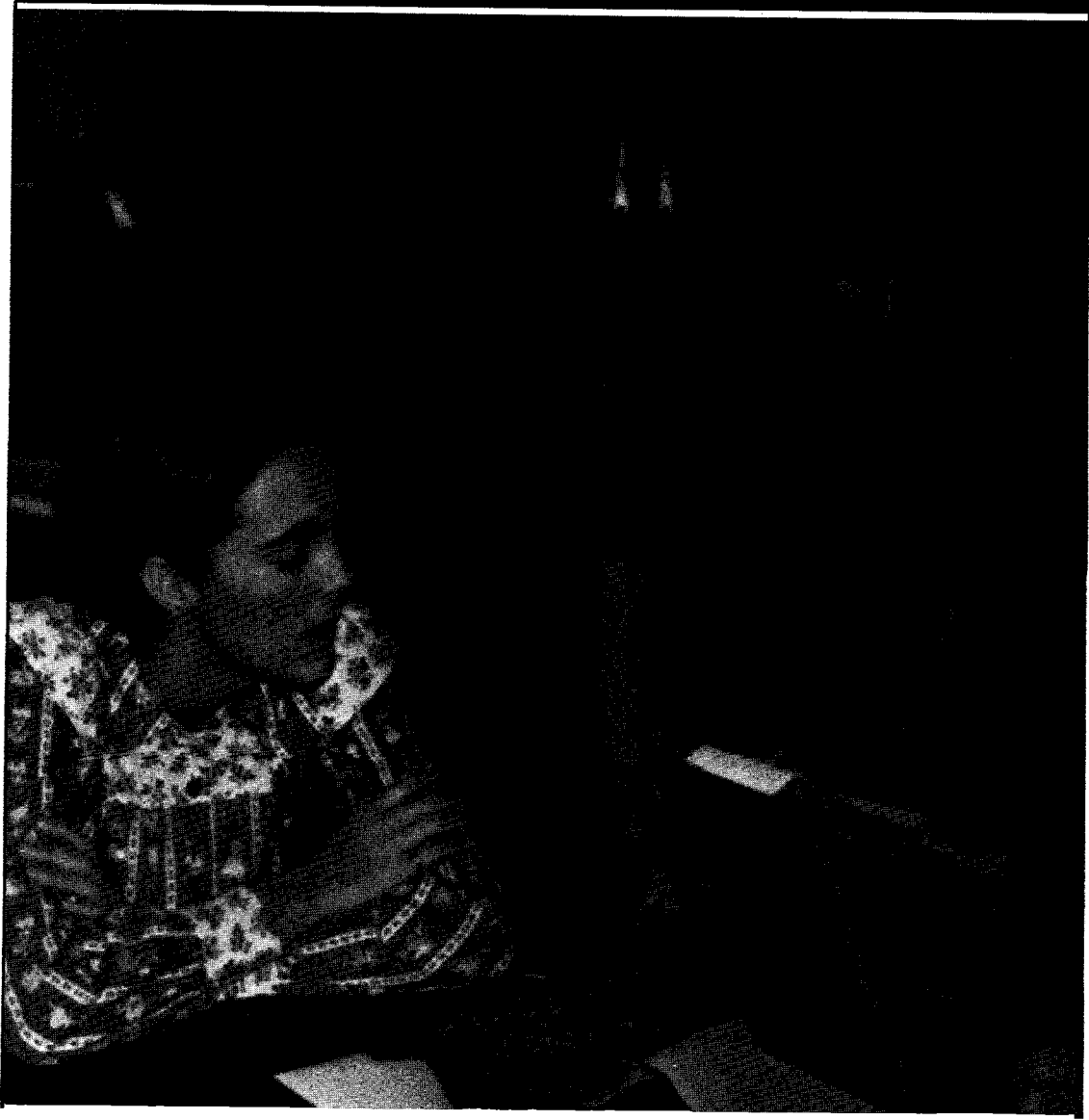
**BUSINESS
TECHNOLOGIES**

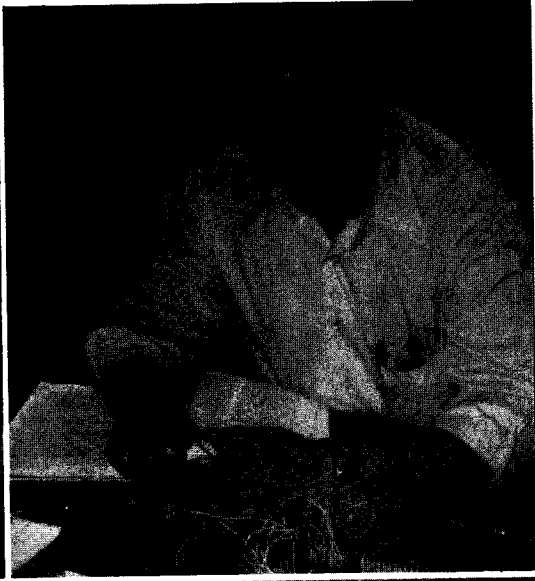
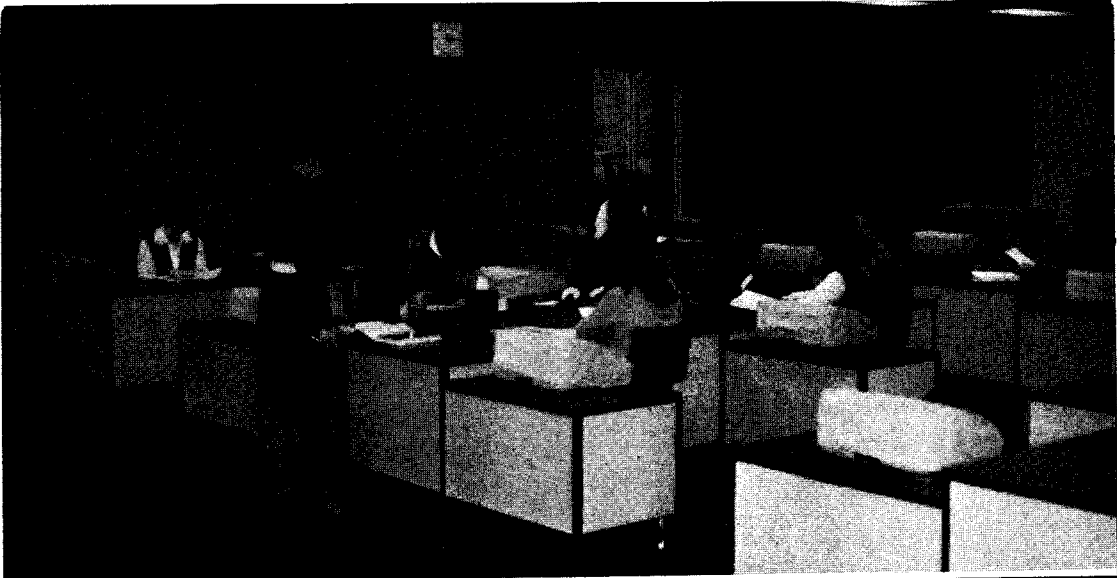
ACCOUNTING TECHNOLOGY

**DATA PROCESSING & COMPUTER
TECHNOLOGY**

EXECUTIVE SECRETARIAL TECHNOLOGY

RETAIL MID-MANAGEMENT TECHNOLOGY





ACCOUNTING TECHNOLOGY

Accounting Technology is designed to give the student a strong background in accounting concepts and principles and experiences in the application of the theory he learns. Emphasis will be placed on the use of modern electronic accounting and calculating machines. The accounting student will be trained to apply his accounting skills in the field of data processing and computers. Accounting students will get "hand on" experience on the computer and will graduate with a "major" in accounting and sufficient courses in data processing to consider this a "minor."

JOB OPPORTUNITIES

Positions available in Accounting Technology:

Accountant, Machine Processing — Coordinates mechanized accounting operations and confers with management and other department heads to adapt accounting and other record-keeping systems to machine accounting processes.

Junior Accountant — Accountant who verifies additions, checks audits, postings, and vouchers, analyzes accounts, and prepares statements, etc.

Accountant — Applies principles of accounting to install and maintain operations of general accounting system.

A graduate may gain employment in government agencies, public accounting, business and industry, as industrial accountants, public accountants or bookkeepers for universities, foundations, schools and other institutions.

ACCOUNTING TECHNOLOGY

Course	Code	Class Hours	Lab Hours	Credit Hours
First Quarter				
Communication Skills I	G	5	0	4
Typewriting I	T	2	4	3
Introduction to Business	T	4	0	3
Accounting I	T	3	4	4
Basic Mathematics	B	<u>5</u>	<u>0</u>	<u>4</u>
		19	8	18
Second Quarter				
Communication Skills II	G	5	0	4
Computer Fundamentals and Procedures I	T	2	4	3
Business Math	B	5	0	4
Business and Office Relations	T	3	0	3
Accounting II	T	<u>3</u>	<u>4</u>	<u>4</u>
		18	8	18
Third Quarter				
Communication Skills III	G	5	0	4
Accounting III	T	3	4	4
Computer Fundamentals and Procedures II	T	2	4	3
Business Statistics	T	4	0	4
Business Machines	T	<u>2</u>	<u>3</u>	<u>3</u>
		16	11	18
Fourth Quarter				
Principles of Sociology	G	5	0	4
Business Law I	B	4	0	3
Intermediate Accounting I	T	3	4	4
Principles of Economics I	B	5	0	4
Cost Accounting I	T	<u>3</u>	<u>2</u>	<u>3</u>
		20	6	28
Fifth Quarter				
Principles of Psychology	G	5	0	4
Principles of Economics II	B	5	0	4
Systems Accounting	T	3	2	3
Intermediate Accounting II	T	3	4	4
Cost Accounting II	T	<u>3</u>	<u>2</u>	<u>3</u>
		19	8	18
Sixth Quarter				
Business Organization and Management	T	3	0	3
Speech I	G	3	0	3
Tax Accounting	T	2	3	3
Credit and Finance	T	3	0	3
Auditing	T	4	3	4
Government Accounting	T	<u>2</u>	<u>3</u>	<u>2</u>
		17	9	18

*Students can complete the Communication Skills requirements by taking Comm. Skills I, II, & III, or II, III, & IV.

ACCOUNTING TECHNOLOGY

- 156 Introduction to Business**
A broad concept of business and the development of an awareness of the economic framework which constitutes our capitalistic system.
- AC201 Accounting I**
Introduction to fundamental accounting concepts and the procedures. The accounting cycle: nature of accounts and techniques of recording, classifying, summarizing and analyzing basic financial data. Application of fundamental accounting techniques to partnerships and corporations. Accounting for the formation, operation, and dissolution of business enterprises.
- BM107 Basic Mathematics**
A review of arithmetic operations including common decimal fractions, and progressing through signed numbers, simple equations and formulas, factoring, algebraic fractions, powers, roots, radicals, simple quadratic equations.
- DP310 Computer Fundamentals and Procedures I**
Technical experience with stored program computer; machine design, components, logical function; machine language and symbolic programming language.
- EC404 Typewriting I**
Introduction to typewriter operation and keyboard technique. Application of these fundamentals in arranging simple letters, tables, forms, and reports. Development of skills to an average speed of 30 words per minute.
- EC415 Business and Office Relations**
Basic principles of office management as applied in both the small and 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.
- AC202 Accounting II**
Application of fundamental accounting techniques for cash, long term investments, notes and accounts, inventory methods, plant and equipment, liabilities. Introduction to manufacturing operations, cost methods and management's need of cost data.
- AC205 Intermediate Accounting II**
Continuation of Intermediate Accounting I, including techniques for review and analysis of financial statements. Cash and funds-flow analysis and reporting.

- AC207 Cost Accounting II**
 Estimating, planning, and controlling the costs of processes and projects. Standard cost accounting procedures and the analysis of variances. Cost and profit responsibility reporting to management. Uses of cost and profit data in project selection, product pricing, and other function of management.
- EC418 Business Organization and Management**
 Formal and informal organizational structures including line and staff relationships indicating authority and responsibility.
- AC208 Tax Accounting**
 Current income tax law and regulations related to business and individual income tax reporting. Practice in preparation of tax returns of businesses and individuals.
- AC213 Credit and Finance**
 Forms of business organization; corporate securities; financing through securities; sources and management of working capital; administration of income; expansion and combination; re-organization receivership, and dissolution.
- AC211 Auditing**
 Independent and internal audits, professional ethics, legal liability, internal control, auditing standards, and procedures. Evidential matter, the auditor's approach and techniques, reports, statistical sampling, advisory services to management.
- AC209 Government Accounting**
 Basic concepts of fund accounting systems and procedures used by governments and most non-profit institutions, and the collection, processing, and interpretation of financial transactions data of these organizations.
- AC203 Accounting III**
 Reporting and analysis of financial data. Financial statement introduction, analysis and interpretation to meet the needs of modern management. Introduction to accounting techniques applicable to parent and subsidiary companies and departmental and branch operations. Budgeting as an aid to management, and the importance of income tax considerations in financial decisions.
- DP311 Computer Fundamentals and Procedures II**
 Fundamentals of business electronic data processing; practical business programs converted to EDP; symbolic programming system using cobal; magnetic tape concepts including Input-Output Control Systems.
- 152 Business Machines**
 Development of fundamental working knowledge of various office machines including adding, calculating transcribing, duplicating, copy machines, tape recorders, and illuminated drawing boards.

154

Business Law I

Introduction to major points of business law, based principally on Uniform Commercial Code; consideration of Uniform Acts relating to specific legal areas. Contracts, agency and employment, negotiable instruments, personal property, and bailments.

AC204 Intermediate Accounting I

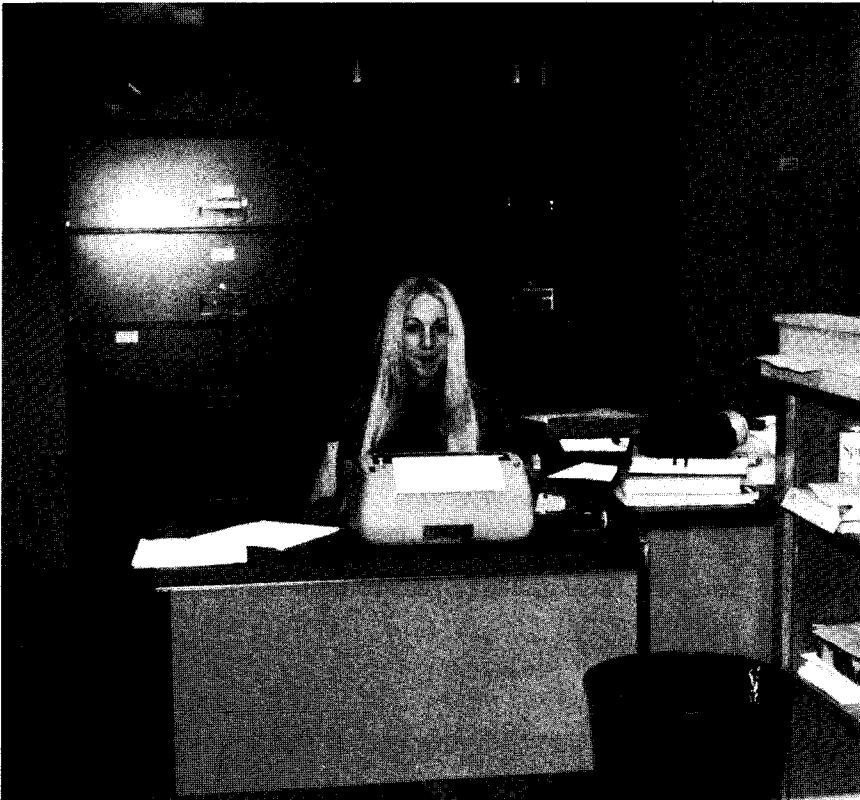
Accounting concepts and principles, with emphasis on special problems of asset valuation and income determination. Practice and theory in reporting on financial position and the results of operations of business enterprises.

AC206 Cost Accounting I

Introduction to cost accounting systems and methods. Cost concepts, classifications, and measurement techniques in relation to their importance in some determination, planning, and control. Job order and process cost accounting methods.

AC210 Systems Accounting

Developing, organizing, and using accounting data, analyzing and improving accounting systems, systems reviews, flow process charting, structural flow charting, internal check, internal control, forms and paper flow analysis.



DATA PROCESSING AND COMPUTER TECHNOLOGY

Although the electronic computer is no longer considered a new machine, the data processing and computer field is continually growing, providing various job opportunities.

Computer can follow only carefully prepared, step-by-step instructions. It is the programmer who prepares these instructions. Every problem that is processed on a computer must be first analyzed to assure the efficient processing of data. There are several possible ways of obtaining the correct answer to any given problem; some of them are more direct than others.

The courses in data processing and computer technology are designed to equip the graduate to be a programmer; that is, to solve problems encountered in the field of business by means of the computer.

The programmer first analyzes the problem and produces flow charts showing possible solutions to the problem. The flow charts are then coded to direct the computer in its actions. After the program has been checked very thoroughly, it is turned over to computer operators to be used as needed. Detailed operating instructions must accompany the program so that others may be able to understand and use the program.

JOB OPPORTUNITIES

Programmer — Works closely with systems analysts to define problems, analyze the input data and output report requirements, and prepare a program of instructions which the computer can follow to solve the problem.

Systems Analyst — Develops ordered methods for data collection, processing, and reporting.

Data Processing Manager — Plans, coordinates and directs all data processing activities for organization; supervises computer center and punched card installations.

Other positions are available to the graduate technician after several years of experience.

