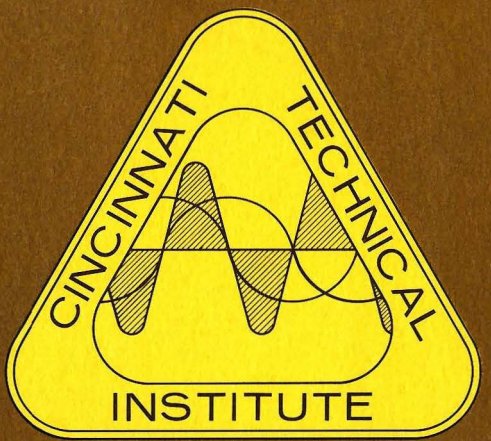
CAREERS OF IMPORTANCE



CINCINNATI TECHNICAL INSTITUTE

CATALOG

ASSOCIATE DEGREE PROGRAMS

1970-71

CINCINNATI TECHNICAL INSTITUTE

BOARD OF TRUSTEES

Appointed By The Governor

Name	Term Expires
Rev. Herman H. Kenning	August 28, 1972
Mr. Arthur R. Ernschwender	August 28, 1971

Appointed By The Cincinnati Board Of Education

Name	Term Expires
Mrs. Alice P. Bruckmann	September 14, 1972
Mr. Calvin H. Conliffe	September 14, 1971
Mr. Wayne F. Wilke	September 14, 1971
Mrs. Virginia K. Griffin	September 14, 1970
Rev. Tecumseh X. Graham	September 14, 1970

Officers

Chairman	Mr. Arthur R. Ernschwender
Vice Chairman	Mrs. Virginia K. Griffin
Secretary-Treasurer	Mr. Donald E. Miller

CINCINNATI TECHNICAL INSTITUTE

3520 Central Parkway
Cincinnati, Ohio 45223

681-3320

Clifford R. House, President

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ADMINISTRATIVE OFFICERS

Clifford R. House, B.S., M. Ed. . . . . President

Frederick B. Schlimm, B.S., M. Ed. . . . . Vice President

Donald E. Miller, B.S., M. Ed. . . . . Director Of Finance and Data Control

Charles E. Warman, B.S., M. Ed. . . Director Of Research, Planning And Informational Services

Nick Visnic, A.B., M.A. . . . . Associate, Vice President Student Services

Irvin C. Kuehn, B.S., M.A. . . . Associate, Vice President Auxiliary Services

Eugene T. Wieland, B.B.A., M.B.A. . . . . Associate, Director of Finance and Data Control

FACULTY

Helen Ball (Mrs.), B.S. . . . . Coordinator - Executive Secretarial Technology

Carmen Battistone, B.S., M. Ed. . . . . Instructor - Communication Skills - Social Science

Johnnie Boggio (Mrs.) B.S., M. Ed. . . . . Instructor - Business

Stewart Bonem, B.A., M.BA. . . . . Instructor - Business

Charles Bornheim, B. Arch. . . . . Coordinator - Data Processing Technology

Jerome X. Cozart . . . . . Coordinator - Graphic Communications Technology

Robert Craigo, B.S., M.A. . . . . Coordinator - Mechanical Design Technology

Donald Dadey, B.S., M. ED. . . . . Instructor - Communication Skllls - Social Science

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Harold Funk, B.S. . . . . Coordinator - Electronics Technology

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James A. Howard . . . . . Coordinator - Electronics Technology

Alvena Ivey, R.N. . . . . Instructor - Clinical Technology

Charles Jonas, B.S., M. Ed. . . . . Coordinator - Mechanical Design Technology

Harold Jones, M.S. . . . . Instructor - Mathematics - Science

Michael Jones, B.F.A. . . . . Instructor - Communication Skills - Social Science

Geraldine Kaminski (Mrs.) B.S., Reg. M.T. (ASCP) Coordinator - Clinical Technology

FACULTY
(Continued)

Joseph Keenan, B.S., M.A. . . . . Coordinator - Automotive Service Management

Eugene Krygowski, B.S. . . . . Coordinator - Graphic Communications Technology

Clyde Kobberdahl, B.S. . . . . Coordinator - Business Management

Russell Ladley, B.S.I.E., B.S.M.E., P.E. . . Coordinator - Civil Engineering Technology

John Lalley, B.S. . . . . Instructor - Physics

Bettie McTerry (Mrs.), B.S. . . . . Instructor - Business

Leonard Penn, B.S. . . . . Instructor - Economics - Social Sciences

Lloyd Pitman, B.S. . . . . Coordinator - Sales-Marketing Technology

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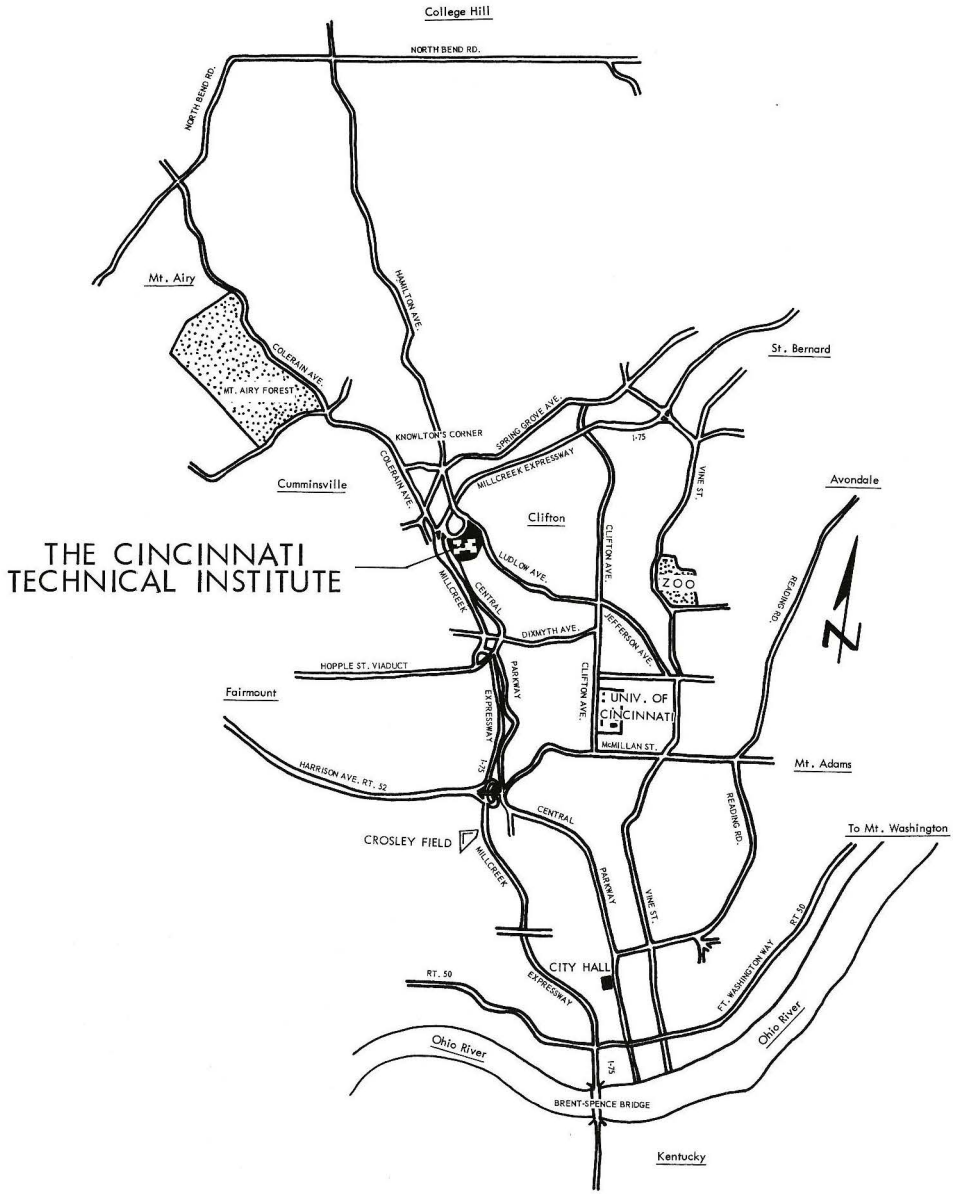
Richard Strait, B.S. . . . . Instructor - Mathematics - Science

James R. Swartz, B.S. . . . . Coordinator - Civil Engineering Technology

Karl Von Kampen, B.S., M.S. . . . . Coordinator - Automotive Service Management

Eugene T. Wieland, B.B.A., M.B.A. . . . . Coordinator - Business Management

I. J. Ziegler, B.S., M. Ed. . . . . Instructor - Mathematics - Science



LOCATION

OF

THE CINCINNATI TECHNICAL INSTITUTE

MAP PREPARED BY MARY HEHN, 1966

GENERAL INFORMATION

Growth and Governance of the School

The Cincinnati Board of Education established the Cincinnati Cooperative School of Technology, a two-year technical institute for high school graduates, in 1966. A great and growing shortage of technicians existed in the Cincinnati area. The function of the school was to train technicians in a practical program combining classroom instruction and cooperative work experience. The school grew rapidly. By 1968-69, enrollment rose to 500-plus and the number of cooperative employers to 127.

Since all technical education programs were to come under the authority of the Board of Regents, the Cincinnati Board of Education proposed in April, 1969 that the Regents establish a Cincinnati Technical Institute District and approve CCST as the nucleus of the technical institute to serve that district. These proposals were approved by the Regents in May, 1969.

The Board of Trustees of the new district—two appointed by the Governor and five elected by the Cincinnati Board of Education—held their organizational meeting on September 15, 1969. At that meeting they appointed the President of the institute and approved the institute operating plan and associate degree programs developed by his staff. They also changed the name of the school to Cincinnati Technical Institute, to conform with the designations of other institutes in the state.

The Board of Regents approved the degree programs and the operating plan on September 19, 1969 and issued the Cincinnati Technical Institute charter on that date.

December 31, 1969 was designated as the final day of operation of the school under the governance of the Cincinnati Board of Education. On the first day of the new decade the school was to be governed solely by its own Board of Trustees and administration.

OBJECTIVES

The student in a technical program at Cincinnati Technical Institute concentrates his major effort on the particular technology which he is studying. He also studies the mathematics, communication skills, science, and leadership skills related to his technology.

The school is staffed by experienced teachers who employ the latest instructional techniques. Cooperative work experience utilizes the diverse training resources of Cincinnati's business-industrial community. Thus, classroom participation and laboratory work, on one hand, and cooperative work experience, on the other, complement each other to provide an ideal program for technical education.

Although technical education is designed to prepare for immediate entry into technical jobs, not into professional positions, thousands of technicians, who do above-average work in school and on the job, upgrade themselves into more desirable positions through further education. Most of those who continue their education beyond the associate degree level, transfer technical courses toward baccalaureate degrees.

ENTRANCE TEST DATES

All applicants for admission to the Cincinnati Technical Institute must take the required entrance examination before any decision on acceptance can be made. (See page 9 for complete outline of application procedures).

The exam will be given in the Courter Technical High School Building, 3520 Central Parkway, Cincinnati, Ohio 45223, on the dates listed below.

Applicants are urged to take the exam on the earliest date possible and to submit all other necessary forms since many programs are filled by early spring.

Applicants living outside of the Greater Cincinnati area, who cannot arrange to take the exam in Cincinnati, should write the Director of Student Services as early as possible so special arrangements might be made through the applicant's high school.

ENTRANCE TEST DATES
1970

For applicants planning to enter in the fall of 1970:

Saturday	February 14, 1970	8:30 A.M.
Saturday	April 18, 1970	8:30 A.M.
Friday	June 26, 1970	8:30 A.M.
Friday	August 7, 1970	8:30 A.M.

PROJECTED CALENDAR

		Terms*	
1970-1971	September 8	3B	1A
	November 16	4A	1B
	February 1	4B	2A
	April 12	5A	2B
	June 21	5B	3A
	August 30	Vacation	
1971-1972	September 7	1A	3B
	November 15	1B	4A
	January 31	2A	4B
	April 10	2B	5A
	June 19	3A	5B
	August 28	Vacation	
1972-1973	September 5	3B	1A
	November 13	4A	1B
	January 29	4B	2A
	April 9	5A	2B
	June 18	5B	3A
	August 27	Vacation	

*The numeral refers to the term in the curriculum being offered; the letter refers to the group in school. The group starting the first year in September is Section A; the group starting the first year in November is Section B. The sequence of classes in school is 1A, 1B, 2A, 2B, 3A, 3B, 4A, 4B, 5A, 5B.

ORGANIZATION OF PROGRAM

The academic year, which begins early in September and ends late in August, is divided into five ten-week terms. The two-year program, therefore, consists of ten sessions of ten weeks each, five sessions spent in school and five in cooperative employment on an alternating basis.

As shown in the chart below, two schedules are in operation with half of the students in each program assigned to "A" schedule and half to "B" schedule students fill co-op positions, and vice versa. As the two groups of students alternate between work and school, one group takes a one-week vacation at the end of December; the other takes a one-week vacation at the end of August.

In the chart, sessions are designated by the month in which each begins. The Roman numeral indicates the academic term taken. E means the employment session.

	FIRST YEAR					SECOND YEAR				
Session	Sept	Nov	Feb	Apr	June	Sept	Nov	Feb	Apr	June
Schedule "A"	I	E	II	E	III	E	IV	E	V	E
Schedule "B"	E	I	E	II	E	III	E	IV	E	V

STUDENT SCHEDULES

Classes may be scheduled at any time between 8:30 a.m. and 5:00 p.m. The average daily load will include five to six hours of instruction. Schedules for individual students are compacted to avoid undue delays between class assignments and to avoid long hours on campus unnecessarily.

Full-time students spend from twenty-five to thirty hours per week in classrooms and laboratories plus ten to fifteen hours on outside study and preparation.

Part-time schedules can also be arranged on an individual basis if special circumstances warrant it. For example, an individual who has family responsibilities and must be employed on a continuous, year 'round basis, may arrange a part-time class to fit his working hours. In such cases, a co-op job, as such, is not held by the student.

BUILDING AND FACILITIES

Cincinnati Technical Institute employs modern, sophisticated instructional gear in all programs that require it. Some examples are:

- A full scale computer and data processing complex devoted exclusively to technical education.
- An engineering drawing lab, incorporating the latest type of drafting equipment.
- Automated microfilm storage and recall of engineering drawings.
- Laboratory quality test equipment for engineering tests.
- Electronics testing and instruction facilities.
- Industrial quality composing, process-photography, and printing facilities.
- Modern automotive testing devices.
- The latest audio-visual and programmed instructional aids.

●

The institute shares facilities at 3520 Central Parkway with Courter Technical High School, but the high school program is expected to be phased out of the building by 1974.

Parking, lunchroom, and library facilities are available. A bookstore and adjoining student lounge are used exclusively by institute students.

IMPLICATIONS FOR DRAFT STATUS OF YOUNG MEN

The Cincinnati Technical Institute will report the enrollment status of all male students to their appropriate draft boards. Draft status for individual students can, of course, be determined only by Selective Service authorities in each instance. Full-time students doing satisfactory work in technical schools are generally classified 2A.

VEHICULAR REGULATIONS

Students may park legally on school property in any of the following designated areas:

1. The lower lot that is located off the right side of the front driveway.
2. The right side of the front drive up to the driveway that runs across the front of the building.
3. The right side of the rear driveway that runs behind the stadium.

No student parking is permitted in the following areas:

1. Anywhere in the upper lots.
2. Anywhere on the driveway that runs across the front of the building.
3. Anywhere on the school grounds other than the areas listed in the first paragraph above.

Students parking in violation of the regulations will be ticketed and fined and will face the loss of all parking privileges on school grounds. Repeated violations will lead to suspension.

After school has started and at the time announced by the office, students with above-average records may apply for a limited number of parking stalls available in the reserved areas.

All students who will be driving to school, either on a regular or occasional basis, must register their vehicles and obtain a parking sticker, which must be displayed on the lower-right corner of the front windshield. The registration forms and the stickers will be available in the office.

Any automobile or other motor vehicle without a sticker and/or parked in an unauthorized area may be towed away.