DATA PROCESSING AND COMPUTER TECHNOLOGY

Course	Code	Class Hours	Lab Hours	Credit Hours
First Quarter				
Communication Skills I	G	5	0	4
Accounting Concepts I	B	3	2	3
Data Math I	B	5	0	4
Introduction to Business	B	4	0	3
Computerized Unit Record I	T	<u>3</u>	<u>5</u>	<u>4</u>
		20	7	18
Second Quarter				
Communication Skills II	G	5	0	4
Accounting Concepts II	B	3	2	3
Data Math II	B	5	0	4
Computer Fundamentals I	T	3	5	4
Basic Computer Concepts	T	<u>2</u>	<u>3</u>	<u>3</u>
		18	10	18
Third Quarter				
Communication Skills III	G	5	0	4
Data Math III	B	5	0	4
Business Statistics	B	4	0	4
Computer Fundamentals II	T	<u>3</u>	<u>5</u>	<u>4</u>
		17	5	16
Fourth Quarter				
Technical Writing	G	3	0	3
Principles of Sociology	G	5	0	4
Business Law I	B	4	0	3
Systems Accounting	T	3	2	3
Systems Programming and Lab I	T	<u>3</u>	<u>6</u>	<u>5</u>
		18	8	18
Fifth Quarter				
Systems Analysis	T	3	3	4
Systems Programming and Lab II	T	3	9	6
Principles of Psychology	G	5	0	4
Principles of Economics I	B	<u>5</u>	<u>0</u>	<u>4</u>
		16	12	18
Sixth Quarter				
Speech I	G	3	0	3
Advanced Programming	T	3	6	4
Cost Accounting (DP Applications)	T	3	2	3
Business Organization and Management	T	3	0	3
Case Study — Computer Systems	T	<u>3</u>	<u>6</u>	<u>4</u>
		15	14	17

*Students can complete the Communication Skills requirements by taking Comm. Skills I, II, & III or Comm. Skills II, III, & IV.

DATA PROCESSING AND COMPUTER TECHNOLOGY

- AC201 Accounting Concepts I**
Introduction to fundamental accounting concepts and the procedures. The accounting cycle; nature of accounts and techniques of recording, classifying, summarizing and analyzing basic financial data. Application of fundamental accounting techniques to partnerships and corporations. Accounting for the formation, operation, and dissolution of business enterprises.
- 156 Introduction to Business**
A broad concept of business and the development of an awareness of the economic framework which constitutes our capitalistic system.
- DP301 Computerized Unit Record I**
Introduction to the theory of punch card equipment. Exercises in interpreting, reproducing, collating, and basic accounting machine functions, together with utility program use.
- AC202 Accounting Concepts II**
Application of fundamental accounting techniques for cash, long term investments, notes and accounts, inventory methods, plant and equipment, liabilities. Introduction to manufacturing operations, cost methods and management's need of cost data.
- DP302 Computer Fundamentals I**
Technical experience with stored program computer; machine design, components, logical function; machine language and symbolic programming language.
- AC210 Systems Accounting**
Developing, organizing, and using accounting data, analyzing and improving accounting systems, systems reviews, flow process charting, structural flow charting, internal check, internal control, forms and paper flow analysis.
- DP304 Basic Computer Concepts**
Fundamental knowledge of what computers are and what role they play in modern technology. Computers and programming systems in general.
- DP303 Computer Fundamentals II**
Fundamentals of business electronic data processing; practical business programs converted to EDP; symbolic programming system using cobol; magnetic tape concepts including Input-Output Control Systems.

- DP305 Systems Programming and Lab I**
Further development of basic computer concepts and techniques of programming, including solution of business problems.
- DP 307 Systems Analysis**
Various considerations inherent in designing a business system; file design; run organization; use of proper controls. Principles of form design for source documents and printed outputs. Investigation and evaluation of various data processing systems.
- DP306 Systems Programming and Lab II**
Further techniques of machine-oriented languages, file-handling methods using magnetic tape.
- DP308 Advanced Programming**
Higher level programming languages playing a more prominent role in modern computer science.
- DP315 Cost Accounting (DP Applications)**
A study of the collection, processing, and interpretation of materials costs, labor costs, and marketing costs, including case studies which illustrate the objectives and role of the computer in cost accounting system.
- EC418 Business Organization and Management**
Formal and informal organizational structures including line and staff relationships indicating authority and responsibility.
- DP309 Case Study — Computer Systems**
Practical experience in the three stages in the evolution of a complete system — analysis of present information flow, system specifications and equipment selection, implementation of the system.

EXECUTIVE SECRETARIAL TECHNOLOGY

Secretaries are essential to business, industry, government, and the professions.

The demand for good secretaries far exceeds the supply; thus, the education in this field provides many opportunities to work in pleasant, attractive surroundings performing interesting tasks for appreciative people.

As the name of the program implies, the executive secretary must have all the usual secretarial skills plus the ability to make decisions and aid in the implementation of management plans and policies. The basic secretarial skills are learned in the classroom and laboratories of the Technical College under the tutelage of competent instructors. The same instructors, experienced in business and industry, help develop the insight, knowledge, and skills necessary for the smooth and effective operations of office management.

JOB OPPORTUNITIES

Positions available in the Executive Secretarial Technology are:

Legal Secretary — Prepares legal papers and correspondence of legal nature, such as summonses, complaints, motions, and subpoenas. Takes dictation in legal terminology.

Medical Secretary — Prepares medical charts and reports for doctors or hospital personnel, utilizing knowledge of medical terminology. Takes dictation in medical terminology.

Executive Secretary — Have a high degree of stenographic speed and accuracy. Responsible for supervision of other clerical personnel. Usually handles all types of correspondence and handles private and confidential reports.

Administrative Secretary — Keeps official corporate records and executes administrative policies determined by or in conjunction with other officials. Prepares memorandums outlining and explaining administrative procedures and policies to supervising workers.

There are advancement possibilities after several years of experience. The secretarial technician can advance to the highest position in the secretarial field. She serves as an administrator of the entire clerical department of an organization, or as the private secretary to the president of a corporation.

EXECUTIVE SECRETARIAL TECHNOLOGY

Course	Code	Class Hours	Lab Hours	Credit Hours
First Quarter				
Communication Skills I	G	5	0	4
Business Mathematics I	B	5	0	4
Accounting I	B	3	4	4
Typing I	T	2	2	3
Shorthand I	T	<u>3</u>	<u>2</u>	<u>3</u>
		18	8	18
Second Quarter				
Communication Skills II	G	5	0	4
Introduction to Business	B	4	0	3
Accounting II	B	3	4	4
Typing II	T	3	2	3
Shorthand II	T	<u>3</u>	<u>2</u>	<u>3</u>
		18	8	17
Third Quarter				
Communication Skills III	G	5	0	4
Dictation and Transcription I	T	3	2	3
Introduction to Data Processing	T	3	4	4
Typing III	T	2	3	3
Shorthand III	T	<u>3</u>	<u>2</u>	<u>3</u>
		16	11	17
Fourth Quarter				
Secretarial Internship	T	0	40	6
Seminar for Critique of Experience	T	<u>0</u>	<u>0</u>	<u>2</u>
			40	8
Fifth Quarter				
Business Machines	T	2	4	3
Principles of Sociology	G	5	0	4
Dictation and Transcription II	T	3	2	3
Office Procedures and Techniques	T	3	2	3
Business Law	B	4	0	3
Shorthand IV	T	<u>1</u>	<u>4</u>	<u>2</u>
		18	12	18
Sixth Quarter				
Economics I	B	5	0	4
Speech I	G	3	0	3
Secretarial Practices I	T	3	2	3
Personnel Management	T	3	2	3
Principles of Psychology	B	4	0	3
Dictation and Transcription Speed Building		<u>0</u>	<u>3</u>	<u>1</u>
		18	7	17
Seventh Quarter				
Economics II	B	5	0	4
High Speed Dictation	T	3	2	3
Secretarial Practices II	T	3	2	3
Government and Business	G	3	0	3
Special Problems in Dictation, Transcription and Typing	T	<u>1</u>	<u>4</u>	<u>2</u>
		15	8	15

*Students can complete the Communication Skills requirements by taking Comm. Skills I, II, & III or Comm. Skills II, III, & IV.

EXECUTIVE SECRETARIAL TECHNOLOGY

- AC201 Accounting I**
Introduction to fundamental accounting concepts and the procedures. The accounting cycle: nature of accounts and techniques of recording, classifying, summarizing and analyzing basic financial data. Application of fundamental accounting techniques to partnerships and corporations. Accounting for the formation, operation, and dissolution of business enterprises.
- EC404 Typing I**
A study of the touch system of typewriting with an emphasis on the development of speed and accuracy. (Students entering the program with a basic skill of at least 40 words per minute will substitute a course from a related technology.)
- EC401 Shorthand I**
A study of manual stenography introducing the student to basic shorthand theory emphasizing phonetics, word families, brief forms and phrases, and penmanship. (Students entering the program with a basic skill of 60 words per minute will substitute a course from a related technology.)
- AC202 Accounting II**
Application of fundamental accounting techniques for cash, long term investments, notes and accounts, inventory methods, plant and equipment, liabilities. Introduction to manufacturing operations, cost methods and management's need of cost data.
- EC405 Typing II**
An application of typewriting with emphasis on the development of speed and accuracy and the mastery of correct typing techniques used in making tabulations; typing manuscripts, correspondence, and business forms; and preparation of materials for various forms of office duplication.
- EC402 Shorthand II**
A continuation of Shorthand I designed to perfect shorthand theory, phonetics, word families, brief forms and phrases, and penmanship with practice for speed and accuracy on wireless shorthand laboratory facilities.
- 156 Introduction to Business**
A broad concept of business and the development of an awareness of the economic framework which constitutes our capitalistic system.

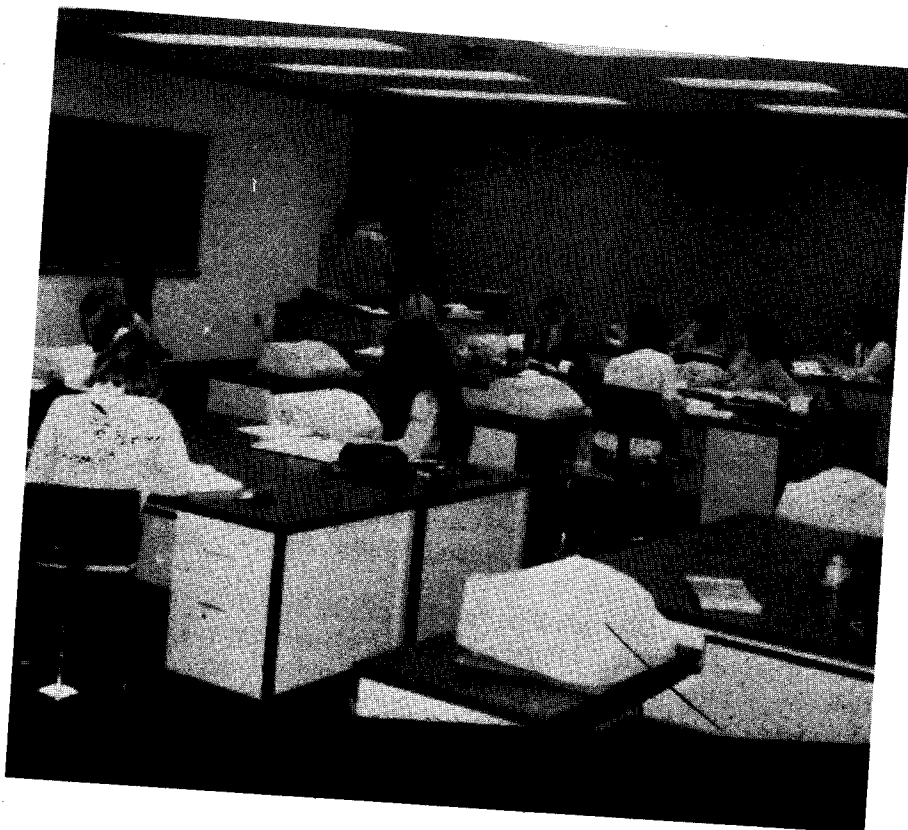
- EC408 Dictation and Transcription I**
A supplemental course to Shorthand III emphasizing practice in taking dictation and transcription at various rates of speed for mailable copy including office-style dictation procedures and techniques in addition to practice with wireless laboratory equipment.
- EC403 Shorthand III (Skill Building)**
A continuation of Shorthand II to build speed and accuracy to 80 words per minute including new theory in other technical areas.
- 154 Business Law I**
Introduction to major points of business law, based principally on Uniform Commercial Code; consideration of Uniform Acts relating to specific legal areas. Contracts, agency and employment, negotiable instruments, personal property, and bailments.
- DP314 Introduction to Data Processing**
An introduction to data processing. Terminology, applications to business problems, and limitations.
- EC420 Secretarial Internship I**
A work experience providing application of all phases of the theory taught in the secretarial program; taking dictation and transcribing routine composition, duplicating processes, record and file maintenance, telephone service, reception, reservation responsibilities, itinerary maintenance, handling of expense accounts and bank accounts, follow-up systems, research of special projects, taking minutes, screening and routing mail, and procuring supplies.
- EC421 Seminar for Critique of Experience**
Weekly evaluation report.
- 152 Business Machines I**
A familiarization course in various types of modern office machines, including adding-listing machines, electronic and mechanical calculators, office duplicating machines, bookkeeping and accounting machines, and various types of dictation and transcription machines.
- EC408 Dictation and Transcription II**
A continuation of Dictation and Transcription I with increased emphasis on increasing speed and mailable copy with specific practice in transcribing material from other technical areas utilizing the wireless shorthand laboratory extensively.
- EC409 Secretarial Practice I**
A course designed to integrate all the knowledges and the skills learned by the student through application to office routines and actual office work flow including an in-depth study of the principles of correct filing and filing systems.

- RM505 Personnel Management**
The philosophy, principles, and methods of personnel management; organizational structure, areas of responsibility and authority, policy making, procurement and placement, training, evaluation, wage and salary administration and benefit programs.
- EC410 Secretarial Practices II**
A continuation of Secretarial Practices I with further use of integrated skills by extensive use of practice sets and including selection, purchase, and inventory of supplies.
- 126 Government and Business**
A study of the economics of American industry and its interrelationships with American government including a survey of comparative economic systems.
- EC411 Special Problems in Dictation, Transcription, and Typing**
Concentration on individual needs for improving typing competence and acquisition of the ability to transcribe dictation into accurate grammatical copy. Dictation, including terminology from medicine, law, engineering, insurance, and education. Transcription from dictation machines.
- EC412 High-Speed Dictation**
A course designed to perfect the student's shorthand skill to rates from 100 to 150 words per minute through the extensive use of the wireless shorthand laboratory and related materials including intensive practice on all types of voice recording and transcription machines, and techniques employed in conference and court reporting with an introduction to machine stenography.
- EC413 Office Procedures and Techniques**
A study of the fundamental principles and practices used to expedite work including office organization and management; office location layout, and equipment, and design and control of office procedures.
- EC414 Typing III**
Emphasis on developing the student's ability to function as an expert typist producing mailable copy. Application of typing ability to producing technical reports, minutes, drafts and business correspondence.
- EC422 Shorthand IV**
A systematic development of business vocabulary in the areas of medicine, science, law, and international trade. Development of high speed in these areas through the use of expert short cuts and high frequency brief forms and derivatives.

EC423

Dictation and Transcription Speed Building

A lab course designed to maintain and build shorthand speed. Students will work with dictation tapes at their own speed building level and will schedule a transcription test with the supervising instructor on a weekly basis.



RETAIL MID-MANAGEMENT TECHNOLOGY

Retailing is the last link in the chain that reaches from the producer or manufacturer to the consumer. It is so closely related to the entire business community that it readily provides an accurate index for judging the health of the economy. The retailer provides an outlet for merchandise and customer services. He is responsible for presenting new articles that may create a new market, as well as being responsible for supplying customer needs.

The retailing industry is particularly attractive because of the variety in the types of work performed by middle managers. Buying, stock control, stock storage, promotion, marketing, accounting, personal management, and legal procedures for retailing are among the many functions a retail mid-manager performs. As advancement occurs, the mid-manager increases his responsibility and authority to become an important part of the management team. In multi-unit companies, he may become the manager of a branch organization. He is constantly working with people inside and outside his company to ensure constant development of both sales and profits.

JOB OPPORTUNITIES

Positions available in retail mid-management technology:

Department Manager — Supervises and coordinates activities of workers in department stores and chain stores. Schedules work hours and assigns duties of workers. Orders merchandise, supplies, and equipment.

Buyer — Purchases merchandise for resale; selects and orders merchandise from showings of manufacturing representatives, basing selection on nature of clientele, demand for specific merchandise, and experience as buyer.

Assistant Buyer — Verifies quantity and quality of stock received from manufacturer. Authorizes payment of invoices or return of shipment. Approves advertising copy for newspaper.

Store Manager — Manages retail store, performing following duties personally or through subordinates: hires, trains and discharges employees, plans work schedule and supervises workers to ensure efficient and productive performance of job.

Positions available to the graduate after several years of experience are: district manager, merchandise manager, assistant store manager and manager of a large store.