LIVING ACCOMMODATIONS

The Cincinnati Technical Institute has no student housing facilities of its own as it is primarily a "commuter" institution. However, for individuals living too far from the school to commute, reputable, efficiently operated living accommodations are available at reasonable cost. A partial list of those that can be recommended are:

FOR MEN:

The Fenwick Club
435 Commercial Square
Cincinnati, Ohio 45202

The L. B. Harrison Club
2368 Victory Parkway
Cincinnati, Ohio 45202

The Central YMCA
Central Parkway & Elm Street
Cincinnati, Ohio 45202

FOR WOMEN:

Anna Louise Inn
300 Lytle
Cincinnati, Ohio 45202

The Fontbonne Club
425 E. 5th Street
Cincinnati, Ohio 45202

The YWCA
9th & Walnut Streets
Cincinnati, Ohio 45202

All of these facilities are located on public transportation lines.

Further information regarding costs, reservations, etc., can be obtained by contacting the facility.

ADMISSIONS INFORMATION

General Admission Requirements

Applicants must meet the following qualifications:

1. High school graduation or equivalent standing in terms of aptitude and achievement tests.
2. Presentation of satisfactory recommendations.
3. Satisfactory scores on entrance examinations.
4. Physical qualifications to perform acceptably in field of training selected.
5. A personal interview with the coordinator of your selected program and/or an admissions counselor.

Application For Admission

Apply early! Each year some programs are filled by early spring. Applicants for these programs who subsequently score well on the admission examination may be placed on stand-by lists.

To apply, follow these steps carefully:

1. Get the necessary forms from your high school counselor or by writing or calling the Admissions Office. (The address and telephone number are on the first page of the catalog.) You will need an application form and two recommendation forms.
2. Complete the application form and mail or take it to the Admissions Office with the ten dollar application fee. This fee partially covers the cost of administering the entrance test, counseling, and registering the student if he is accepted. It is not refundable.
3. Ask your high school counselor to send a transcript to The Cincinnati Technical Institute; he will have one sent at any time during your senior year. This should be done as soon as you have decided to apply for admission.

4. Ask two adults who have observed your performance at school or at work to complete the recommendation forms and send them to The Cincinnati Technical Institute. If you have never worked, two adults from school will be sufficient.

5. Take the entrance examination on the earliest possible date. No action can be taken on your application until the examination has been taken and scored. The dates on which the examination will be administered are listed on page 3.

6. After you have completed these procedures, wait until you are contacted by the coordinator for your selected area and/or the Admissions Office to arrange a pre-enrollment interview. This will not be done until your records contain the following items:

    - Application (two copies)
    - Two references
    - High School transcript
    - Entrance examination scores

This interview will give you an opportunity to discuss enrollment, school, and cooperative work experience.

Student Deposit

A deposit of at least $30.00, payable when an applicant receives notice of tentative acceptance, will apply toward fees later charged to the full-time day student when he enrolls. Payment of the deposit when due assures the applicant of a place in class and is considered as evidence of good faith that he will register.

The student fee deposit will not be refunded if the applicant is later denied admission through failure (1) to acquire the necessary credits, (2) to be graduated from high school, or (3) to meet the physical and health requirements. It may be refunded if the applicant is called to active military duty.

Credit for the fee deposit may be extended for (1) twelve months when an applicant fails to register due to illness or other causes entirely beyond his control or (2) the period of active duty when an applicant enlists in military service.

Upon registration within the specified time limits, the credit will apply toward fees charged to the same person only when he enrolls as a full-time student in any program.

Application for either refund or credit must be made in writing at the time of the admission cancellation. Proof of any extenuating circumstances may be required. The Director of Finance is authorized to make decisions on these matters in accordance with school regulations.

Advanced Standing

A student desiring advanced standing must submit an official transcript of his college record. Courses paralleling Cincinnati Technical Institute courses in which a student has achieved a grade of 'C' or better will be considered for credit.

ACADEMIC INFORMATION

Grading System

Academic standards are maintained at a high level. The following system is used to evaluate student achievement in each subject:

Grade	Quality	Points
A	Superior	4
B	Good	3
C	Average	2
D	Poor	1
F	Failing	0
Inc.	Incomplete	
Wd.	Withdrawn	

Grade Reports

Grade reports will be mailed to the student's home at the end of each term. Mid-term grades of students who are failing will be reported to the school administration and special attention will be given those students to assist them in improving.

Dismissal

A student will be dismissed if his accumulative point-hour ratio is below any of the following levels:

After one term	1.00
After two terms	1.25
After three terms	1.50
After four terms	1.75
After five terms	1.90

Instruction exists in an adult atmosphere; there are few regulations. In the case of gross or repeated violations of the school's policies, the student will be dismissed.

Make-Up Work

Any student who has missed classwork should be given an opportunity to make it up. Students are reminded that make-up tests, since they must be "tailor-made" and therefore not designed for easy mass scoring, tend to be more difficult than the regular tests.

Incompletes and grades of "F" can be made up by:

1. Repeating the course at The Cincinnati Technical Institute.
2. Repeating the course at another school approved by the coordinator.

Academic Recognition

Students whose quality point averages for an academic term are 3.50 or higher receive special recognition for their superior work by being named to the Dean's List.

Graduation

A student successfully completing the course requirements and having the stipulated cumulative grade point average in any of the programs, is granted an Associate Degree in his area of study. Upon request, a transcript of the student's record will be forwarded to any employer or educational institution. Evaluation of the record is entirely in the hands of the reviewer.

FINANCIAL INFORMATION

Student Expenses

The Ohio Board of Regents provides a student subsidy to The Cincinnati Technical Institute for each Ohio resident enrolled. The amount received from the Regents equals about two-thirds of the Institute's operating costs. The other third must come from tuition payments. Out-of-state residents pay the highest amount of tuition since the Institute receives no Regent's subsidy for their instruction. (See Appendix for complete explanation of residence determination.)

TUITION CHARGES

Full-time Students	Per School Term	1970-1971	1971-1972
Residents of the Cincinnati Technical Institute District	$100.	$125.	$125.
Out-of-district residents who live in Ohio	$125.	$150.	$150.
Out-of-district residents who live outside Ohio	$150.	$200.	$250.

Part-time Students	12-18 Credit Hours	Per Hour 11 Credit Hours or Less
Residents of Cincinnati Technical Institute District	Full Tuition	- $ 7.50
Out-of-district residents who live in Ohio	Full Tuition	- $ 9.00
Out-of-district residents who live outside of Ohio	Full Tuition	- $15.00

Co-op Employment

Two to three credit hours are granted for each term of cooperative work experience. The charge for these credit hours will be based on the amount listed per credit hour for part-time students. This charge must be paid no later than one week before the co-op term begins.

The tuition charges received for the credit hours granted for the Cooperative Employment Experience help to defray the expenses incurred by the school in securing co-op positions and providing services necessary for co-op employment.

Fees

Application	$10.	
Late Registration Fee	$ 5.	
Late Payment Fee	$ 5.	
Identification Badge Fee (for first-year students only)	$ 2.	
General Fee	$10.	per term
Student Services Fee	$ 5.	per term
Graduation Fee	$20.	
Vehicle Registration Fee	$ 1.	

Books and Supplies

The cost of books and supplies can vary greatly from term to term. Also, different programs have different requirements. Students in the engineering technologies, for example, generally will spend more on supplies and equipment than the business oriented programs.

The first school term usually is the most expensive one as students purchase books and equipment at that time that they also use in later terms. The average range of expenses per term is between $35-$50.

Refunds

Fees are not refundable. As a general rule, no tuition is refunded to students who withdraw before the end of the term. Exceptions to tuition charge refunds will be made only in cases where students are compelled to withdraw because of personal illness that is verified by a physician's statement.

Application for refund must be made by the student in writing on the proper form at the time of withdrawal.

The Director of Finance will be the final judge as to the validity of the request for tuition refund.

Tuition refunds, when allowed, shall be made on the following basis:

During the first week of term	80%
Second Week	60%
Third Week	40%
Fourth Week	20%

The Cincinnati Technical Institute reserves the right to revise this statement of tuition and fees at any time.

No degree will be granted or grades released until all financial obligations are cleared.

Most students earn more than enough in cooperative employment to finance their education at the institute. In fact, the majority contribute regularly to the family income.

Students who still require financial assistance in their in-school terms may be able to obtain loans available under the National Vocational Student Loan Insurance Act of 1965. These are low-interest loans made through state-approved commercial lending agencies. A student who borrows money through this act does not have to begin repayment until he has completed his schooling. Further information can be obtained by contacting the school.

A limited number of small scholarships is also available for qualified students with demonstrated financial need.

The Cincinnati Technical Institute is recognized and approved by the Veterans Administration. Veterans who qualify for V.A. education benefits are eligible to receive these benefits when attending Cincinnati Technical Institute.

WORK PLACEMENT

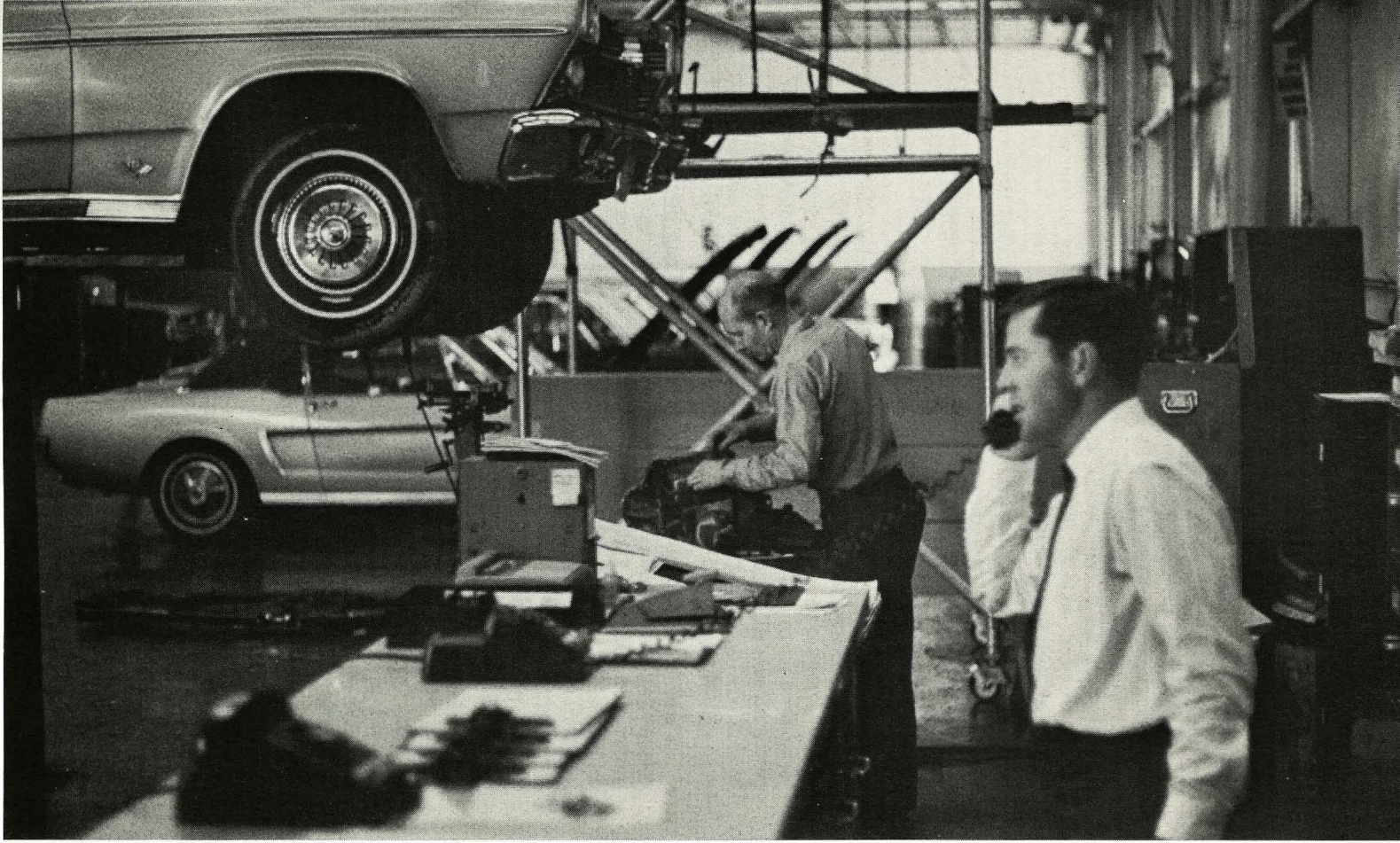
Full-time students at the Cincinnati Technical Institute are selected on the assumption that they will be immediately employable in a beginning job, hopefully related to the technology being studied. While such employment may be only of wage earning value at the very outset, it is expected that the student will merit more challenging job assignments very soon with the same employer, using his newly-acquired technical knowledge.

Every effort will be made to place early enrollees on work-experience jobs during the summer months prior to the opening of the fall term. Students are encouraged to locate employment for themselves within a framework which serves the purposes of technical education.

Students accepting co-op employment which does not serve the intended purpose as determined by the school may be asked to withdraw from the program. A liberal interpretation of this regulation may be exercised during the early stages of enrollment, but all students will be expected to find or accept employment directly related to the technology being studied after the second term in school.

While the Cincinnati Technical Institute has been quite successful in placing students on cooperative work jobs, there can be no ABSOLUTE GUARANTEE. Cooperative employment and continued employment depend on what the individual student can offer to employers. Students who have not demonstrated employability in some form by the end of the second term in school will be advised to discontinue the program.

Violations of the work placement procedures are harmful to the student, to the cooperative employer, to the school, and to the business-industrial community. No student nor any employer should attempt, under any circumstances, to influence the other for steady employment until the student has completed the entire two-year program.



AUTOMOTIVE SERVICE MANAGEMENT TECHNOLOGY

AUTOMOTIVE SERVICE MANAGEMENT TECHNOLOGY

The automobile industry employs more people and generates more income than any other industry in the nation. Increasing numbers of automobiles, generally increased complexity of design, and additional use of complex accessories all increase the number of people employed in automotive service — and increase employment opportunities for those technicians who work at the mid-management level.

Cincinnati Technical Institute students are instructed in theory, procedures, and management techniques in school. As co-ops on the job in automotive service departments, they get practical experience under the direction of experienced service managers.

Graduates of the Automotive Service Management program will work as service managers, assistant service managers, service writers, parts department supervisors, and in other appropriate positions in the automobile industry.

AUTOMOTIVE SERVICE MANAGEMENT CURRICULUM

	Class Hours	Lab Hours	Credit Hours
First School Term			
1001 Communication Skills I	5	-	3
1121 Technical Mathematics I	5	-	4
2501 Automotive Technology I	5	10	8
2506 Machine and Hand Tool Laboratory	3	2	3
			18
First Co-op Term			
2551 Cooperative Employment	-	40	2
			2
Second School Term			
1003 Communication Skills III	5	-	3
1101 Business Mathematics	5	-	4
2221 Physics I	3	2	3
2502 Automotive Technology II	5	10	8
			18
Second Co-op Term			
2552 Cooperative Employment		40	2
			2
Third School Term			
1321 Blueprint Reading and Sketching	2	3	2
1505 General Psychology	3	-	3
1512 Economics I	3	-	3
1823 Business Law	5	-	3
2222 Physics II	3	2	3
2503 Automotive Technology III	4	6	4
			18
Third Co-op Term			
2553 Cooperative Employment		40	3
			3

AUTOMOTIVE SERVICE MANAGEMENT

CURRICULUM

Fourth School Term	Class Hours	Lab Hours	Credit Hours
1004 Technical Writing	3	2	3
1513 Economics II	3	-	3
1531 American Government	3	-	3
2504 Automotive Technology IV	4	6	4
2508 Techniques of Welding	1	4	2
2510 Automotive Management	3	2	3
			18

Fourth Co-op Term			
2554 Cooperative Employment		40	3
			3

Fifth School Term			
1005 Effective Speaking	2	3	3
1504 Industrial Psychology	5	-	4
2505 Automotive Technology IV	7	8	8
2511 Automotive Management II	3	2	3
			18

Fifth Co-op Term			
2555 Cooperative Employment		40	3
			3

AUTOMOTIVE SERVICE MANAGEMENT
ADVISORY COMMITTEE

Carl Tedesco, ... Cincinnati Automobile
Director Dealers Association

Arthur Burnett, ... Burnet Pontiac
Auto Dealer

Robert Behler, ... Behler Oldsmobile
Auto Dealer

Cliff Jacobs, ... Jacobs Plymouth
Auto Dealer

Clifford Metzger, ... General Motors
Buick Zone Service and Parts Manager

James Smith, ... Ford Motor Company
Assistant District Sales Manager

Bruce Markley, ... Lincoln-Mercury
District Manager, Parts and Services

Irwin Sobul, ... Leaseway Corporation
Vice President (Cincinnati Division)

AUTOMOTIVE SERVICE MANAGEMENT

COURSE DESCRIPTIONS

1001 COMMUNICATION SKILLS I

5 Clock Hours — 3 Credit Hours

Syntax, paragraph development, mechanics, usage, spelling and vocabulary. Analysis of each student's strengths and weaknesses.