RETAIL MID-MANAGEMENT TECHNOLOGY

Course	Code	Class Hours	Lab Hours	Credit Hours
First Quarter				
Communication Skills I	G	5	0	4
Business Math	B	5	0	4
Principles of Economics I	B	5	0	4
Introduction to Business	T	4	0	3
Accounting Concepts I	B	3	0	3
		<u>22</u>	<u>2</u>	<u>18</u>
Second Quarter				
Communication Skills II	G	5	0	4
Marketing	B	5	0	4
Accounting for Retail	T	3	2	3
Introduction to Data Processing	T	3	2	3
Principles of Economics II	B	5	0	4
		<u>21</u>	<u>4</u>	<u>18</u>
Third Quarter				
Speech I	G	3	0	3
Communication Skills III	G	5	0	4
Principles of Management	B	5	0	4
Introduction to Retail	T	3	2	3
Salesmanship I	T	3	0	3
		<u>19</u>	<u>2</u>	<u>17</u>
Fourth Quarter				
Retail Internship I	T	0	0	6
Special Problems in Retailing	T	0	0	2
		<u>0</u>	<u>0</u>	<u>8</u>
Fifth Quarter				
Speech II	G	3	0	3
Technical Writing (Retail)	G	5	0	4
Business Law I	B	4	0	3
Personal Development	T	3	0	3
Sales Promotion	T	3	0	3
		<u>18</u>	<u>2</u>	<u>16</u>
Sixth Quarter				
Principles of Psychology	G	5	0	4
Business Statistics	B	3	0	3
Credit and Collection	T	5	0	4
Retail Buying	T	5	0	4
Retail Case Studies	T	3	0	3
		<u>21</u>	<u>2</u>	<u>18</u>
Seventh Quarter				
Government & Business	B	5	0	4
Personnel Management	T	5	0	4
Principles of Sociology	G	5	0	4
Human Behavior	G	3	0	3
Advertising	T	3	0	3
		<u>21</u>	<u>2</u>	<u>18</u>

*Students can complete the Communication Skills requirements by taking Comm. Skills I, II, & III, or Comm. Skills II, III, & IV plus Technical Writing.

RETAIL MID-MANAGEMENT TECHNOLOGY

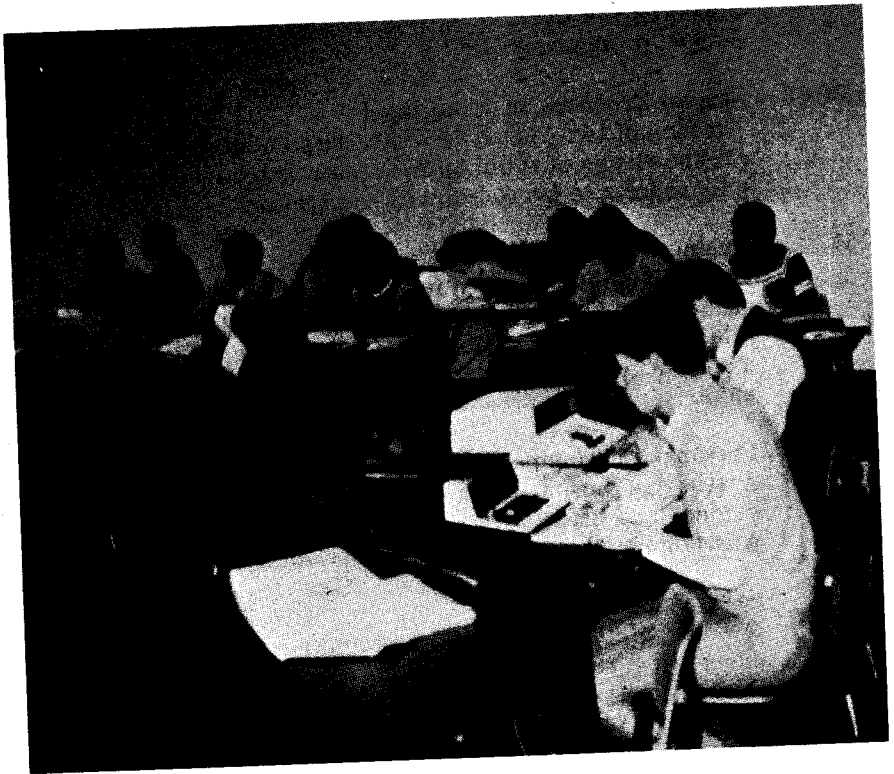
- 150 Business Math I**
Proficiency in the fundamental skills of mathematics as applied to business. Emphasis will be placed on payroll procedures, business and financial reports, presentation of business data, and computing of interest for money and banking.
- 156 Introduction to Business**
A broad concept of business and the development of an awareness of the economic framework which constitutes our capitalistic system.
- AC201 Accounting Concepts I**
Introduction to fundamental accounting concepts and the procedures. The accounting cycle: nature of accounts and techniques of recording, classifying, summarizing and analyzing basic financial data. Application of fundamental accounting techniques to partnerships and corporations. Accounting for the formation, operation, and dissolution of business enterprises.
- RM511 Credit and Collection**
The organization of this course grants the student an appreciation of the economic and social implications of credit and exposes him to the specific type of credit. It presents the vital principles of credit management as well as the everyday experience of an actual credit manager.
- RM512 Retail Buying**
A study of the buyer's role and buying routines in a retail establishment. Included will be the process of the buyer's decision in merchandising and controlling a retail department.
- RM513 Retail Case Studies**
A study into the analysis, interpretation and solution of cases relating to the retail institution. Cases will involve management, personnel, pricing, merchandising, sales, advertising and controlling circumstances.
- RM501 Marketing**
A study of marketing fundamentals, consumption and consumer behavior, retailing and wholesaling structures. The functions performed in marketing, marketing policies, and a critical appraisal of the field of marketing.
- RM508 Introduction to Retailing**
Principles and methods of retail management, including organization, policy making, location, operation, selling services, records, inventory, expense control, insurance, and the coordination of a store.
- DP314 Introduction to Data Processing**
An introduction to data processing. Terminology, applications to business problems, and limitations.

- RM503 Principles of Management**
A realistic approach to the principles and practices of management.
- RM506 Accounting for Retail**
Application of fundamental accounting techniques for cash, long term investments, notes and accounts, inventory methods, plant and equipment, liabilities. Introduction to manufacturing operations, cost methods and management's need of cost data.
- RM504 Salesmanship I**
A study of selling, including preparation for selling, sales processes, and an introduction to sales management.
- RM509 Retail Internship I**
Supervised on-the-job application of knowledge and skills acquired in the classroom.
- RM510 Special Problems in Retailing I**
The first of two courses in which the student applies his practical knowledge of retailing to specific areas of his job and submits reports to his coordinator-supervisor.
- 154 Business Law I**
Introduction to major points of business law, based principally on Uniform Commercial Code; consideration of Uniform Acts relating to specific legal areas. Contracts, agency and employment, negotiable instruments, personal property, and bailments.
- EC414 Personal Development**
A study of business office behavior and etiquette, personal hygiene and office attire, refinement of oral communications with emphasis on conference forms, leadership, and techniques.
- RM502 Sales Promotion**
A study of the various sales-promotion activities, including advertising, retail display and the coordination of an effective sales-promotion program.
- 126 Government and Business**
A study of the economics of American industry and its interrelationships with American government including a survey of comparative economic systems.
- RM505 Personnel Management**
The philosophy, principles, and methods of personnel management; organizational structure, areas of responsibility and authority, policy making, procurement and placement, training, evaluation, wage and salary administration and benefit programs.

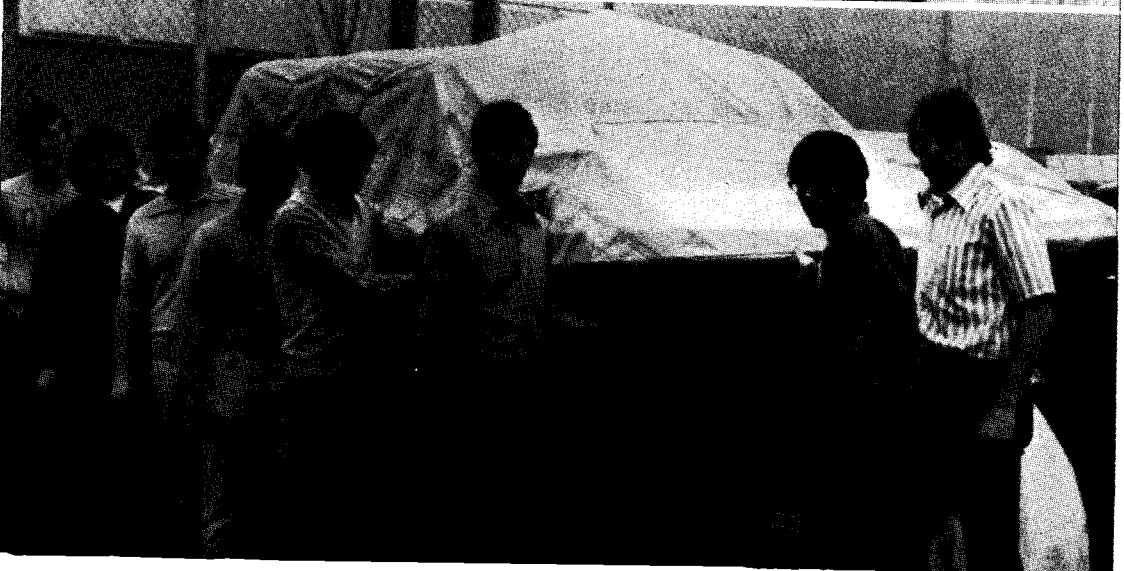
RM507

Advertising

A study of the principles of advertising and promotion stressing the history and development of advertising; advertising techniques including illustrations, copy, color, slogans, layout, and display; various advertising media; promotion campaigns; and direct-mail marketing, selling, and advertising.



**NATURAL RESOURCES TECHNOLOGIES
PARK AND RECREATION ADMINISTRATION**



PARKS AND RECREATION ADMINISTRATION

Outdoor Recreation and the development of recreational facilities is one of the fastest growing industries in Ohio and the nation. People are spending more time and money on recreation than ever before. Recreational facilities are growing faster than there are trained personnel to manage them, thus offering excellent opportunities in this field.

The Park and Recreation curriculum is designed to graduate a technician capable of handling design, layout, and construction of water and recreational areas which will include boating, swimming, camping, playground facilities, basketball courts, tennis courts, baseball and softball areas, etc. Not only must he have thorough understanding in this area, he will be exposed to management of such area, maintenance, and serve as a supervisor for personnel under his control. The Park and Recreation Administration technician will be able to develop recreational programs and give instructions in all areas of recreation.

JOB OPPORTUNITIES

Positions available in Park and Recreation Administration Technology:

Park Manager or Assistant (City-State-Federal) — Supervises and coordinates activities of workers in maintenance and repair of driveways, walks, hedge, swings, benches, and other park equipment.

Administrative Assistant to Recreation Director or Superintendent of Recreation — Assists in plans, promotes, organizes, and administers public recreation service for entire community. Studies local conditions and assists in the developing of immediate and long range plans to meet recreational needs of all age groups.

Camp Supervisor or Camp Manager — Manages constructions of camping areas, selects location and supervises workers engaged in the installation of camping facilities. Inspects and corrects sanitary conditions of camp.

Recreation Supervisor — Supervises paid and volunteer recreation service personnel in public department, voluntary agency, or similar type facility, such as community centers of swimming pools.

Other positions are available to the graduate technician after several years of experience — positions as turf and grounds specialists, lab and service technician, and assistant in landscapes architecture.

PARK AND RECREATION ADMINISTRATION

Course	Code	Class Hours	Lab Hours	Credit Hours
First Quarter				
Introduction to Recreation I	T	2	2	3
Field Biology	B	2	4	3
Communication Skills I	G	5	0	4
*Basic Mathematics of Tech Math I	B	5	0	4
Engineering Drawing I	T	<u>1</u>	<u>6</u>	<u>3</u>
		15	12	17
Second Quarter				
General Ecology	B	2	3	3
Forest Management and Recreation	T	3	3	4
Communication Skills II	G	5	0	4
Technical Mathematics I or II	B	5	0	4
Recreation Park Layout and Design (Outdoor — Water Park Area)	T	<u>1</u>	<u>6</u>	<u>3</u>
		16	12	18
Third Quarter				
Water Pollution and Sanitation	T	2	4	3
Taxonomy of the Vertebrates	T	3	3	4
Communication Skills III	G	5	0	4
Business Math	B	5	0	4
Surveying I	T	<u>2</u>	<u>5</u>	<u>3</u>
		17	12	18
Fourth Quarter				
Water and Outdoor Internship Seminars for Critique of Experience	T	0	40	6
		-	40	<u>2</u>
				8
Fifth Quarter				
Principles of Sociology	G	5	0	4
Speech I	G	3	0	3
Water Recreation	T	3	3	4
Wildlife Management	T	3	2	3
First Aid and Safety	T	1	1	1
Maintenance of Recreational Areas I	T	<u>2</u>	<u>6</u>	<u>3</u>
		17	12	18
Sixth Quarter				
Economics I	B	5	0	4
Principles of Psychology	G	5	0	4
Maintenance of Recreational Areas II	T	2	6	3
Hydrology	T	2	3	3
Soil Management	T	<u>3</u>	<u>3</u>	<u>4</u>
		17	12	18
Seventh Quarter				
Recreational Areas Fiscal Operations Seminar	T	3	3	4
Outdoor Recreation	T	2	0	2
Orientation to Employment	T	2	5	4
Social Recreation Management	T	1	1	1
Park Protection	T	2	4	3
		<u>3</u>	<u>3</u>	<u>4</u>
		13	16	18

*Students can select the math sequence which best fits their ability and future plans.

*Students can complete the Communication Skills requirements by taking Comm. Skills I, II & III or Comm. Skills II, III, & IV.

PARK AND RECREATION ADMINISTRATION

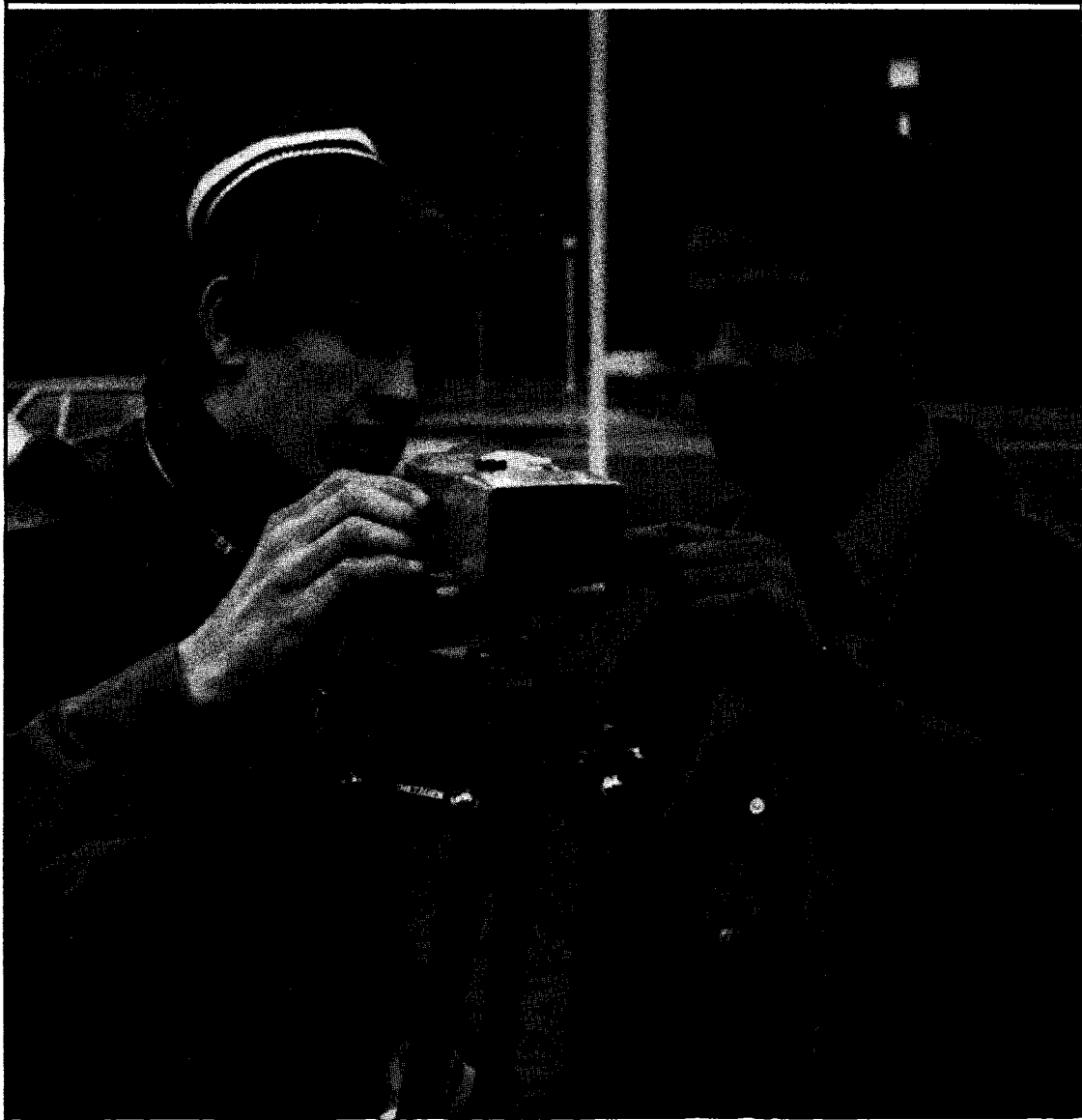
- PR751 Introduction to Recreation**
A study of the general concepts of recreation with a concept of tourism included. What recreation is; its history and development and importance. Laboratory work designed to get students into the park areas.
- PR752 Taxonomy of the Vertebrates**
Classification of the higher animals with particular attention to the Ohio species. Field identification of birds, reptiles, amphibians, and mammals of Ohio will be emphasized in the laboratory.
- PR753 Recreational Park Layout and Design**
The theories and basic principles of designing recreational parks. Practical application in studying areas for parks. An elementary course in land surveying, including the theory of measurements, solution of triangles, angles, bearings, azimuths, lines, and angular measurements. Blue print reading, writing of Educational Specifications for bids.
- PR754 Park Protection**
Study of laws pertaining to parks and recreation areas, managers' responsibilities, law enforcement, crowd control techniques, control of vandalism. Public safety.
- CE701 Surveying I**
Surveying and its applications; the surveying method; setting up the transit; use of the transit, turning angles, prolongation of a straight line, etc.; setting up the level; running circuits of levels, horizontal measurement; tape corrections, keeping field notes, adjustment and cleaning of transit and level.
- PR770 Outdoor Recreation Internship I**
Eleven weeks' supervised work experience. Supervisory visits by instructor. Weekly seminars for critique of experience. Weekly evaluation reports. 15 hours credit.
- PR771 Seminar for Critique of Experience**
Weekly evaluation report.
- PR756 Water Recreation**
Study of waterrelated facilities such as marinas and of boating law, operation and safety. Consideration of all forms of water recreation. Beach and Pool maintenance will be considered.
- PR758 First Aid and Safety**
Responsibilities of park and recreation supervisors in first aid. General first aid procedures. Contacting local emergency agencies, etc. Include water front safety procedures, safety in the operation of small equipment.