1003 COMMUNICATION SKILLS III

5 Clock Hours — 3 Credit Hours

Continuation of Communication Skills I, stressing expository writing.

1004 TECHNICAL WRITING

5 Clock Hours — 3 Credit Hours

Informal and formal written reports. Techniques for collecting and presenting data, particularly as they apply to industry. Some work with business letters.

1005 EFFECTIVE SPEAKING

5 Clock Hours — 3 Credit Hours

Organization, development, and presentation of general speeches with emphasis on the oral report as a form of business communication.

1101 BUSINESS MATHEMATICS I

5 Clock Hours — 4 Credit Hours

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.

1121 TECHNICAL MATHEMATICS I

5 Clock Hours — 4 Credit Hours

Selected applications of principles and concepts essential for the automotive technician. Stressing accuracy in reading and interpreting units of measurements for efficient understanding of graphs, algebraic formulae, ratios and proportions.

1321 BASIC BLUEPRINT READING AND SKETCHING

5 Clock Hours — 2 Credit Hours

Provides a working knowledge of blueprint reading and shop sketching with special application for automotive techniques. Technical terminology is defined and applied in logical sequence for each new principle.

1504 INDUSTRIAL PSYCHOLOGY

5 Clock Hours — 4 Credit Hours

Behavior in business and industry. Behavior of workers, management, and consumers. Direct application of psychological principles to assist with inter-personal problems. Techniques include role playing and case studies.

1505 GENERAL PSYCHOLOGY

3 Clock Hours — 3 Credit Hours

A scientific study of human behavior with emphasis on motivation, learning, individual differences, and personality.

1512 ECONOMICS I

3 Clock Hours — 3 Credit Hours

An introductory study of the analysis and application of basic economic theory as applied to the problems of labor and industrial relations. Income and spending of the aggregate of individuals, business firms, and various levels of government. Money, commercial and central banking. Price levels and inflation. The role of the national government in fiscal and monetary policy in a private enterprise economy. Current economic issues introduced and analyzed.

1513 ECONOMICS II

3 Clock Hours — 3 Credit Hours

An introductory study of the pricing and allocation mechanism of the classical market economy using the theory and analysis of supply and demand on an individual basis in the determining of the nature of production consumption, and distribution of the national output. International trade, the balance of payments, economic growth and development and comparative economic systems.

1531 AMERICAN GOVERNMENT

3 Clock Hours — 3 Credit Hours

A survey of the fundamental structure and operations of federal, state and local governments.

1823 BUSINESS LAW

5 Clock Hours — 3 Credit Hours

Treatment of fundamental principles of business law, including contracts, negotiable instruments, and agencies.

2221 PHYSICS I

5 Clock Hours — 3 Credit Hours

Fundamental principles of mechanics, treated with emphasis on the kinematics and dynamics of machines and fluids with special application to the motor vehicle.

2222 PHYSICS II

5 Clock Hours — 3 Credit Hours

Fundamental principles of heat and electricity treated with emphasis on heat engines, electron theory, circuits and instruments with special application to the motor vehicle.

2501 AUTOMOTIVE TECHNOLOGY I

15 Clock Hours — 8 Credit Hours

Principles of the internal combustion engine. Repair and rebuilding modern automotive engines, including valves, rings, bearings, cooling and lubricating systems. Emphasis on the proper use of hand tools and special equipment.

2502 AUTOMOTIVE TECHNOLOGY II

15 Clock Hours — 8 Credit Hours

Principles of carburetion: cleaning, rebuilding and adjusting representative types of carburetors and other fuel components. Fundamentals of auto electrics; construction, operation and repair of the electrical system, including batteries, ignition, starting, generating and accessory circuits.

2503 AUTOMOTIVE TECHNOLOGY III

10 Clock Hours — 4 Credit Hours

Fundamentals and repair of the automobile chassis; includes suspension, braking system, steering and ventilation systems. Emphasis on the use of special equipment used to measure, repair and adjust these units.

2504 AUTOMOTIVE TECHNOLOGY IV

10 Clock Hours — 4 Credit Hours

A study of the design, construction, operation and servicing of automotive drive line components. These components include clutches, transmissions, rear axles and differentials.

2505 AUTOMOTIVE TECHNOLOGY V

10 Clock Hours — 4 Credit Hours

Automotive service and trouble-shooting. Procedures and techniques for diagnosing and repairing electrical, engine and carburetion problems. The latest types of automotive testing equipment are studied together with standard repair procedures as practiced in the modern automotive shop. Work will be performed on live equipment.

2506 MACHINE AND HAND TOOL LAB I

5 Clock Hours — 3 Credit Hours

Principles and processes which underlie the use of hand tools, cutting tools, portable equipment and accessories, measuring devices and gauges. Emphasis placed on developing sound trade judgment, safe work habits, and correct work procedures.

2508 TECHNIQUES OF WELDING

5 Clock Hours — 2 Credit Hours

Fundamental understanding and skill in the use of oxyacetylene arc welding and cutting equipment is developed. Such typical operations as butt, lap, and fillet welds and the making of a bead are performed.

2510 AUTOMOTIVE MANAGEMENT I

5 Clock Hours — 3 Credit Hours

Organization, design, layout, administration and operation of an automobile dealership, trucking company or automotive leasing operation. Recruiting, hiring and retaining personnel.

2511 AUTOMOTIVE MANAGEMENT II

5 Clock Hours — 3 Credit Hours

A continuation of Automotive Management I. Engineering traffic flow, building parts and accessory sales, customer relations, measuring local parts and accessory market. Service selling and automotive warranties.

2551 COOPERATIVE EMPLOYMENT PROGRAM
2552
2553
2554
2555

2-3 Credit Hours Each Term

On an alternating term basis, the student is placed on a full-time (32-40 hours) job that relates to his class work. This affords the student the opportunity to make practical application of the knowledge and skills acquired in his class work.

With each succeeding cooperative term, the student is able to assume more responsibility and perform higher level duties on the job because of what he has learned from the previous term (s) of employment and the added knowledge and skills acquired in each school term.

DATA PROCESSING TECHNOLOGY

BUSINESS DATA PROCESSING TECHNOLOGY

Occupations in the data processing and computer technology field are numerous, challenging and changing. The use of the electronic computer has yet to reach its potential not only in the business office but in all of industry as well.

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

Normally a programmer does the preliminary analysis and planning. Once the general plans have been completed, the programmer is ready to start the job of writing the "program," or detailed instructions for processing data on the computer. Exactly how he does this depends on the kind of computer used and the nature of the application being programmed.

The programmer usually starts his task by conferring with professional staff members who are in a position to furnish him with detailed information about the subject matter of the problem. This done, he makes a flow chart, or diagram, showing the order in which the computer must perform each operation; for each operation he prepares detailed instructions, or "routines." These routines, once they have been transferred to the computer's memory, tell the machine exactly what to do with all the data associated with the problem.

A comparatively simple problem can be programmed for a computer within a few hours. A program which deals with a complex problem or is designed to produce many different kinds of information may require thousands of routines and many months of preparation.

The aim of the Business Data Processing program is to prepare students to become proficient programmers and to provide them with a background for possible advancement to positions in systems analysis.

BUSINESS DATA PROCESSING
CURRICULUM

	Class Hours	Lab Hours	Credit Hours
First School Term			
1001 Communication Skills I	5	-	3
1131 Mathematics for Business Data Processing	5	-	4
1511 Principles of Economics	5	-	4
1701 Introduction to Data Processing	5	5	4
2911 Accounting I	3	2	3
			18
First Co-op Term			
1751 Cooperative Employment	-	40	2
			2
Second School Term			
1002 Communication Skills II	5	-	3
1132 Mathematics for Business Data Processing II	5	-	4
1502 Principles of Psychology	5	-	4
1703 Basic Computer Concepts	3	7	4
2912 Accounting II	3	2	3
			18
Second Co-op Term			
1752 Cooperative Employment	-	40	2
			2
Third School Term			
1007 Expository Writing	5	-	3
1133 Mathematics for Business Data Processing	5	-	4
1704 Computer Programming and Operations	7	8	8
1999 Computer Electronics	3	2	3
			18
Third Co-op Term			
1753 Cooperative Employment	-	40	3
			3

BUSINESS DATA PROCESSING

CURRICULUM

	Class Hours	Lab Hours	Credit Hours
Fourth School Term			
1004 Technical Writing	5	-	3
1705 Computer Programming and Systems Analysis	12	8	12
1823 Business Law	5	-	3
			18
Fourth Co-op Term			
1754 Cooperative Employment	-	40	3
			3
Fifth School Term			
1005 Effective Speaking	5	-	3
1706 Computer Programming and Research	5	-	4
1707 Installation Management	5	-	3
1708 Case Study Laboratory	5	10	8
			18
Fifth Co-op Term			
1755 Cooperative Employment	-	40	3
			3

BUSINESS DATA PROCESSING
ADVISORY COMMITTEE

Andrew Atkinson, ... City of Cincinnati
Superintendent of Data Processing

Robert Bridges, ... Billboard Publishing Company
Manager of Systems and Information Services

Clifford Carte, ... Cincinnati Gas and
Manager, Data Processing Electric Company

O. V. Herried, ... Fireman's Fund
Office Manager American Insurance
Companies

Donald R. Lancaster, ... Central Trust Bank
Vice President of Data Processing Center

Lowell Mason, ... R. K. LeBlond
Supervisor, Data Processing Machine Company

William McDonald, ... General Electric Company
Manager, Evendale Computer Center

Paul Nerone, ... Western Southern
Staff Assistant Life Insurance Company

Lee Ransick, ... Ohio National Life
Director of Data Insurance Company
Processing Operations

Edward Wess, ... MacGregor-Brunswick
Division Manager,
Management Information Services

BUSINESS DATA PROCESSING

COURSE DESCRIPTIONS

1001 COMMUNICATION SKILLS I

5 Clock Hours — 3 Credit Hours

Syntax, paragraph development, mechanics, usage, spelling and vocabulary. Analysis of each student's strengths and weaknesses.

1002 COMMUNICATION SKILLS II

5 Clock Hours — 3 Credit Hours

A continuation of Communication Skills I, stressing reading improvement - both rate and comprehension.

1004 TECHNICAL WRITING

5 Clock Hours — 3 Credit Hours

Informal and formal written reports. Techniques for collecting and presenting data, particularly as they apply to industry. Some work with business letters.

1005 EFFECTIVE SPEAKING

5 Clock Hours — 3 Credit Hours

Organization, development, and presentation of general speeches with emphasis on the oral report as a form of business and/or industrial communication.

1007 EXPOSITORY WRITING

5 Clock Hours — 3 Credit Hours

Organization and development of expository compositions, stressing logical and fallacious reasoning.

1131 MATHEMATICS FOR BUSINESS DATA PROCESSING

5 Clock Hours — 4 Credit Hours

Number system; algebraic equations, linear equations, negative numbers, negative exponents. Arithmetic of computers; octal, binary and decimal systems. Introduction to set and group theory.

1132 MATHEMATICS FOR DATA PROCESSING II
(Statistics)

5 Clock Hours — 4 Credit Hours

Practical business application of statistics to business problems. Students develop the ability to construct, use, and interpret tables, charts, frequency distributions; determine measures of central tendency and dispersion. The course acquaints the student with the theory and applications of probability and stresses the importance of statistics in decision making.

1133 MATHEMATICS FOR DATA PROCESSING III

5 Clock Hours — 4 Credit Hours

The types of logic a computer uses in operation. Linear programming and additional number systems. Traditional logic and uses in computer operation. The memory and circuitry of the machine. Boolean algebra of propositions with application to switching circuits.

1502 PRINCIPLES OF PSYCHOLOGY

5 Clock Hours — 4 Credit Hours

A survey course designed to develop an understanding of basic principles underlying human behavior. Special emphasis is placed on motivation, perception, learning, intelligence, personality, and social interaction.

1511 PRINCIPLES OF ECONOMICS

5 Clock Hours — 4 Credit Hours

Basic economics with attention given to central problems of price, competition and money; supply and demand; business organizations; firm and family income, labor and industrial relations; government and the economy; gross national product; relationship of income to expenditures; business cycles.

1701 INTRODUCTION TO DATA PROCESSING

10 Clock Hours — 4 Credit Hours

An overview of the entire field of data processing. Instruction in the theory of punched card equipment, with laboratory exercises involving panel wiring and operations of the following machines: card punch, sorter, interpreter, reproducing punch, collator, calculating and accounting machines. Practical exercises will be typical of those performed in existing installations.

1703 BASIC COMPUTER CONCEPTS

10 Clock Hours — 4 Credit Hours

Operation of the Honeywell-200 computer on premises, function and use of central processor and peripheral devices. Introduction to programming—flow charting, decision tables, parameter cards, writing and testing the Honeywell Assembler Language.

1704 COMPUTER PROGRAMMING AND OPERATIONS

15 Clock Hours — 8 Credit Hours

Further study of assembler language. Introduction to Cobol programming, writing, testing, debugging and documenting.

1705 COMPUTER PROGRAMMING AND SYSTEMS ANALYSIS

20 Clock Hours — 12 Credit Hours

Planning, flow charting, layout forms, encoding, testing and running Cobol programs with emphasis on practical business applications. Use of utility software.

1706 COMPUTER PROGRAMMING AND RESEARCH

5 Clock Hours — 4 Credit Hours

Introduction to Fortran programming, writing and testing programs. Use of Fortran in research and statistical computations.

1707 INSTALLATION MANAGEMENT

5 Clock Hours — 3 Credit Hours

Personnel policies, office management, and data processing as it relates to general management problems. Scheduling work for unit record and computer equipment.

1708 CASE STUDY LABORATORY

15 Clock Hours — 8 Credit Hours

The student is required to design a complete system for a small business. He must select the type of data to be used, design data flow patterns, design input and output formats, flow chart the system, program in Cobol, generate test data and demonstrate the operation of the system.

1751 COOPERATIVE EMPLOYMENT PROGRAM
1752
1753 2-3 Credit Hours Each Term
1754
1755 On an alternating term basis, the student is placed on a full-time (32-40 hours) job that relates to his class work. This affords the student the opportunity to make practical application of the knowledge and skills acquired in his class work.

With each succeeding cooperative term, the student is able to assume more responsibility and perform higher level duties on the job because of what he has learned from the previous term(s) of employment and the added knowledge and skills acquired in each school term.

1823 BUSINESS LAW

5 Clock Hours — 3 Credit Hours

Treatment of fundamental principles of business law, including contracts, negotiable instruments, and agencies.

1999 COMPUTER ELECTRONICS

5 Clock Hours — 3 Credit Hours

Survey of electronic principles as they apply to the operation of computers.