- PR759 Maintenance of Recreational Areas I**
Maintenance of park grounds, outdoor recreational areas, boating and swimming areas, maintenance of turf and golf courses.
- PR760 Maintenance of Recreational Areas II**
Maintenance of park and recreational buildings, maintenance of machinery. Study of safety to employees while on the job. Vehicle maintenance and equipment.
- PR761 Forestry-Management and Recreation**
An introduction to silvics and forest management principles, with emphasis on the forest preserve. Attention will be given to forest mensuration. Problems unique to forest recreation will be considered.
- PR762 Soil Management**
The student is introduced into the basic principles of soils, and management and fertility. The physical and chemical properties of soil, and soil and water conservation techniques are discussed. Soil materials formation and classification of soil. Land soil organisms are covered.
- PR763 Water Pollution and Sanitation**
The study of the interdependency of discipline in evaluating water quality. Tests and measurements used in water quality evaluation will be performed in the chemistry and physics laboratories. The ability and knowledge to analyze findings and results will be applied. Solid waste disposal, sewage, water supply, insect control and odor control will be studied.
- PR764 Outdoor Recreation**
Study and application of boating, swimming, canoeing, camping, etc. Emphasis on appreciation of wildlife and natural resources. History development and significance of outdoor recreation at the local, state, and federal levels. Provide camping experiences in canoeing, cooking, and the packing of bed rolls.
- PR765 Wildlife Management**
The principles of wildlife management in the conservation of all wildlife resources with emphasis on terrestrial communities. General wildlife management techniques are considered in the laboratory segments. Emphasis to be placed on the interactions of the wildlife population with conflicting forest interests. Include general values of wildlife management.
- PR766 Social Recreation Management**
Organization and leadership techniques and activity skills for planning and directing leisure activities. Includes arts and crafts, dancing, group games, court games, etc. Officiating of sports, officials in two sports. Scheduling of intermurals.

- PR768 Seminar**
A discussion type course designed to bring together the ideas and facts learned in the two years of training. Special problems in Water and Outdoor Recreation will be introduced with the student attempting to solve them by using his Recreation Technology training.
- PR769 Orientation to Employment**
Job Applications, personal interviews, references, data sheets, what the employer expects from employee, what the employee would expect from the employer. Job security, fringe benefits, opportunity for advancement.
- PR770 Recreational Area Fiscal Operations**
A study of the various means of financing park operations; including general bonds, revenue bonds, and self operation of revenue producing complexes.

ENGINEERING TECHNOLOGIES

CIVIL ENGINEERING TECHNOLOGY
ELECTRO-MECHANICAL ENGINEERING
TECHNOLOGY
PLASTIC ENGINEERING TECHNOLOGY





CIVIL ENGINEERING TECHNOLOGY

The Civil Engineering Technology program prepares a student to become a technician in a field which concerns itself with the planning, design, and construction of both fixed structures and ground facilities for land, sea, or air transportation. It is concerned with the flow and uses of water. It is concerned with protection, in war and peace, against the destructive forces of man or nature. In other words, civil engineers and technicians build airports, bridges, dams, highways, powerhouses, pipelines, and railroads.

Thus, the engineering technician must possess skills, in such a variety of areas as: hydraulics, flood control, irrigation, steel and concrete structural work, field surveying, traffic studies, computations, and the fundamentals of construction. And he is specifically trained to draw up plans and specifications; estimate costs and materials; use the transit, level and other surveying instruments; prepare maps; inspect jobs; and supervise construction.

JOB OPPORTUNITIES

Positions available to the civil engineering technician are:

Computer — He determines coordinates for geographic position, land lines, and land monuments in addition to computing quantities.

Contractor's Aide — He prepares plans and detail drawings for elements of construction projects.

Estimator — He estimates costs, quantities of materials and supplies, and labor for construction projects.

Inspector — He inspects line and grade references, forms, materials, and construction methods.

Surveyor — Surveys earth's surface and oversees engineering survey partly engaged in determining exact location and measurements of points, elevations, lines, areas, and contours of earth's surface to secure data used for construction, map making, land valuation, mining or other purposes. Calculates information needed to conduct survey from notes, maps, deeds, or other records.

Other positions are available to the graduate engineering technician after several years of experience. These include: construction supervisor, highway engineering supervisor, photogrammetrist, and specifications writer.

CIVIL ENGINEERING TECHNOLOGY

Course	Code	Class Hours	Lab Hours	Credit Hours
First Quarter				
Communication Skills I	G	5	0	4
Technical Mathematics I	B	5	0	4
Economics I	B	5	0	4
Introduction to Surveying	T	3	0	3
Engineering Drawing I	T	<u>2</u>	<u>6</u>	<u>3</u>
		19	6	18
Second Quarter				
Communication Skills II:	G	5	0	4
Technical Mathematics II	B	5	0	4
Physics I (Heat, Light, Sound)	B	3	3	4
Surveying I	T	2	5	3
Engineering Drawing II	T	<u>1</u>	<u>6</u>	<u>3</u>
		16	14	18
Third Quarter				
Communication Skills III	G	5	0	4
Technical Mathematics III	B	5	0	4
Physics (Mechanics)	B	3	3	4
Surveying II	T	2	5	3
Engineering Drawing III	T	<u>1</u>	<u>6</u>	<u>3</u>
		16	14	18
Fourth Quarter				
Technical Writing	G	3	0	3
Physics (Electricity)	G	3	3	4
Statics	T	5	0	4
Surveying III*	T	2	6	3
Concrete	T	<u>4</u>	<u>2</u>	<u>4</u>
		17	11	18
Fifth Quarter				
Principles of Sociology	G	5	0	4
Highway Construction I	T	5	0	4
Surveying IV	T	4	0	3
Town Site and Landscape Engineering	T	2	4	3
Principles of Psychology	G	<u>5</u>	<u>0</u>	<u>4</u>
		21	4	18
Sixth Quarter				
Field Engineering	T	0	2	1
Civil Engineering Law	T	2	0	2
Highway Construction II	T	5	0	4
Strength of Materials and Testing	T	3	2	3
Soil Materials and Testing	T	2	3	3
Hydraulics for Civil Eng.	T	2	1	2
Surveying V	T	<u>4</u>	<u>0</u>	<u>3</u>
		18	8	18

Courses taken out of sequence require program coordinator approval.

*Students can complete the Communication Skills requirements by taking Comm. Skills I, II, & III, or Comm. Skills II, III, & IV.
 Students can complete the Technical Mathematics requirements by taking Tech Math I, II, & III, or Tech Math II, III, & IV.

CIVIL ENGINEERING TECHNOLOGY

- CE700 Introduction to Surveying**
Introductory topics in plane geometry, trigonometry and field mathematical computations to prepare the student for plane surveying. Introductory discussions and lectures on surveying equipment, nomenclature, and general field procedures to give the student an overview of the surveying profession.
- CE701 Surveying I**
Surveying and its applications; the surveying method; setting up the transit; use of the transit, turning angles, prolongation of a straight line, etc.; setting up the level; running circuits of levels; horizontal measurement; tape corrections; keeping field notes, adjustment and cleaning of transit and level.
- CE702 Surveying II**
Leveling procedures; establishing line and grade for construction; topographic surveying, traverse and traverse computations; the elements of the use of aerial photographs.
- CE703 Surveying III**
Transportation systems; route surveys by ground and aerial methods; circular curves; compound curves; parabolic curves; transition spirals, field procedures.
- CE715 Strength of Materials I**
The study of tension, compression and shear stress, deformation, engineering materials, riveted and welded joints, thin-walled pressure vessels, torsion, centroids and moments of inertia of areas, shear and moments in beams, and stresses in beams.
- CE704 Surveying IV**
Spiraled compound curves, elements of highway safety and design, drainage surveys; field application of route surveys.
- CE706 Concrete**
The theory of modern concretes. Practices of making, placing, and curing Portland cement and asphaltic concretes. Design of batches, testing of compounds, and testing of specimens of concrete.
- CE707 Highway Construction I**
Highway economics and finance, highway planning, geometric design of highways, drainage, and drainage structure, surveys and plans, contractual documents and supervision of construction.
- CE705 Surveying V**
Advanced surveying methods. Triangulation systems. Details of new surveying procedures; aerial surveys, the telerometer, the geometer, precision survey instruments and methods.

- CE709 Town Site and Landscape Engineering**
City and subdivision planning, calculations, preliminary cost considerations. Public regulation and private interest.
- CE710 Civil Engineering Law**
Record research at court house, writing of deeds and recording of plots; a study of those phases of law directly associated with the Civil Engineering field; judicial procedure, duty of care, industrial nuisances, industrial injuries and industrial contracts.
- CE712 Statics**
The statics of particles is treated first through the use of vectors and the principle of equilibrium is immediately applied to practical situations involving only concurrent forces. The statics of rigid bodies is considered next. The concept of moment of force is introduced. The solution of steel trusses is covered by use of the method of joints and the method of sections.
- CE708 Highway Construction II**
Advanced. Earthwork operations and equipment; thickness design of flexible pavements and basis; soil aggregate roads and stabilization; bituminous surface treatments; highway maintenance.
- CE713 Soil Materials and Testing**
Engineering tests of soils for design and control to meet ASTM Standards. Testing for moisture content, standard compaction, proctor penetration, sieve analysis, hydrometer analysis, and unconfined compression.
- 134 Hydraulics for Civil Engineers**
A study is made of the basic components of hydraulic systems. The emphasis is on the use of hydraulic transmission systems. The subject is treated as a basic science, with emphasis on mathematics analysis and the scientific method. It is recommended that individual term problems requiring a significant amount of handbook design be required for this course.
- CE711 Engineering Problems and Field Inspection**
Actual field visitations, office computations; use of office machines, reducing filed notes, report forms, state and federal interpretation of highway code.

ELECTRO-MECHANICAL ENGINEERING TECHNOLOGY

An electro-mechanical engineering technician is a para-professional educated for positions which encompass both electrical and mechanical engineering technologies but which demand more than just a simple combination of the two fields. The electro-mechanical engineering technician, for example, may work in the computer industry in positions which could not be handled by the electrical or mechanical engineering technician.

This field is so new to business and industry that its potential has merely been scratched, and as electro-mechanical engineering graduates take their places in industry, specific job definitions will evolve. Though very few of these technicians are currently working in business and industry at present time, the demand for their services is already great.

JOB OPPORTUNITIES

Positions available in Electro-Mechanical Technology:

Electro-Mechanical Inspector — Inspects and tests electrical components, housings, and finished assemblies of electrical sensing devices.

Electro-Mechanical Technician — Fabricates, tests, analyzes, and adjusts precision electro-mechanical instruments.

Electro-Mechanical Assembler — Tests assembled electronic scale components with oscilloscope and voltmeter to detect missing parts, loose wires and defected solder joints.

Electrical and Electronic Technician — Applies electronic theory, principles of electrical circuits, electrical testing procedures, engineering mathematics, physics, and related subjects to layout, build, test, troubleshoot, etc.

Electro-Mechanical Design & Development Technician — Develops detailed design drawings and related specifications of mechanical equipment, according to engineering sketches and design proposal specifications.

Other positions are available to the graduate technician after several years of experience; such as, contractor, designer, estimator, and sales representative.

ELECTRO-MECHANICAL ENGINEERING TECHNOLOGY

Course	Code	Class Hours	Lab Hours	Credit Hours
First Quarter				
✓Communication Skills I	G	5	0	4
✓Technical Mathematics I	B	5	0	4
✓Economics I	B	5	0	4
✓Electrical Fundamentals I	T	2	3	3
✓Engineering Drawing	T	<u>1</u>	<u>6</u>	<u>3</u>
		18	9	18
Second Quarter				
✓Communication Skills II	G	5	0	4
✓Technical Mathematics II	B	5	0	4
✓Physics (Heat, Light, Sound)	B	3	3	4
✓Electro-Mechanical Devices	T	1	3	2
✓Electrical Fundamentals II	T	<u>3</u>	<u>3</u>	<u>4</u>
		17	9	18
Third Quarter				
✓Communication Skills III	G	5	0	4
✓Technical Mathematics III	B	5	0	4
✓Physics (Mechanics)	B	3	3	4
✓Electronics I	T	2	6	4
✓Electro-Mechanical Drawing	T	<u>1</u>	<u>3</u>	<u>2</u>
		16	12	18
Fourth Quarter				
✓Technical Writing	G	3	0	3
✓Physics (Electricity)	G	3	3	4
✓Introductory Electro-Mechanical Systems	T	1	2	1
✓Mechanical Analysis	T	2	3	3
✓Mechanics and Dynamics	T	2	3	3
✓Electronics II	T	<u>2</u>	<u>5</u>	<u>4</u>
		13	16	17
Fifth Quarter				
✓Principles of Sociology	G	5	0	4
✓Electronics Logic Circuits I	T	2	5	3
✓Control Devices	T	2	3	3
✓Automatic Control Systems	T	2	4	3
✓Hydraulics and Pneumatics		<u>3</u>	<u>3</u>	<u>4</u>
		14	15	17
Sixth Quarter				
✓Principles of Psychology	G	5	0	4
✓Electronic Logic Circuits II	T	2	5	3
✓Electro-Mechanical Design	T	1	6	3
✓Electro-mechanical Systems	T	3	3	4
✓Strength of Materials I	T	<u>5</u>	<u>0</u>	<u>4</u>
		16	14	18

Courses taken out of sequence require program coordinators approval.

*Students can complete the Communication Skills requirements by taking Comm. Skills I, II, & III, or Comm. Skills II, III, & IV.

Students can complete the Technical Mathematics requirements by taking Tech Math I, II, & III, or Tech Math II, III, & IV.

ELECTRO-MECHANICAL ENGINEERING TECHNOLOGY

- EM801 Electrical Fundamentals I**
An introductory course in the study of electricity. Basic definitions of energy and electricity are introduced which lead to studies of resistance, Ohm's law, series and parallel circuits, magnetism, simple meters, inductance, and capacitance. Direct current effects only are studied.
- EM803 Electro Mechanical Devices**
An introduction to devices where both electrical and mechanical principles are utilized. The use of drawings, schematics, hand tools, and common shop equipment forms an important part of the course. Electro-mechanical machinery is emphasized.
- EM802 Electrical Fundamentals II**
Simple inductance-resistance and capacitance-resistance transient circuits are initially studied. Studies of alternating current fundamentals, phasor algebra, alternating current circuit analysis, power factor, resonance, simple transformers, and simple three phase systems complete the course.
- EM805 Electronics I**
A thoroughly modern introduction to high vacuum and solid-state, electronic devices and basic electronic circuits, including small signal and power amplifiers, as well as electronic power supplies and related circuitry. The course features a closely integrated laboratory to provide up-to-date experience in electronic applications.
- EM804 Electro-Mechanical Drawing I**
An in-depth study of the mechanical drawing of power distribution equipment, conduit and junction box details, lighting distribution equipment, switchgear, safety enclosures, welded parts, motors, generators, service entrances and electrical portions of machinery installations. The course includes exercises in electronic drawing as well as the above.
- EM809 Introductory Electro-Mechanical Systems**
An introduction to systems emphasizing both electrical and mechanical principles. Refrigeration, hydraulic, pneumatic, and vacuum systems are utilized to stress the coordinated combination of previously learned elements.
- EM815 Mechanical Analysis**
A mathematical analysis of functional machines typical to those used in today's industry. Analysis of mechanical systems is introduced. A study on the common characteristics of mechanical and electrical phenomena.

EM810 Mechanics and Dynamics

A study of stresses, vibrations, linkages, gears, and other machine elements found in complex electro-mechanical systems. Logical applications of theory to the design and functioning of machine elements. Mathematical analysis is reinforced by immediate application to functional machines typical of those used in modern industry.

EM806 Electronics II

Continuation of Electronics I. Decibels, small signal voltage amplifiers; large signal power amplifiers, field effect amplifiers, regulated power supplied; control circuits; unijunction transistor oscillators. Laboratory hours complement class work.

EM807 Electronic Logic Circuits I

The electronic logic course in the electro-mechanical technology program is a computer oriented course emphasizing practical applications of: passive wave shaping networks solid-state electronic logic gates, binary pulse circuits, computer arithmetic and control processes. Emphasis is placed on meaningful laboratory experiences, involving actual logic circuitry and computer equipment.

EM811 Control Devices

Electro-mechanical devices, and many others, respond to a variety of inputs. These may be created by temperature changes, pressure variations, rates of flow, potentials generated by light energy, moisture conditions, or any one of a number of physical conditions. They have definite limitations in the amount of energy they can convert, frequencies of operation, and the impedance into which they can operate. Various transducers are analyzed for the particular conditions where they function best, and the limitations which must be imposed by their use.