2911 PRINCIPLES OF ACCOUNTING I

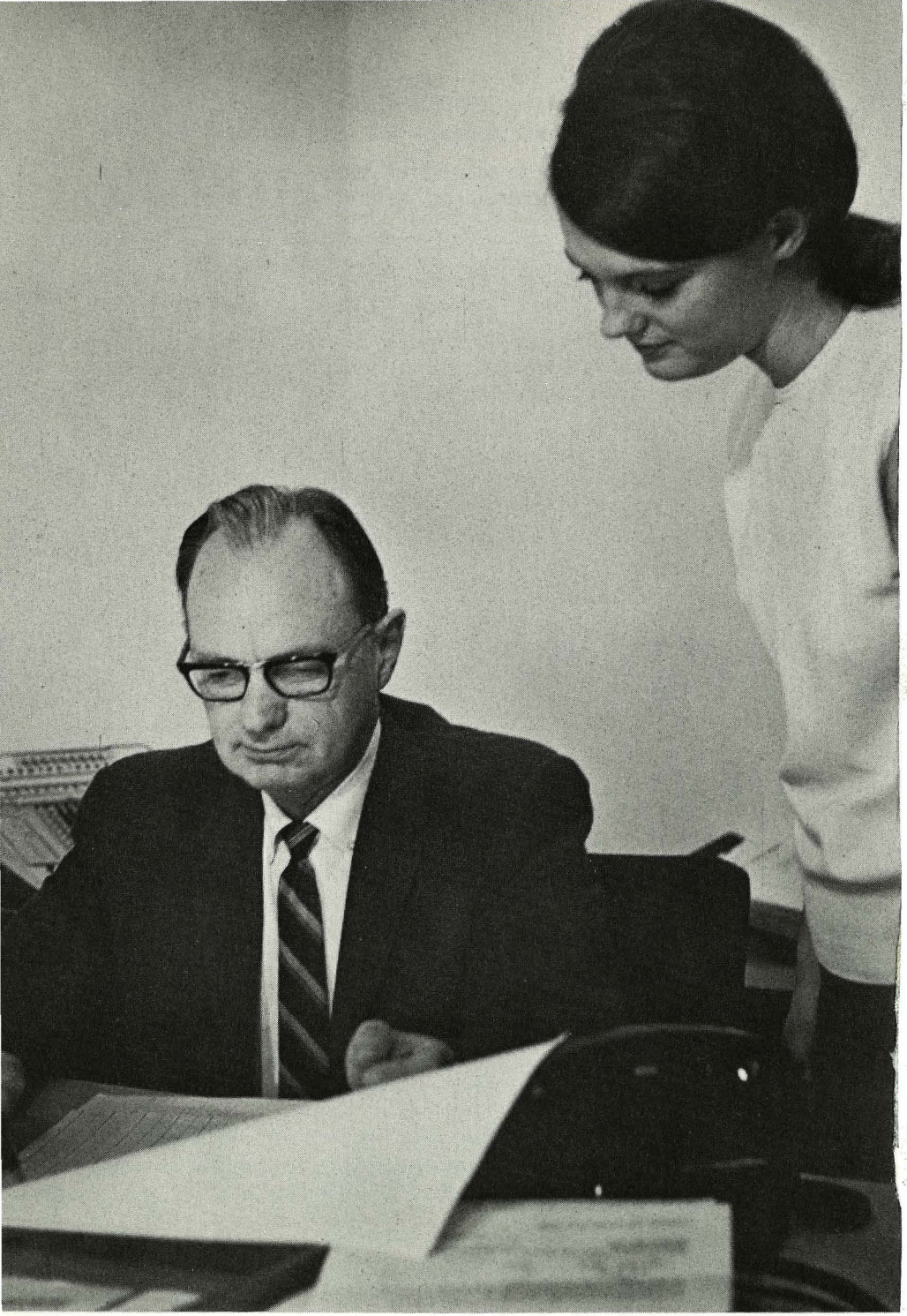
5 Clock Hours — 3 Credit Hours

Principles and practices of basic accounting with practical application as related to other fields of business.

2912 PRINCIPLES OF ACCOUNTING II

5 Clock Hours — 3 Credit Hours

A continuation of Principles of Accounting I. Permits the student to solve accounting problems in supervised accounting labs.



BUSINESS MANAGEMENT TECHNOLOGY

BUSINESS MANAGEMENT

Modern business management requires mature judgment, mastery of management techniques, and a knowledge of modern technology. The Cincinnati Technical Institute Business Management program, offered by a school experienced in technical education, fills the need for mid-management personnel with the technical knowledge so valuable to industry.

Business Management students meet with instructors experienced in management—in an adult atmosphere of mutual respect. In school, they learn the skills and acquire the knowledge necessary for mid-management positions. The latest communication techniques (visual presentation of management concepts, case studies, systems development, field trips, guest experts, for example) are employed.

While engaged in their cooperative work experience, Business Management students participate in management training programs in many of Cincinnati's leading firms.

Upon graduation, the Business Management student will be prepared to assume mid-management responsibilities in banking, insurance, and a number of other important industries.

BUSINESS MANAGEMENT

CURRICULUM

	Class Hours	Lab Hours	Credit Hours
First School Term			
1001 Communication Skills I	3	2	3
1101 Business Mathematics I	5	-	4
1511 Principles of Economics	5	-	4
2901 Principles of Marketing	5	-	2
2911 Principles of Accounting	3	2	3
2921 Introduction to Business	5	-	2
			18
First Co-op Term			
2951 Cooperative Employment	-	40	2
			2
Second School Term			
1002 Communication Skills II	3	2	3
1102 Business Mathematics II	5	-	4
1804 General and Multiple Line Insurance	3	2	3
2902 Principles of Marketing II	5	-	2
2912 Principles of Accounting II	3	2	3
2922 Introduction to Business II	5	-	2
			17
Second Co-op Term			
2952 Cooperative Employment	-	40	2
			2
Third School Term			
1007 Expository Writing	3	2	3
1799 Survey of Data Processing	5	-	4
1805 General and Multiple Line Insurance	4	1	3
2903 Principles of Marketing III	5	-	2
2913 Intermediate Accounting	2	3	3
1810 Principles of Salesmanship	3	2	3
			18
Third Co-op Term			
2953 Cooperative Employment	-	40	3
			3

BUSINESS MANAGEMENT

CURRICULUM

Fourth School Term	Class Hours	Lab Hours	Credit Hours
1006 Technical Writing	3	2	3
1520 Introduction to Sociology	5	-	4
1823 Business Law I	5	-	3
2904 Sales Management	3	2	3
2914 Cost and Management Accounting	3	2	3
2924 Organization of Management	5	-	2
			18

Fourth Co-op Term			
2954 Cooperative Employment	-	40	3
			3

Fifth School Term			
1005 Effective Speaking	3	2	3
1502 Principles of Psychology	5	-	4
1824 Business Law II	5	-	3
2905 Money and Banking	5	-	3
2915 Tax Accounting	3	2	3
2925 Organization of Management II	5	-	2
			18

Fifth Co-op Term			
2955 Cooperative Employment	-	40	3
			3

BUSINESS MANAGEMENT

ADVISORY COMMITTEE

Harold Elliott, ... Central Trust Bank
Assistant Personnel Director

G. James Haan, ... Union Central Life
Personnel Relations Insurance Company

Norman Hartleb, ... Eagle-Picher Industries
Billing Manager for Chemical
and Metal Division

Don Heisel, ... University of Cincinnati
Department Head of Institute of
Government Research

Orlan V. Herried, ... American Insurance Company
Office Manager

George Keller, ... Cincinnati Insurance Board
Executive Secretary

Larry Otto, ... Provident Bank
2nd Vice President and Personnel Manager

Burnett Reed, ... Cincinnati Industrial Institute
Executive Manager

BUSINESS MANAGEMENT

COURSE DESCRIPTIONS

1001 COMMUNICATION SKILLS I

5 Clock Hours — 3 Credit Hours

Syntax, paragraph development, mechanics, usage, spelling and vocabulary. Analysis of each student's strengths and weaknesses.

1002 COMMUNICATION SKILLS II

5 Clock Hours — 3 Credit Hours

A continuation of Communication Skills I, stressing reading improvement, both rate and comprehension.

1005 EFFECTIVE WRITING

5 Clock Hours — 3 Credit Hours

Organization, development, and presentation of general speeches with emphasis on the oral report as a form of business communication.

1006 TECHNICAL WRITING

5 Clock Hours — 3 Credit Hours

Business letters with emphasis on various types according to their purposes. Some work with informal and formal reports.

1007 EXPOSITORY WRITING

5 Clock Hours — 3 Credit Hours

Organization and development of expository compositions, stressing logical and fallacious reasoning.

1101 BUSINESS MATHEMATICS I

5 Clock Hours — 4 Credit Hours

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.

1102 BUSINESS MATHEMATICS II

5 Clock Hours — 4 Credit Hours

Application of mathematics to trade discounts, markons, commissions, installment charges, freight expenses, corporate earnings, stocks and bonds, insurance, taxes, loans, and data processing systems of billing and inventory.

1502 PRINCIPLES OF PSYCHOLOGY

5 Clock Hours — 4 Credit Hours

A survey course designed to develop an understanding of basic principles underlying human behavior. Special emphasis is placed on motivation, perception, learning, intelligence, personality, and social interaction.

1511 PRINCIPLES OF ECONOMICS

5 Clock Hours — 4 Credit Hours

Basic economics with attention to central problems of price, competition and money; supply and demand; business organizations; firm and family income; labor and industrial relations; government and the economy; gross national product; relationship of income to expenditures; business cycles.