EM812 Automatic Control Systems

Electro-mechanical systems are governed and controlled by many different types of inputs and produce a vast variety of outputs. The commercial equipment response to pneumatic, hydraulic, and electrical or electronic inputs will be investigated. The purpose of the course is to consider the various basic control systems — on-off, proportional, proportional plus reset, and proportional plus reset plus rate. The speed of response of the various types of controllers, their relative safety, and the distance over which they function are essential elements of the course.

- EM817 Hydraulics and Pneumatics**
A study is made of the basic components of hydraulic and pneumatic systems and methods of combining them to build various circuits. The emphasis is on the use of hydraulics and pneumatics for power transmission and for control purposes. Both subject areas are treated as basic sciences, with emphasis on mathematical analysis and the scientific method. It is recommended that individual term problems requiring a significant amount of handbook design be required for this course.
- EM808 Electronic Logic Circuits II**
Continuation of Electronic Logic Circuits I. Including practical course in digital computers and memory with particular reference to construction and mechanical maintenance.
- EM813 Electro-Mechanical Design**
A course intended to exercise the student's knowledge of electro-mechanical technology. It provides the time and opportunity for students to work on the design, fabrication, assembly and testing of electro-mechanical devices or systems. The purpose is to promote independent study, initiative, and creativity by requiring the student to develop the design problem with minimal staff supervision.
- EM814 Electro-Mechanical Systems**
Diverse electro-mechanical systems are analyzed in detail to show how few are the principles involved in even extremely complex devices, and the extension of these principles into several apparently different areas is studied in depth so that the student will recognize ways in which the flow of information has been established. This course embodies all of the principles which have been considered previously in the program. Thorough understanding of the applied principles is the aim of the course.
- IE903 Strength of Materials I**
The study of tension, compression and shear stress, deformation, engineering materials, riveted and welded joints, thin-walled pressure vessels, torsion, centroids and moments of inertia of areas, shear and moments in beams, and stresses in beams.

PLASTICS ENGINEERING TECHNOLOGY

Modern research and technology are making the plastics industry the fastest growing industry in the world. Plastic manufacture now ranks as one of the few billion-dollar industries in the United States, having increased its production more than 200 per cent from 1955 to 1965.

Plastics Engineering Technology curriculum is designed to provide a wide range of learning experiences, including design, drawing, planning, testing, chemistry of plastics, manufacturing processes, molding, casting, welding, thermoforming, electro-plating, vacuum metallizing and extrusion.

JOB OPPORTUNITIES

Positions available in Plastics Engineering Technology are:

Quality Control Technician — Takes samples of materials and checks specifications of products.

Pilot Plant Technician — Assistant to engineer, operates experimental plants, construction and maintains the operations of polymerize raw resins materials into plastics materials. Responsible for taking data and making observations.

Application Research Technician — Laboratory job in blending and compounding plastics with additives, filters, colors, etc.

Plastic Article Production Technician — Operates and supervises the operation of commercial equipment of injection, extruder, rotational, compression, and calendar moulding.

Senior Technician — Supervises new technicians in all operations and takes part in new projects or process evaluation.

Other positions are available to the graduate technician after several years of experience. Supervisory positions are open to the well-experienced technician with a background in engineering techniques and problem solving.

PLASTICS ENGINEERING TECHNOLOGY

Course	Code	Class Hours	Lab Hours	Credit Hours
First Quarter				
Communication Skills I	G	5	0	4
Chemistry I	B	3	3	4
Technical Mathematics I	B	5	0	4
Introduction to Plastics	T	3	2	3
Machine Tools I	T	<u>1</u>	<u>3</u>	<u>2</u>
		17	8	17
Second Quarter				
Communication Skills II	G	5	0	4
Chemistry II	B	3	3	4
Technical Mathematics II	B	5	0	4
Extrusion Molding	T	3	3	4
Machine Tools II	T	<u>1</u>	<u>3</u>	<u>2</u>
		17	9	18
Third Quarter				
Communication Skills III	G	5	0	4
Chemistry III	T	3	3	4
Technical Mathematics III	B	5	0	4
Thermo-Forming	T	2	3	3
Injection Molding	T	<u>2</u>	<u>3</u>	<u>3</u>
		17	9	18
Fourth Quarter				
Plastic Finishing	T	3	3	4
Technical Writing	G	3	0	3
Production Control and Planning	T	3	3	4
Testing of Plastic Materials	T	2	3	3
Principles of Sociology	G	<u>5</u>	<u>0</u>	<u>4</u>
		16	9	18
Fifth Quarter				
Time and Motion Study I	T	5	0	4
Plant Layout and Materials Handling	T	3	2	3
Introduction to Chemical Engineering	T	3	2	3
Physics (Mechanics)	B	3	3	4
Principles of Psychology	G	<u>5</u>	<u>0</u>	<u>4</u>
		19	7	18
Sixth Quarter				
Properties of Materials	T	3	3	4
Fundamentals of Processing Equipment & Maintenance	T	3	2	3
Industrial Supervision	T	3	0	3
Fabrication & Manufacturing of Plastic Products	T	3	3	4
Physics (Electricity)	B	<u>3</u>	<u>3</u>	<u>4</u>
		15	11	18

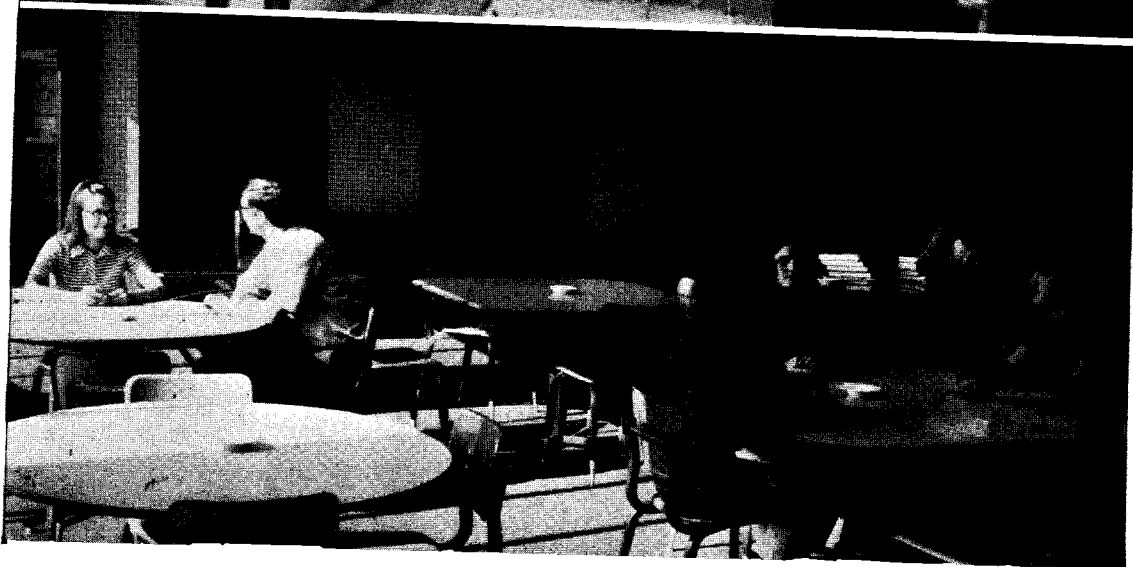
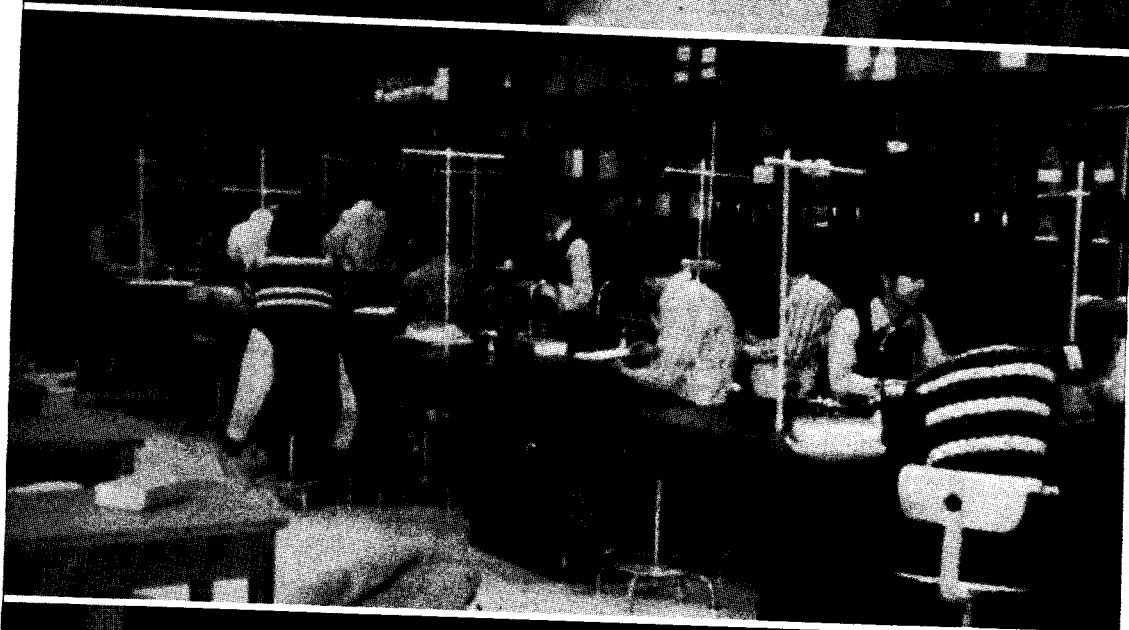
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PLASTICS ENGINEERING TECHNOLOGY

- PE851 Introduction to Plastics**
Covers a description of the different thermoplastics, beginning with a brief outline of organic chemistry necessary for understanding. Discussion will cover different types of plastics: Thermosets, thermoplastics, and single identification tests, polymerization, molecular growth, and molecular weight.
- IE907 Machine Tools I**
Safety, measuring tools, bench work, drill press, lathe, forge work, shaper, planer, milling machine, grinding machine, hydraulic power transmission, metal band saws, properties and uses of ferrous and non-ferrous alloys, cutting fluids, welding and foundry practices.
- IE908 Machine Tools II**
Continuation of Machine Tools I.
- PE857 Extrusion Molding**
This course will cover extrusion equipment with emphasis on processing materials such as styrene, vinyls, polyethylene, polypropylene, A.B.S. and ancillary materials. Laboratory involves operating the extrusion equipment, determining operating conditions for different materials.
- PE859 Injection Molding**
This course will cover the material characteristics of polymers as related to injection mold processes. The student will learn to operate the injection molding machines. Materials to be used in the machine operations will include such polymers as polystyrene, polyethylene nylon, and polycarbonates.
- PE858 Thermo-Forming**
Discussion will cover the material characteristics as related to thermo-forming processes and thermo-forming equipment. Thermo-forming equipment will be introduced with special emphasis on vacuum-forming equipment and process.
- IE901 Production Control and Planning**
The basic concepts, principles, objective, influencing factors, and functions of production control to industrial organizations of various types. Actual planning and scheduling of various types of production.
- PE854 Testing of Plastic Materials**
Study is made of the mechanical, electrical, optical, and environmental characteristics of different plastics. Making and testing of plastic materials, impact testing, chemical testing, heat stability testing and electrical testing. Conducting experiments and writing of technical reports on the property changes of plastic under various circumstances.

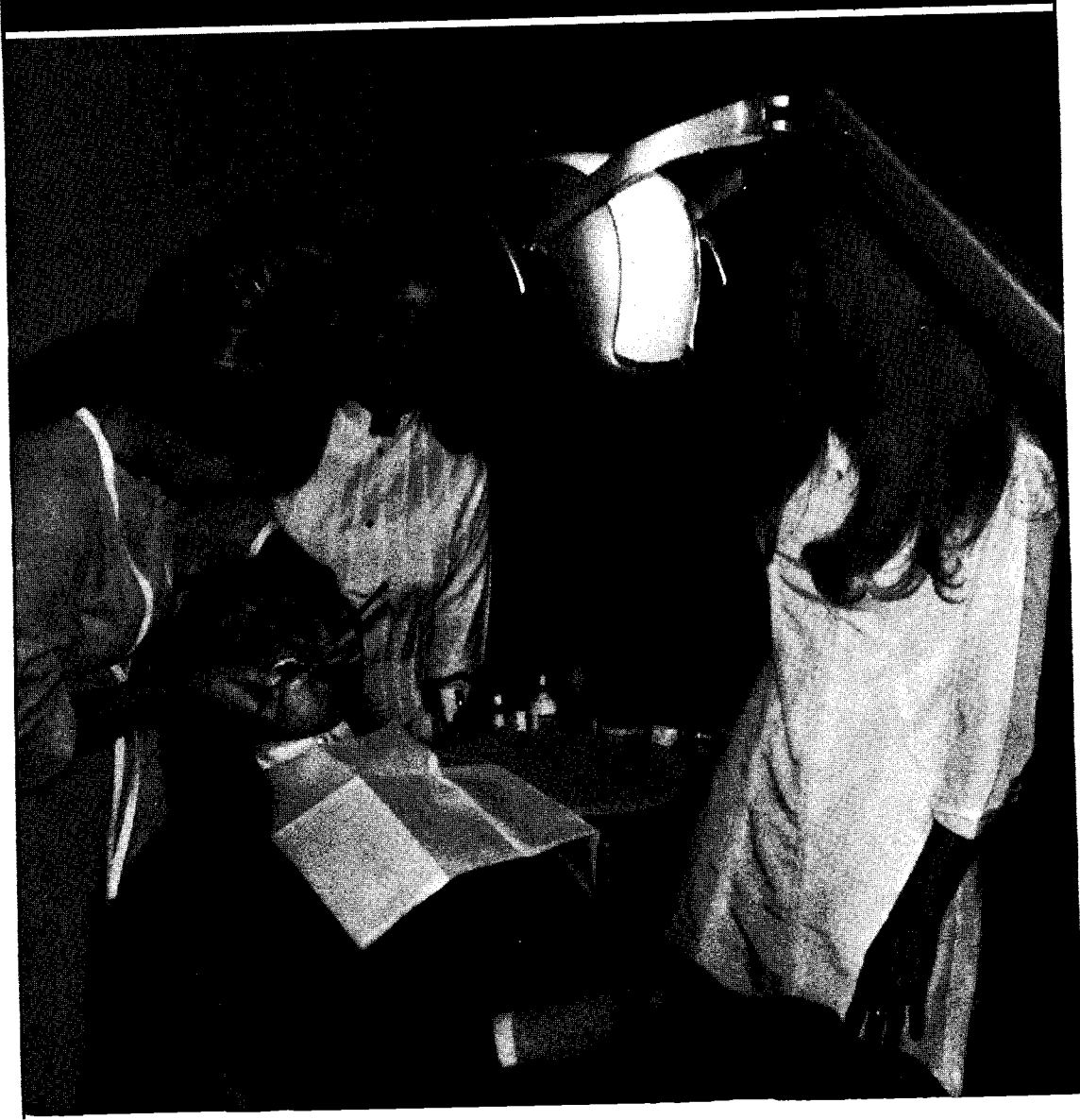
- PE860 Plastic Finishing**
Areas covered include printing, cementing, plating, hot stamping, polishing, punching, and drilling as they apply to thermoplastics and thermosets. Laboratory covers the practical applications of finishing.
- PE855 Introduction to Chemical Engineering**
Study of flow sheets, survey of equipment, heat exchange, instrumentation, temperature and pressure controls.
- IE904 Plant Layout and Materials Handling**
Principles of plant layout to obtain the most effective utilization of men, materials, and machines, as related to space and cost. Selection and use of modern equipment and methods for handling materials in industrial processes.
- IE905 Time and Motion Study I**
Basic laws of motion economy, operational analysis; process analysis; multiple activity charts; methods improvements, stop watch time study of various types of operations.
- PE861 Properties of Materials**
Study of various plastics with special emphasis on fitting the proper plastic to the correct end use. Problems will be introduced requiring the practical use of the theory developed in lecture. Properties such as ability to weld, decorate, and form (extrusion, injection, thermo-forming) will be discussed.
- IE902 Industrial Supervision**
Training in the methods of handling management problems, setting policies, personnel problems, etc. To equip the student for possible supervisory positions.
- PE856 Fundamentals of Processing Equipment and Management**
How to read piping diagrams, function of pumps, heat exchanger, reactors, dryers, polymerization bottle, etc. A review of process equipment used in plastics manufacturing with emphasis on maintenance problems.
- PE853 Fabrication and Manufacturing of Plastics Products**
Extrusion, injection, vacuum molding, rotational molding of plastics. Covers all industrial fabrications of plastics; example, making of plastic items, clorox bottle, telephone, etc.

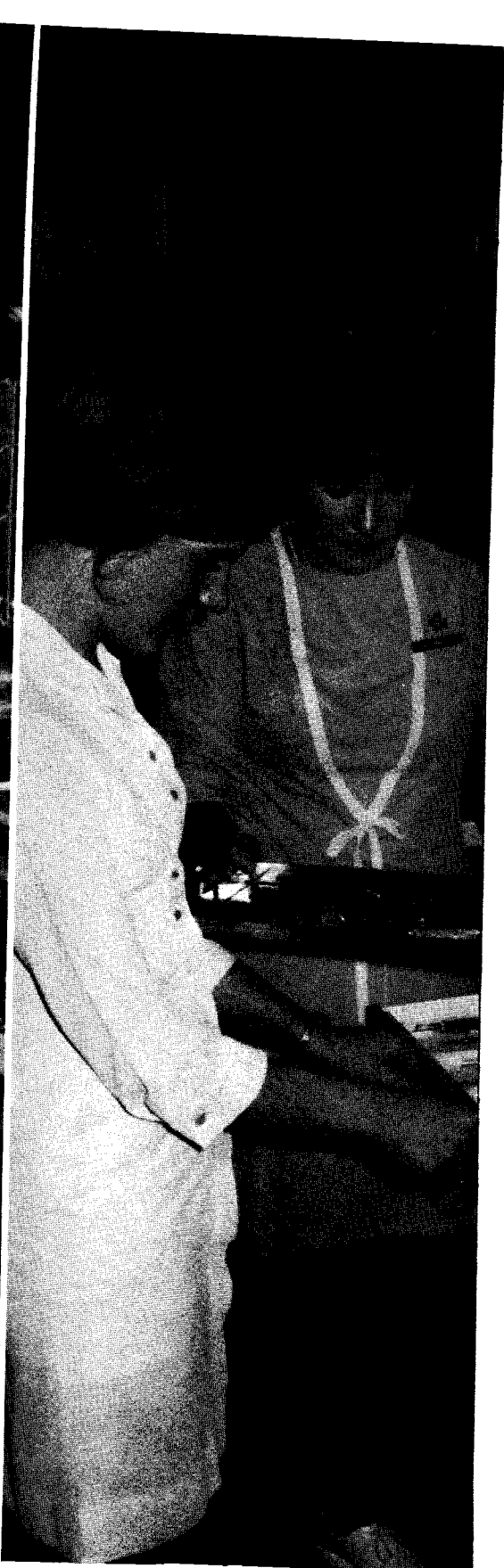
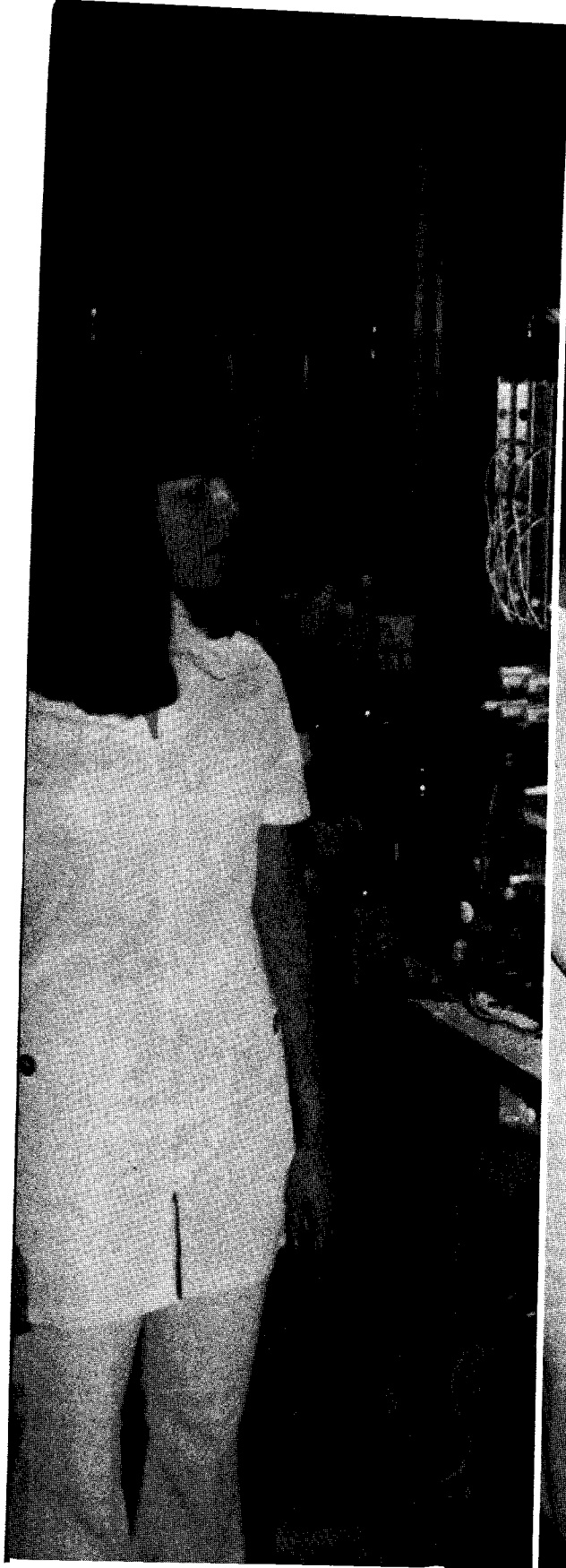


HEALTH TECHNOLOGIES

DENTAL HYGIENE TECHNOLOGY
MEDICAL LABORATORY TECHNOLOGY

PRACTICAL NURSING
(One Year Program — Non-degree)





DENTAL HYGIENE

Working under the supervision of a dentist, the dental hygienist checks and cleans teeth, charts tooth conditions, takes radiographs, applies fluoride, imparts dental health information, sterilizes instruments, and performs other chairside and office duties. Upon successful completion of this two-year program, the student is eligible to take a licensing examination prescribed by the board of dental examiners of the state in which she chooses to practice.

JOB OPPORTUNITIES

Dental hygienists practice in the following areas:

Offices in Dentists in Private Practice

School Systems — Primarily concerned with the proper care of children's teeth. Inspect students' teeth and report findings to a supervising dentist. May also instruct students in proper care of teeth, give demonstrations of the proper use of a toothbrush, and present talks on nutrition and its effects on dental health.

Public Health Work or Private Welfare Agencies — Perform duties similar to those of the school hygienist. However, they work mainly with adults.

Industry- or Union-Sponsored Clinics — Give regular dental service to plant employees, providing such care as examining and cleaning teeth and charting cavities.

Hospitals and Clinics — Concerned primarily with the special oral health problems of the bedridden and chronically ill.

Hygienists with advanced degrees may be employed in research or may teach in dental hygiene educational programs that help students to prepare for the profession.

DENTAL HYGIENE

Course	Code	Class Hours	Lab Hours	Credit Hours
First Quarter				
Communication Skills I	G	5	0	4
Speech I	C	3	0	3
Principles of Medical Science I	B	2	3	3
Oral Hygiene I	T	2	0	2
General and Oral Histology	T	3	0	3
Head and Neck Anatomy and Tooth Morphology	B	<u>2</u>	<u>2</u>	<u>3</u>
		17	5	18
Second Quarter				
Communication Skills II	G	5	0	4
Principles of Medical Science II	B	2	3	3
Preclinical Dental Hygiene I	T	0	6	2
Head and Neck Anatomy and Tooth Morphology II	B	2	2	3
Oral Hygiene II	T	3	0	3
General and Oral Pathology	T	<u>3</u>	<u>0</u>	<u>3</u>
		15	12	18
Third Quarter				
Communication Skills III	G	5	0	4
Principles of Medical Science III	B	2	3	3
Clinical Dental Hygiene I	T	0	6	2
Periodontics	T	2	0	2
Radiology	T	2	3	3
Microbiology	B	<u>3</u>	<u>3</u>	<u>4</u>
		14	15	18
Summer Quarter				
Dental Materials	T	3	6	5
Clinical Dental Hygiene II	T	<u>1</u>	<u>12</u>	<u>5</u>
		4	18	10
Fourth Quarter				
Principles of Medical Science IV	B	2	3	3
Clinical Dental Hygiene III	T	1	12	5
Pharmacology and Anesthesiology	B	4	0	4
Nutrition	T	<u>3</u>	<u>0</u>	<u>3</u>
		10	15	15
Fifth Quarter				
Principles of Sociology	G	5	0	4
Clinical Dental Hygiene IV	T	1	12	5
Public Health	T	3	0	3
Dental Health Education	T	<u>2</u>	<u>3</u>	<u>3</u>
		11	15	15
Sixth Quarter				
Principles of Psychology	G	5	0	4
Dental Specialities	T	5	0	4
Clinical Dental Hygiene V	T	1	12	5
Dental Ethics and Jurisprudence	T	2	0	2
Dental Office Management	T	<u>2</u>	<u>0</u>	<u>2</u>
		15	12	18

*Students can complete the Communication Skills requirements by taking Comm. Skills I, II, III or Comm. Skills II, III, & IV.

DENTAL HYGIENE

- DH550 Principles of Medical Science I**
Basic inorganic, organic and bio-chemistry, with emphasis on physiological principles and applications. Includes principles of physics and metric system. Designed principally for Health Technology programs. Study of Chemistry and other related subject matter included in laboratory.
- DH554 Oral Hygiene I**
History of Dentistry and development of Dental Hygiene. Introduction to medico-dental terminology. Study of the formation of calcium and stains, principles of preventive dentistry, and instrument sharpening.
- DH556 General and Oral Histology**
Origin and structure of tissues, histology and embryology of teeth, face, and oral cavity.
- DH557 Head and Neck Anatomy and Tooth Morphology I**
Study of anatomy of oral structures including the teeth and their environmental and supporting tissues. Lectures on nomenclature, morphology, structure, function, and occlusion of the teeth. Identification, drawing, and carving of some permanent and deciduous teeth.
- DH551 Principles of Medical Science II**
Fundamental concepts of cellular structure and physiology. A study of the architectural plan of the body, its skeletal, muscular, and digestive systems. Emphasis is placed on morphological and physiological concepts and applications. Laboratory includes gross anatomy and experiments in physiology.
- DH560 Preclinical Dental Hygiene I**
Techniques of removing stains and deposits from the teeth. Students practice on mannikins and then apply the instruments in the mouth.
- DH558 Head and Neck Anatomy and Tooth Morphology II**
Continuation of Head and Neck Anatomy and Tooth Morphology I.
- DH555 Oral Hygiene II**
Study of the principles and methods of patient education, sterilization, fluoride, supplementary oral health techniques, and clinic procedures.
- DH562 General and Oral Pathology**
Introduction to general pathology, inflammation, necrosis, retrograde changes, pathological process in diseases caused by bacteria, viruses and other organisms. Clinical pathology of diseases affecting teeth and their supporting structures. Visual differentiation between normal and abnormal tissues.

- DH552 Principles of Medical Science III**
Principles of electrolytes and fluid balance. Structure and function of the circulatory and respiratory systems. Laboratory includes gross anatomy and experiments in physiology.
- DH561 Preclinical Dental Hygiene II**
Continuation of Preclinical Dental Hygiene and techniques of fluoride application.
- DH563 Periodontics**
Etiology and classification of periodontal disease and principles of periodontology.
- DH564 Radiology**
History and development of the X-ray, its nature and properties. Safety precautions and uses of the X-ray in dentistry. Theory and practice in the fundamentals of oral radiographic techniques. Film placement, tube angulation, processing and mounting of films. A specific number of radiodontic examinations and hours in darkroom procedures are required throughout the two-year Dental Hygiene Program.
- DH565 Nutrition**
A study of normal nutrition and its role in promoting good health. Includes composition and functions of foods, digestion and metabolism. Nutritional needs throughout the life cycle.
- DH566 Dental Materials**
Physical properties of dental materials and basic principles of their preparation. General manipulative techniques and various phases of laboratory techniques discussed and demonstrated.
- DH567 Clinical Dental Hygiene I**
Students perform oral prophylaxis, expose radiographs, apply topical fluoride to the teeth and give patient education to adult and child patients in the clinic. Laboratory hours refer to hours in clinic. Clinical Dental students will be on a rotating basis in the various dental offices in the area.
- DH553 Principles of Medical Science IV**
Structure and functions of the nervous, urinary, and reproductive systems. Laboratory includes gross anatomy and experiments in physiology.
- DH568 Clinical Dental Hygiene II**
Continuation of Clinical Dental Hygiene I.
- DH571 Pharmacology and Anesthesiology**
Drugs and anesthetics, with emphasis on those used in the dental office. Discussion of the origin of drugs and anesthetics, physical and chemical properties, preparation, mode of administration and effects on body systems.

- DH572 Dental Health Education**
Analysis of concepts, techniques of presentation, and goals of Dental Health Education. Major emphasis is placed on preparation and use of lesson plans and instructional materials in Dental Health. Classroom instruction in Dental Health in the Elementary and Secondary Schools.
- DH569 Clinical Dental Hygiene III**
Continuation of Clinical Dental Hygiene.
- DH575 Public Health**
Historical development of public health practices in the United States as they relate to Dental Hygiene; present administrative organizations and their functions and services; exploration of present public health concepts.
- DH577 Dental Specialities**
Lectures by Dental Specialists in the fields of endodontics, operative dentistry, orthodontics, pedodontics, periodontics, prosthetics, research, and surgery to enable students to gain a knowledge of all phases of dentistry.
- DH570 Clinical Dental Hygiene IV**
Continuation of Clinical Dental Hygiene.
- DH578 Dental Ethics and Jurisprudence**
Future of dentistry and role of the dental hygienist in her profession and association. Relationship of dental hygienist to other members of the dental health team. Principles of professional ethics; laws and regulations related to dentistry and dental hygiene.
- DH579 Dental Office Management**
Introduction to office administration covering all phases of a dental office. Reception of patients, use of telephone, inventory records, recording, billing, filing, banking procedures and care of equipment.
- DH559 Microbiology**
A survey of representative types of microorganisms. Emphasis is placed on cellular structure and physiology, nutritional and environmental requirements and methods of reproduction. Introduction to the role of pathogenic organisms in carrying diseases and infections. Principles of immunity and resistance to disease. Laboratory includes methods of sterilization, culture, staining and identification.

MEDICAL LABORATORY TECHNOLOGY

The Medical Laboratory Technician performs laboratory procedures in bacteriology, blood banking, chemistry, hematology, parasitology, serology, and urinalysis under the direction of a medical technologist, physician, or pathologist. Specific tasks include collecting blood specimens, grouping and typing blood, concentrating specimens for parasitological study, analyzing blood and body fluids, preparing and staining slides for chemical components, microscopic examinations of urine, blood, and body fluids, and conducting electrocardiograms.

JOB OPPORTUNITIES

Graduates will find immediate employment opportunities in hospitals, nursing homes, independent laboratories, clinics, research laboratories. Training in this technology is not easily acquired, but the opportunities available more than compensate for the hard work. This field of endeavor is so vast that the technician upon graduation and employment acceptance, may find a tendency to specialize.

The diversity of training in the school of Medical Laboratory Technology qualifies the graduate for positions in practically any area of this expanding technology. The technician might select general medical technology, blood banking, research and development, quality control or any one of the many other areas of employment. With experience a technician may also move into a position as a manufacturer's sales representative, or in the installation, servicing, and maintenance of special laboratory equipment. Salaries are commensurate with ability, motivation, and knowledge of Medical Laboratory Technology.

MEDICAL LABORATORY TECHNOLOGY

Course	Code	Class Hours	Lab Hours	Credit Hours
First Quarter				
Communication Skills I	G	5	0	4
Technical Mathematics I	B	5	0	4
Principles of Sociology	B	4	0	4
Basic Inorganic Chemistry	B	3	3	4
Medical Technology I	T	<u>2</u>	<u>2</u>	<u>2</u>
		19	5	18
Second Quarter				
Communication Skills II	G	5	0	4
Technical Mathematics II	B	5	0	4
Physiology & Anatomy	B	4	2	4
Introduction to Organic Chemistry	B	4	4	4
Medical Technology II	T	<u>1</u>	<u>2</u>	<u>2</u>
		19	8	18
Third Quarter				
Economics	G	5	0	4
Microbiology I	B	4	3	5
Hematology I	T	3	6	5
Clinical Microscopy	T	<u>3</u>	<u>3</u>	<u>4</u>
		15	12	18
Fourth Quarter				
Technical Writing	G	3	0	3
Hematology II	T	3	6	5
Immunology and Serology	T	3	3	4
Microbiology II	T	<u>4</u>	<u>3</u>	<u>5</u>
		13	12	17
Fifth Quarter				
Medical Technology Seminar I	T	1	0	1
Histology	T	2	3	3
Biochemistry	B	3	0	3
Clinical Chemistry I	T	4	6	5
Blood Banking	T	<u>3</u>	<u>6</u>	<u>5</u>
		13	15	17
Sixth Quarter				
Medical Technology Seminar II	T	1	0	1
Human Behavior	G	3	0	3
Physics (Basic)	B	4	3	5
Clinical Chemistry II	T	4	6	5
Speech	G	<u>3</u>	<u>0</u>	<u>3</u>
Seventh Quarter				
Medical Laboratory Internship I	T	0	40	6
Special Problems in Medical Lab Tech. I	T	<u>0</u>	<u>0</u>	<u>2</u>
			40	8
Summer Quarter				
Medical Laboratory Internship II	T	0	40	6
Special Prob. in Medical Lab. Tech II	T	<u>0</u>	<u>0</u>	<u>2</u>
			40	8

*Students can complete the Communication Skills requirements by taking Comm. Skills I, II, & III or Comm. Skills II, III, & IV.

MEDICAL LABORATORY TECHNOLOGY

- ML580 Medical Technology I**
Orientation to the field of medical technology; role of the medical laboratory technician, definition and use of terms, the use and care of laboratory equipment, reporting methods, charts. A survey of the ethics set forth by the professional groups within the fields of the healing arts.
- ML581 Medical Technology II**
Detailed study of the use and care of laboratory equipment including the microscope, incubator and glassware. The importance of laboratory safety is stressed. Sterilization and titration are discussed.
- ML583 Hematology I**
The origin and formation of blood cells, including demonstrations of formed elements of blood in their normal and abnormal stages are studied. Differential morphology, straining qualities, and recognition are stressed. Techniques of counting red and white blood cells and platelets are discussed and practical. Different methods of determination of hemoglobin concentration are reviewed.
- ML585 Clinical Microscopy**
The procedure and methods of examination employed in the clinical microscopy laboratory are involved for the most part with chemical and microscopic examination of the urine and spinal fluid. Qualitative and quantitative laboratory procedures for urine and spinal fluid examinations. The theory and application of the kidney tests are included in this section.
- ML584 Hematology II**
A continuation, concentrating on the mechanisms of coagulation and their evaluations. This includes the study and practice of such procedures as prothrombin time, partial thromboplastin time, bleeding, and coagulation time. Serum prothrombin consumption is discussed. Diseases including anemias, leukemias, and hemaglobinopathy will be presented.
- ML586 Immunology and Serology**
Antigen antibody classifications, agglutination and titration procedures, and similar techniques are stressed. The students practice flocculation precipitation, and competent fixation methods to various diseases.
- ML587 Clinical Chemistry I**
This course reviews topics of general chemistry in relation to their applications in the medical laboratory. The student participates in the preparation of solutions and reagents used in biological examinations. Colorimetry, photometry, gasometry, enzyme, chemistry, flame photometry, and other hospital chemistry laboratory procedures are studied. Quality control and instrumentation are stressed throughout the course.

- ML589 Blood Banking**
Basic theory including the Mendelian Laws, genotypes and phenotypes is discussed. The collection and processing of blood is stressed. Instruction and practice in typing, cross-matching are given. Titration procedures, discussion of atypical antibodies and similar techniques are related to the recognition of incompatibilities. Practice of blood banking procedures follows the study of their segment of laboratory techniques.
- ML590 Microbiology I**
Host parasite relationships as pertain to laboratory safety. A study of bacteria and bacteriological techniques for cultivation and isolation in pure culture, including primary, enrichment and secondary culture. Microscopic techniques. Preparation and sterilization and quality control of culture media and glassware. Preparation and use of various stains and certain reagents used in the biochemical techniques for identification. Effects of physical and chemical agents. Anaerobic techniques. Other specialized methods of including concentration of mycobacteria, blood cultures, water, mold, and food cultures, and antibiotic sensitivity tests. Collection of human blood specimens for bacterial culture.
- ML592 Histology**
Students are taught how to prepare tissue specimens for microscopic examination, including fixation, dehydration, embedding, and cutting tissues, and use and care of tools. Labeling and recording accuracy are stressed. Various mounting and staining procedures are taught and practiced with emphasis on the preparation of permanent slides for pathological diagnosis.
- ML591 Microbiology II**
Continuation of bacterial methods. Protozoological and helminthological methods including staining and flotation or concentration techniques. Microscopic examinations. General mycological technique and study of various types of fungi. Collection and preservation of specimens for viral examination. Study of various viral agents, and or basic viral techniques for virus isolation and viral serology.
- ML588 Clinical Chemistry II**
Continued study of the medical applications of the topics presented in Clinical Chemistry I. The study of diagnostic isotopy, steroid determinations, and flurometry will be introduced.
- ML594 Summer Quarter I**
One-quarter internship providing a practical application of the skills and abilities learned during the previous three-quarters of the first year. The students are assigned to an accredited hospital laboratory as a trainee.

- ML595 Special Problems I**
During the internship period, the student will keep a monthly log indicating scope and degree of activity in the laboratory. A copy of this work will be filed with the hospital and a copy filed with the College. A problem of special interest to the student, requiring library and/or laboratory study will be selected by the student and faculty coordinator.
- ML596 Summer Quarter II**
One-quarter internship providing a practical application of the skills and abilities learned during the previous three-quarters of the second year. The students are assigned to an accredited hospital laboratory as a trainee.
- ML597 Special Problems II**
During the internship period, the student will keep a monthly log indicating scope and degree of activity in the laboratory. A copy of this work will be filed with the hospital and a copy filed with the College. A problem of special interest to the student, requiring library and/or laboratory study will be selected by the student and the faculty coordinator.
- ML598 Medical Technology Seminar I**
Student participation in areas such as ethics and responsibilities in the medical laboratory. Career and professional opportunities in the medical laboratory. Consideration of other allied health occupations, the value of research to laboratory sciences and management problems for the benchside worker.
- ML599 Continuation of Medical Technology Seminar I.**
- 140 Biochemistry**
This course is an introduction to physiological chemistry with a short review of organic chemistry. Metabolism of carbohydrates, lipids, and proteins is discussed with emphasis on metabolic pathways, enzymes, hormonal control of metabolism, metabolic energy for muscular work, composition of body fluids, and metabolic relationships among major organs. Pathological conditions related to metabolism are discussed.

PRACTICAL NURSE PROGRAM

Purpose:

To prepare qualified people for satisfying and gainful employment in practical nursing.

To provide competent practical nurses to function in care of the sick, rehabilitation and prevention of illness in private homes and community health agencies.

Entrance Requirements:

Education:

Graduation from an accredited high school or passed the high equivalency examination.

Health:

Applicant must be in good health; state of health is determined by a pre-entrance physical examination by the applicant's physician, including a chest x-ray, laboratory tests and immunization. (Immunizations should include those currently advocated by the local and/or State Department of Health.)

Personal:

Suitability is determined by entrance tests, personal interview and references. All applicants must be accepted by the Admissions Committee.

Tuition and Other Costs:

Tuition — In County	\$ 800.00	(No refund)
Tuition — Out of County	\$ 820.00	(No refund)
Tuition — Out of State	\$ 900.00	(No refund)
Uniforms	\$ 55.00	(No refund)
Books and Supplies*	\$ 100.00	(estimated)

*Watch with sweep second hand, white shoes and white hose are essential.

Curriculum:

The curriculum is planned to help the student progress through the various phases of the Practical Nurse Program in accordance with the standards set by the State Board of Nursing Education and Nurse Registration.

Classroom and instruction include studies in:

1. Personal and Vocational Relationships
2. Body Structure, Function and Hygiene
3. Nutrition and Diet Therapy

4. Care of Surgical Patients
5. Care of Medical Patients
6. Nursing Principles
7. Maternity Nursing
8. Care of Children
9. Community Health
10. Family Living

An overall average of 80% must be maintained throughout the course. At the completion of the course the graduate is eligible to take the State Board Licensing Examination to become a Licensed Practical Nurse.

Facilities for Instruction:

The formal classes and laboratory practice are held in the Scioto Technical College. Medical, surgical, obstetric and pediatric experiences are provided in Mercy Hospital and Scioto Memorial Hospital.

Length of Study:

The course is a 51 week program. The first 18 weeks provide the student with certain concepts, attitudes and skills basic to the practice of practical nursing. The last 30 weeks provide for more clinical experience with correlated theory. Vacation time totaling three weeks is allotted.

ADULT CONTINUING EDUCATION

The adult continuing education program of para-professional education concentrates in two (2) areas: (1) Evening classes offered for general public; (2) Special classes organized in cooperation with local business and industry.

More specifically, the part-time program is designed for adults who desire to:

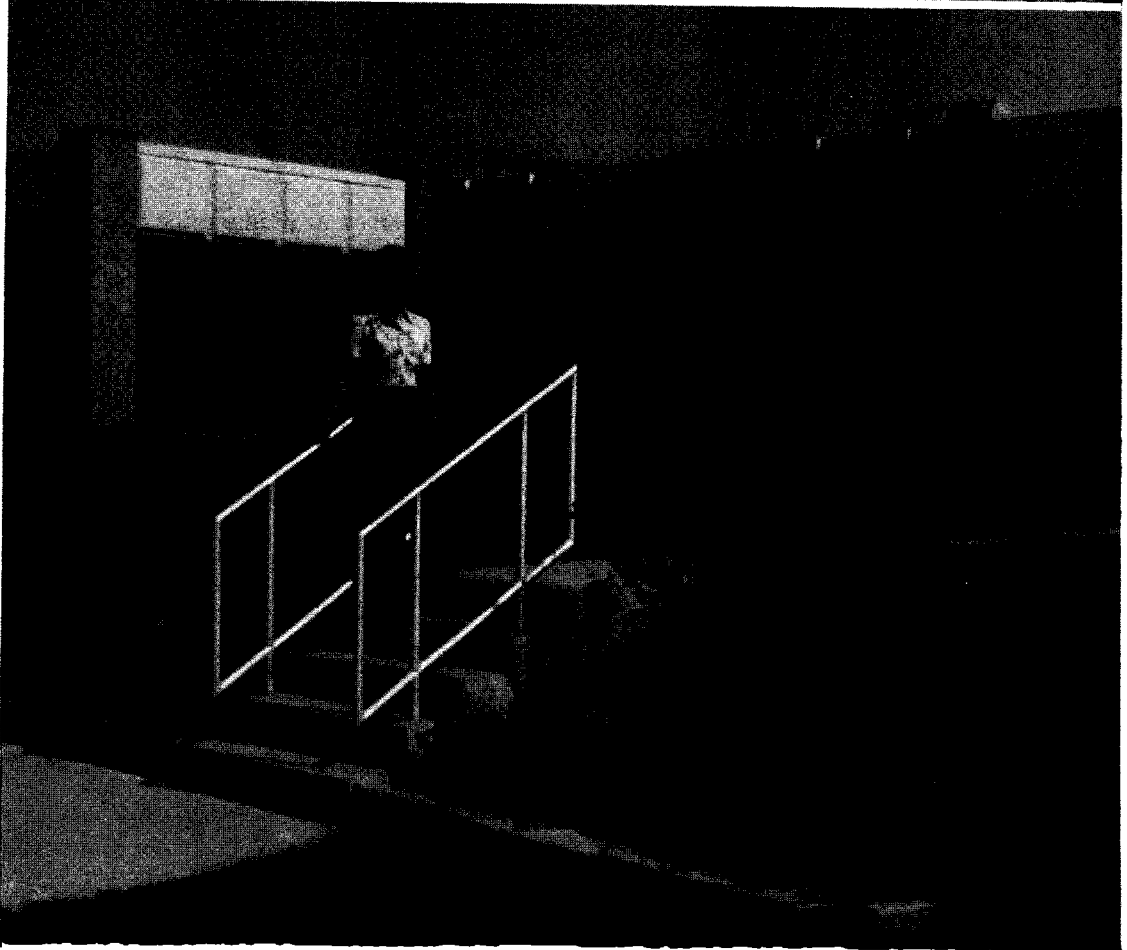
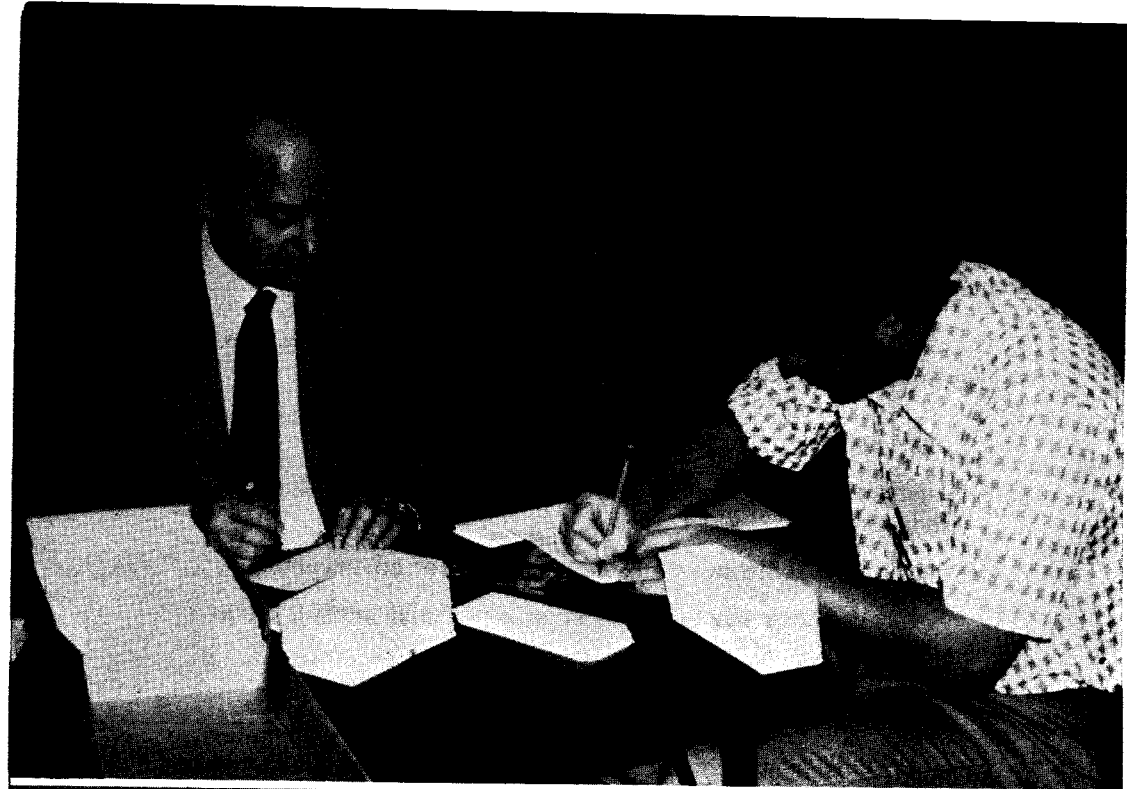
1. Earn credit applicable toward the Associate Degree.
2. Upgrade skills to meet the on-the-job requirements of business and industry.
3. Learn new skills and concepts necessary for advancement.
4. Select credit or non-credit courses as personal interest dictates.

ADMISSIONS

Evening Division students may apply any time prior to the announced closing of registration. No school records need to be submitted at this time. Technical College students should be high school graduates or equivalent.

REGISTRATION PROCEDURE

Registration may be accomplished by mail or in person any time prior to announced closing of registration. Offices at Scioto Technical College are open from 8:00 to 4:00 daily. Telephone inquiries should be directed to the Evening Division, 259-5566.



ADDITIONAL TECHNOLOGIES

BANKING AND FINANCE TECHNOLOGY

The Banking and Finance Technology Program is designed to provide the individual with a background that will have many opportunities to broaden his knowledge and skills once he is working in a bank or consumer finance company. The student will have an opportunity to participate in a management training program in which the candidate is exposed to the various aspects of financial institutions and operations to which management thinks he may be eventually suited as a potential supervisor, manager, or officer. Courses in Accounting Principles, Money and Banking, Economics, Business Law, Investments, Bank Organization, etc. Students with a background of these courses are needed to staff their fast growing operations.

JOB OPPORTUNITIES

Graduates will find employment as an assistant to the credit analyst, trust officer, supervisor of financial services, businessman's advisor, comptroller, or any of the many senior officers employed in the various banks and financial institutions.

There is a wide range of jobs from which a two-year college graduate can choose. Banks need people to work in their commercial loan department where all types of businesses are advised types of financing available.

BANKING AND FINANCE TECHNOLOGY

Course	Code	Class Hours	Lab Hours	Credit Hours
First Quarter				
Communications Skills I	G	5	0	4
Business Math	B	5	0	4
Business Law	B	5	0	4
Principles of Banking & Finance I	T	3	2	3
Accounting I	B	<u>2</u>	<u>3</u>	<u>3</u>
		20	5	18
Second Quarter				
Communication Skills II	G	5	0	4
Accounting II	B	2	3	3
Business Law II	B	5	0	4
Credit and Collection	T	5	0	4
Principles of Banking & Finance II	T	<u>2</u>	<u>3</u>	<u>3</u>
		19	6	18
Third Quarter				
Communication Skills III	G	5	0	4
Fund. of Data Processing	T	2	3	3
Accounting III	T	2	3	3
Insurance I	T	2	0	2
Installment Credit	T	4	0	3
Principles of Banking Operation	T	<u>2</u>	<u>3</u>	<u>3</u>
		17	9	18
Summer Quarter				
Banking and Finance Internship	T			6
Special Problems in Banking & Finance	T			<u>2</u>
				8
Fourth Quarter				
Communication Skills IV	G	5	0	4
Economics	B	5	0	4
Human Behavior	B	3	0	3
Residential Appraising	T	2	3	3
Home Mortgage Lending	T	<u>3</u>	<u>3</u>	<u>4</u>
		18	6	18
Fifth Quarter				
Principles of Psychology	G	5	0	4
Speech I	G	3	0	3
Economics II	B	5	0	4
Valuation of Real Estate	T	2	3	3
Investments I	T	<u>5</u>	<u>0</u>	<u>4</u>
		20	3	18
Sixth Quarter				
Principles of Sociology	G	5	0	4
Personnel Management	T	3	0	3
Investments II	T	5	0	4
Mortgage Loan Servicing	T	2	3	3
Supervision of Personnel Administration	T	3	0	3
Seminar in Consumer Finance	T	<u>0</u>	<u>4</u>	<u>1</u>
		18	7	18

*Students can complete the Communication Skills requirements by taking Comm. Skills I, II, & III, or Comm. Skills II, III, & IV.

BANKING AND FINANCE

- 154 Business Law I**
Introduction to major points of business law, based principally on Uniform Commercial Code; consideration of Uniform Acts relating to specific legal areas. Contracts, agency and employment, negotiable instruments, personal property, and bailments.
- BF601 Principles of Banking and Finance I**
Monetary standards, commercial and central banking. Federal Reserve functions and statements, monetary and income theory, problems of monetary and fiscal stabilization, international payments, and the International Bank and Monetary Fund.
- AC201 Accounting I**
Introduction to fundamental accounting concepts and the procedures. The accounting cycle; nature of accounts and techniques of recording, classifying, summarizing and analyzing basic financial data. Application of fundamental accounting techniques to partnerships and corporations. Accounting for the formation, operation, and dissolution of business enterprises.
- AC202 Accounting II**
Application of fundamental accounting techniques for cash, long term investments, notes and accounts, inventory methods, plant and equipment, liabilities. Introduction to manufacturing operations, cost methods and management's need of cost data.
- 155 Business Law II**
A second quarter of the study of Business Law in which the subject matter covered includes partnerships, corporations, real property and leases, nature of insurance, mortgages, nature of bankruptcy, trusts and estates, and basic business regulations by government.
- RM511 Credit and Collections**
A course designed to stress the importance of the credit-granting stage in mortgage loan procedures and the practical procedures and techniques involved in effective collection systems. This course covers the principles of credit and credit risk analysis, descriptions of the nature, uses and role of credit, credit instruments, consumer credit information, consumer and mortgage credit, collection policies and procedures, effective collection letters, the development and maintenance of a low delinquency rate, special procedures and remedies for collection problems.

- BF602 Principles of Banking and Finance II**
A study of banking operations and management. Course is designed as an introduction to the administration and operation of commercial banks and saving and loan banks. Management of banking funds with liquidity. Investment characteristics of securities. Analysis of objectives, risks, yields, and outlets for individual and institutional funds.
- BF603 Fundamentals of Data Processing**
Introduction to the theory of punch card equipment. Exercises in interpreting, reproducing, collating, and basic accounting machine functions, together with utility program use.
- AC203 Accounting III**
Reporting and analysis of financial data. Financial statement introduction, analysis and interpretation to meet the needs of modern management. Introduction to accounting techniques applicable to parent and subsidiary companies and departmental and branch operations. Budgeting as an aid to management, and the importance of income tax considerations in financial decisions.
- BF604 Installment Credit**
Procedures, forms, government regulations, delinquency and collections, interest rates, background of installment credit.
- BF605 Principles of Bank Operations**
Basic course stating a history of banking, developing of Federal Reserve System, three main duties, safekeeping, transfer of funds, lending. Examination and governmental examination. Field work and problems concerning the operation of commercial bank and savings and loan institutions. On the job visitation to various banks.
- 124 Economics I**
Introduction to American capitalism; basic economic concepts, including elementary demand-supply and price system analysis. Macro-economics: national income analysis, employment theory, inflation, business cycle, fiscal policy; American economic growth. Money: roles of money, the institutions and functions of the American banking system, monetary problem.
- BF606 Residential Appraising**
A course that covers the basic appraisal principles and practices with specific reference to the operations of savings associations. The appraisal terminology, the study of national, regional, local and neighborhood trends, the study of site, the methods of arriving at value estimates and the processes involved in studying the market are just some of the topics covered. Field work in the area of appraising.

- BF607 Home Mortgage Lending**
A course covering the basic principles of home mortgage lending. A study of the procedures use from the opening to closing of mortgages. A complete study of all necessary forms, rules, and regulations the buyer should know in obtaining a loan.
- 125 Economics II**
Micro-economics: price determination in various product and resource markets; demand-supply, elasticity, profit maximization and general cost analysis. Current domestic economic problems and policies. International economics; history, institutions, and theory of international trade; foreign exchange; balance of payments; the under-developed countries; the Soviet economic challenge.
- BF608 Valuation of Real Estate**
This course includes a review of basic residential appraising, the development and operation of an appraising department, building cost analysis, market analysis, land development appraising and some of the more specialized appraising problems. Apartment units and buildings, commercial properties, special purpose properties, office buildings, shopping centers, motels and hotels are all studied in this course.
- BF609 Investments I**
A course consisting of assignments dealing with the various investment alternatives as well as general and specific information that must be considered before thought is directed toward particular industries and companies. Also included are the tools and sources that are needed for the analysis necessary before making wise investment decisions.
- BF611 Personnel Management**
The philosophy, principles, and the methods of personnel management; organizational structure, areas of responsibility and authority, policy making, procurement and placement, training, evaluation, wage and salary administration and benefits programs.
- BF610 Investments II**
Part II of this course is more analytical and involves the actual art of investing. It proceeds from an analysis of the needs and the determination of objectives to the careful analysis and selection of industries and securities appropriate for realizing those objectives.
- BF612 Mortgage Loan Servicing**
Servicing systems, regulations, reports, records, accounting procedures, loan participations and the sale of loans are just a few of the topics covered in this course. It can be a most helpful course, specifically to those involved in the lending activities of the association, and generally to all those working for a savings association.

- BF613 Supervision and Personnel Administration**
Training of all new employees, and supervision of the physical facilities.
- BF614 Seminar in Banking and Finance**
Problem to be selected in consultation with an assigned instructor.
- BF615 Banking and Finance Internship**
Eleven weeks of supervised work experience with supervisory visits by instructor. Weekly seminars for critique of experience. Weekly evaluation reports.
- BF616 Special Problems in Banking & Finance**
Weekly evaluation report.

CORRECTIONS TECHNOLOGY

Corrections Technology Program is designed to provide the student with an understanding of the course 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.

The correctional specialist works in major areas as group supervisors, guards and other instructional personnel concerned generally with the custody and care of offenders in group settings. More than 50 per cent of the personnel in the correctional field belong to this group.

JOB OPPORTUNITIES

Graduates are specialists trained to assist in the supervision, research, and administration necessary to estimate and determine the appropriate time to release an inmate from an institution and ultimately discharge him from supervision. They are qualified to become institutional parole officers or counselors, case managers, custodial officers or correctional officers.

CORRECTIONS TECHNOLOGY

Course	Code	Class Hours	Lab Hours	Credit Hours
First Quarter				
Communication Skills I	G	5	0	4
Basic Mathematics	B	5	0	4
Introduction to Correction	T	3	3	3
Criminology	T	2	2	2
Probation & Parole	T	<u>4</u>	<u>3</u>	<u>5</u>
		19	8	18
Second Quarter				
Communication Skills II	G	5	0	4
Accounting I	B	2	3	3
Physical Science I	B	3	0	3
Drug Abuse	T	2	4	3
Correctional Interview and Counseling Techniques	T	2	3	3
Observation Techniques	T	<u>2</u>	<u>2</u>	<u>2</u>
		16	12	18
Third Quarter				
Communication Skills III	G	5	0	4
Psychology I	G	3	0	3
Physical Science II	B	3	0	3
Juvenile Delinquency I	T	2	2	2
Correctional Case Evaluation	T	<u>3</u>	<u>6</u>	<u>5</u>
		16	8	17
Summer				
Internship	T			6
Special Problems	T			<u>2</u>
				8
Fourth Quarter				
Speech I	G	3	0	3
Typing and Business Machines	T	2	2	2
Juvenile Delinquency II	T	2	3	3
Philosophy of Correction	T	2	2	2
Abnormal Psychology	T	3	0	3
Research Appreciation in Corrections	T	<u>4</u>	<u>3</u>	<u>5</u>
		16	10	18
Fifth Quarter				
Group Interaction	T	1	6	3
Technical Writing	G	3	0	3
Principles of Leadership	B	4	0	4
Political Science	G	3	0	3
Correctional Law	T	<u>4</u>	<u>3</u>	<u>5</u>
		15	9	18
Sixth Quarter				
Sociology	G	3	0	3
Correctional Programs	T	5	0	5
Correctional Psychology	B	5	0	4
Community Programs	T	<u>3</u>	<u>6</u>	<u>5</u>
		16	6	17

*Students can complete the Communication Skills requirements by taking Comm. Skills I, II, & III or Comm. Skills II, III, & IV.

CORRECTIONS TECHNOLOGY

- CT650 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.
- CT651 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.
- CT652 Probation and 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.
- AC201 Accounting I**
Introduction to fundamental accounting concepts and the procedures. The accounting cycle: nature of accounts and techniques of recording, classifying, summarizing and analyzing basic financial data. Application of fundamental accounting techniques to partnerships and corporations. Accounting for the formation, operation, and dissolution of business enterprises.
- CT670 Physical Science**
A development of basic concepts and theories in the physical sciences. A terminal course.
- CT653 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.
- CT654 Correctional Interview and 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.
- CT655 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.
- CT671 Physical Science II**
An introduction to principles of magnetism, electricity and atomic structure. Lab work is included.

- CT656 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.
- CT658 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.
- CT668 Internship**
This course will provide the student with on-the-job training.
- CT669 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.
- CT659 Typing and Business Machines**
An introduction course in typing and business machines, such as adding machines, calculators, etc.
- CT657 Juvenile Delinquency II**
A continuation of Juvenile Delinquency I.
- CT600 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.
- CT661 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.
- CT662 Research Appreciation in Corrections**
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.
- CT663 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.

- 105 Technical Writing**
Forms and procedures for making technical reports. Practice in writing technical papers, memos, business letters, and establishment of patterns for reports required at school or in industry.
- CT664 Principles of Leadership**
This course will help officers evaluate their own understanding of human relations and pinpoint areas of strength and weakness in relationship with leadership skills: How to understand the drives that motivate man in his work; how to praise, how to reprimand, how to handle disciplinary problems, and techniques of communicating ideas.
- CT672 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.
- CT665 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.
- 122 Sociology**
An analysis of the relationship of the individual and the group to social institutions. The cultural background of American civilization. Collective behavior, human ecology, and social change are studied. Emphasis on the social effects of modern technology and adjustment of man to his culture.
- CT666 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.
- CT667 Correctional Psychology**
Psychology dealing with problems predominant to the personalities entering a correctional facility. Level quay psychology — psychoanalytic. He will be expected to know where the various approaches are being used and be required to study one of them in depth.
- CT673 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.

SOCIAL SERVICES TECHNOLOGY

The Social Services Technology program provides a two-year college level program for high school graduates interested in working with the people of the local community and in helping them with their daily problems.

Opportunities in health, education and welfare have expanded more rapidly than has the number of highly trained specialists to meet them.

Social Service technicians will be needed as long as there is a society to be improved, as long as there are people in trouble, neighborhoods to be changed, institutions to be made more accessible to people. As long as people search for meaning in their lives and for personal progress, workers in this field of social services shall attempt to build a more satisfying world for all of us.

JOB OPPORTUNITIES

Graduates are specialists trained in field work, specialized courses in both group work and casework, human relationships, race relations, social problems, and group dynamics and leadership. They are qualified to become case workers, child care workers, mental health aides, rehabilitation aides, and vocational counselor trainee.

SOCIAL SERVICE TECHNOLOGY

Course	Code	Lecture Hours	Lab Hours	Credit Hours
First Quarter				
Communication Skills I	G	5	0	4
Principles of Sociology	G	5	0	4
Principles of Psychology I	G	5	0	4
Human Growth and Development	B	3	2	3
Historic Background to Urban Society	B	<u>3</u>	<u>2</u>	<u>3</u>
		21	4	18
Second Quarter				
Communication Skills II	G	5	0	4
Contemporary Social Problems	B	4	0	3
Principles of Psychology II	G	5	0	4
Human Behavior	B	3	0	3
Personal Growth Development	T	2	0	2
Social Services Internship I	T	<u>0</u>	<u>6</u>	<u>2</u>
		19	6	18
Third Quarter				
Communication Skills III	G	5	0	4
Marriage and the Family	T	3	1	3
Public and Child Welfare	T	3	2	3
Rehabilitation	T	2	0	2
Sociology of Education	B	5	0	4
Social Services Internship II	T	<u>0</u>	<u>6</u>	<u>2</u>
		18	9	18
Fourth Quarter				
Speech I	G	3	0	3
Juvenile Delinquency	T	3	0	3
Gerontology	T	4	0	3
Social Group Work	T	2	0	2
Principles of Economics I	B	5	0	4
Social Service Internship III	T	<u>0</u>	<u>6</u>	<u>2</u>
		17	6	17
Fifth Quarter				
Economics II	B	5	0	4
Social Science Statistics	B	3	0	3
Criminology	T	4	0	3
Medical Sociology	T	3	0	3
U.S. Minority Groups	T	3	0	3
Social Service Internship IV	T	<u>0</u>	<u>6</u>	<u>2</u>
		18	6	18
Sixth Quarter				
Community and Community Resources Seminar	T	3	2	3
Orientation to Social Work	T	1	3	2
Social Problems and Police Relations	T	3	0	3
Penology and Corrections	T	2	3	3
Social Services Internship V	T	3	3	4
		<u>0</u>	<u>6</u>	<u>2</u>
		12	17	17

*Students can complete the Communication Skills requirements by taking Comm. Skills I, II, & III or Comm. Skills II, III & IV.

- SS901 Human Growth and Development**
A study of the development of man from birth to maturation. A direct observation of children.
- SS902 Historic Background to Urban Society**
A survey of the evolution of urban society, emphasizing the development of change in American culture patterns. Field trip to urban area, and visitations to homes in different geographic regions.
- SS903 Contemporary Social Problems**
Social issues in contemporary America. Society responses to structural defects in society.
- SS904 Psychology II**
A study of the behavior science approach to understanding the human performance and potentialities.
- SS905 Personal Growth Development**
A study of how to work with patients/clients, professional people, personal hygiene and office attire, refinement of oral communications with emphasis on conference forms, leadership, and techniques.
- SS906 Marriage and the Family**
A study of the American family system; domestic relations law, courtship, marriage processes, factors associated with successful and unsuccessful marriages. Visitation with local ministers to discuss problems encountered.
- SS907 Public and Child Welfare**
Contemporary organization, functions, and needs at local, state, and national levels, including social security system. Field experience with caseworkers. Visitation to Welfare Office, Social Security Administration, Vocational Rehabilitation Centers, etc.
- SS908 Rehabilitation**
A study of the rehabilitation process. A study of the laws and legislation influencing the rehabilitation process. Visitations and conferences with personnel involved in rehabilitation.
- SS909 Sociology of Education**
An examination of education as a social institution. Social factors influencing learning, teaching and school programs. Social trends and problems in education.
- SS910 Juvenile Delinquency**
Social and personal factors in juvenile delinquency; relationship of disorganized areas to development and control of juvenile delinquency.
- SS911 Gerontology**
A study of the life style and problems encountered by the aged.

- SS912 Social Group Work**
Orientation to the process and techniques of social group work, the agencies, using this method, and trends in the field.
- 125 Economics II**
A study of consumer purchases in food, clothing, drugs, etc. Helping the individual develop better habits in consumer purchasing.
- SS913 Social Science Statistics**
Principles and procedures in treatment and presentation of quantitative social data. Methods of measuring central tendency, dispersion and association. Scientific sampling, estimation and test of significance.
- SS914 Criminology**
Crime, criminals, corrections, and community; criminological theories and correctional systems.
- SS915 Medical Sociology**
Sociological concepts of illness and health; structure, role, rank, and value of health personnel and patients.
- SS916 U. S. Minority Groups**
Examination of minority groups, causes and consequences of prejudice and discrimination.
- SS917 The Community and Community Resources**
The American community as a social system. Emphasis on ecology, stratification, and social power.
- SS919 Orientation to Social Work**
Orientation to the process and techniques of social casework; the agencies using this method; trends in the field.
- SS920 Social Problems and Police Relations**
Use of sociological perspective to analyze major social problems including causes, treatment, and prevention. Consideration of the ways the community and police allocates its resources to deal with problems. Analysis includes such problems as race relations, poverty, crime, delinquency, population, and work.
- SS921 Penology and Corrections**
Societal reactions to offenders against law, viewed historically and cross-culturally.
- SS922 Seminar**
Course designed for students to do individual research related to their particular area of interest in Social Services.
- SS923 Social Services Internship I, II, III, IV and V**
This internship program involves the student in applying his classroom studies in the field. Group of 4-6 students are assigned to work with counselors, caseworkers, etc. in social work areas.

SCIOTO TECHNICAL COLLEGE CALENDAR 1973-74

FALL QUARTER

September 17, 18, 19 Freshman Registration & Orientation
September 20, 21 Sophomore Registration
September 24 First Day of Classes
December 12 Quarter Ends (Exams 10, 11, 12)
December 13, 14 Records Day for Staff

WINTER QUARTER

January 2 Registration
January 3 First Day of Classes
February 18 President's Birthday — Legal Holiday
March 19 Quarter Ends (Exams 15, 18, 19)
March 20, 22 Records Day for Staff

SPRING QUARTER

March 25 Registration
March 26 First Day of Classes
April 11-15 Spring Vacation
May 27 Memorial Day — Legal Holiday
June 7 Quarter Ends (Exams 5, 6, 7)
June 9 Graduation
June 10, 11, 12 Records Day for Staff

SUMMER QUARTER

1st Term

June 17 Registration
June 18 First Day of Classes
July 4 Legal Holiday
July 19 Quarter Ends (Exams 23)

2nd Term

July 22 Registration
August 23 Quarter Ends (Exams 23)

SCIOTO TECHNICAL COLLEGE CALENDAR 1974-75

FALL QUARTER

September 16, 17, 18 Freshman Registration & Orientation
September 19, 20 Sophomore Registration
September 23 First Day of Classes
December 11 Winter Registration
December 16 Quarter Ends (Exams 12, 13, 16)
December 17, 18 Records Day for Staff

WINTER QUARTER

January 6 Registration
January 7 First Day of Classes
February 17 President's Birthday (Legal Holiday)
March 21 Quarter Ends (Exams 19, 20, 21)
March 25, 26 Records Day for Staff

SPRING QUARTER

March 26 Registration
March 27-March 31 Spring Vacation
April 1 First Day of Classes
May 26 Memorial Day (Legal Holiday)
June 6 Quarter Ends (Exams 4, 5, 6)
June 8 Graduation
June 9, 10, 11 Records Day for Staff

SUMMER QUARTER

1st Term

June 16 Registration
June 17 First Day of Classes
July 4 Legal Holiday
July 18 Quarter Ends (Exams 18)

2nd Term

July 21 Registration
July 22 First Day of Classes
August 22 Quarter Ends (Exams 22)

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