1520 INTRODUCTION TO SOCIOLOGY

5 Clock Hours — 4 Credit Hours

A study of fundamental sociological concepts involving socialization, culture, social deviation, social institution, race and ethic relations and social problems and policy.

1799 SURVEY OF DATA PROCESSING

5 Clock Hours — 4 Credit Hours

Terminology and basic concepts of automation. History of punched card data processing, the development of computer systems, the manual methods and the stored program are introduced.

1804 PRINCIPLES OF GENERAL AND MULTIPLE LINE INSURANCE I

5 Clock Hours — 3 Credit Hours

A study of the principles and practices of insurance including the economic, social and historical background. The need and uses of insurance.

1805 PRINCIPLES OF GENERAL AND MULTIPLE LINE INSURANCE II

5 Clock Hours — 3 Credit Hours

A continuation of Insurance I, including legal principles, the insurance contract, insurers, underwriters and re-insurance.

1810 PRINCIPLES OF SALESMANSHIP

5 Clock Hours — 3 Credit Hours

Analysis of the general principles and techniques of effective selling. Principles and problems that include background information a salesman needs, and analysis of the selling process.

1823 BUSINESS LAW I

5 Clock Hours — 3 Credit Hours

Treatment of fundamental principles of business law, including contracts, negotiable instruments, and agencies.

1824 BUSINESS LAW II

5 Clock Hours — 3 Credit Hours

A continuation of Business Law I, with a treatment of government regulations, trust and insurance.

2901 PRINCIPLES OF MARKETING I

5 Clock Hours — 2 Credit Hours

Details the principles and functions of marketing. The essential concepts of competition, demand, and the structure of distribution. The roles of marketing management and the marketing executive are emphasized.

2902 PRINCIPLES OF MARKETING II

5 Clock Hours — 2 Credit Hours

The analysis, interpretation, application, and forecasting of research findings in marketing management. The case study method is used in relating these techniques to actual marketing problems.

2903 PRINCIPLES OF MARKETING III

5 Clock Hours — 2 Credit Hours

Factors which influence the determination of price, such as cost, demand, or legislation. The control of marketing programs. An evaluation of marketing costs.

2904 SALES MANAGEMENT

5 Clock Hours — 3 Credit Hours

The general management concept, including planning, organizing, actuating, controlling, and coordinating the activities of others to achieve established objectives and goals.

2905 MONEY AND BANKING

5 Clock Hours — 3 Credit Hours

The processes of modern banking, including capital, deposits, loans, investments, and reserves. Credit expansion and contraction. The operation of the Federal Reserve System.

2911 PRINCIPLES OF ACCOUNTING I

5 Clock Hours — 3 Credit Hours

Principles and practices of basic accounting with practical application as related to other fields of business.

2912 PRINCIPLES OF ACCOUNTING II

5 Clock Hours — 3 Credit Hours

A continuation of Principles of Accounting I. Permits the student to solve accounting problems in supervised accounting lab.

2913 INTERMEDIATE ACCOUNTING

5 Clock Hours — 3 Credit Hours

The nature and formation of corporations and their methods of financing. Accounting for department and branch divisions of the parent corporation, including branch operation financial statements — separately and combined with statements of the home office.

2914 COST AND MANAGERIAL ACCOUNTING

5 Clock Hours — 3 Credit Hours

The cost of manufacturing and processing including raw materials, goods in process, and finished products. The analysis of accounting data by management.

2915 TAX ACCOUNTING

5 Clock Hours — 3 Credit Hours

Nature of income taxes and their relationship to accounting. Gross income and filing requirements for individuals and corporations.

2921 INTRODUCTION TO BUSINESS I

5 Clock Hours — 2 Credit Hours

A broad concept of business and the development of an awareness of the economic framework which constitutes our capitalistic system.

2922 INTRODUCTION TO BUSINESS II

5 Clock Hours — 2 Credit Hours

Personnel functions, methods of finance, controls for decision making, and the legal and regulatory environment of business.

2924 ORGANIZATION OF MANAGEMENT I

5 Clock Hours — 2 Credit Hours

Formal and informal organizational structures including line and staff relationships indicating authority and responsibility.

2925 ORGANIZATION OF MANAGEMENT II

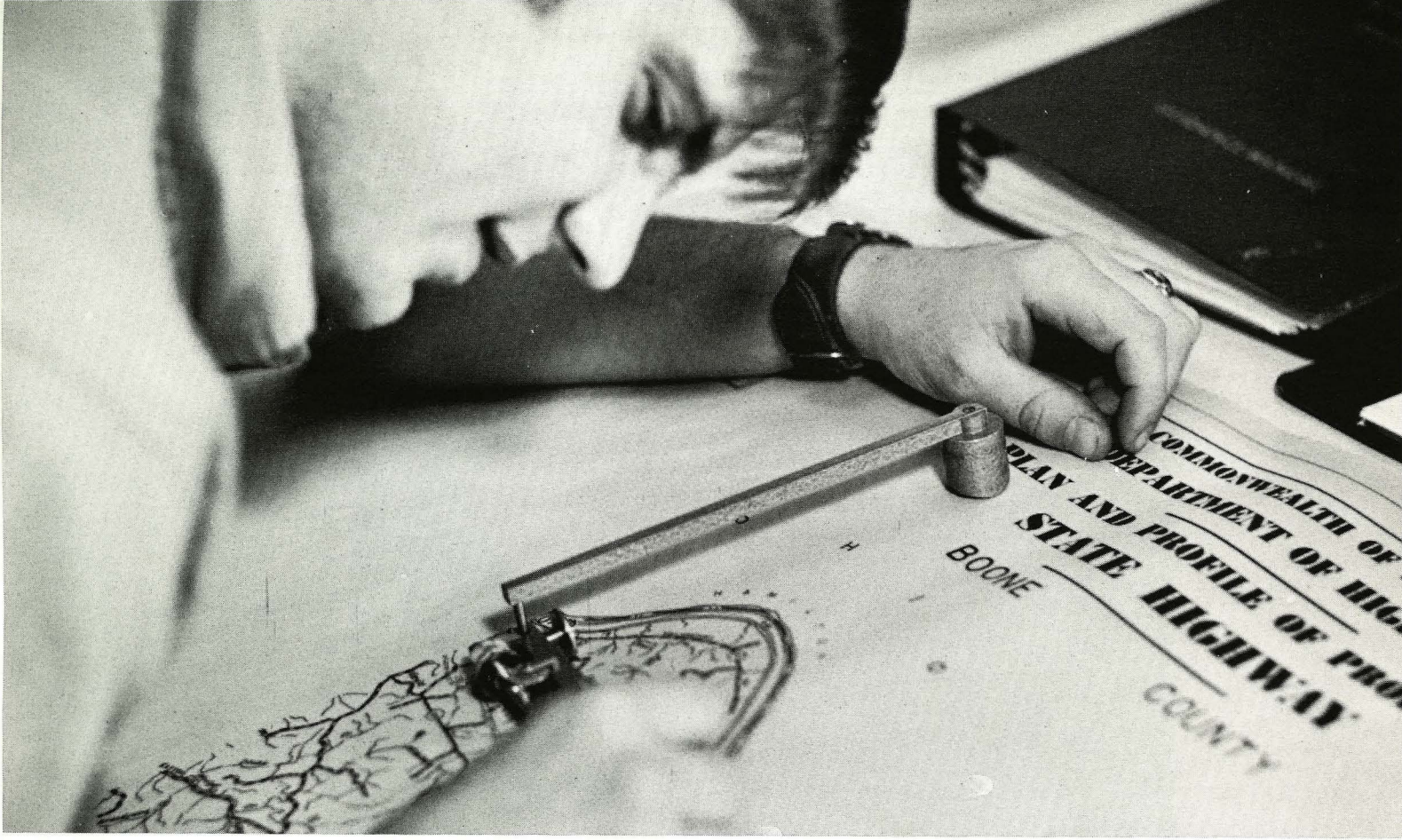
5 Clock Hours — 2 Credit Hours

The psychological areas of management with a study of procuring, processing, appraising and compensating executives.

2951 COOPERATIVE EMPLOYMENT PROGRAM
2952
2953 2-3 Credit Hours Each Term
2954 On an alternating term basis, the student is placed
2955 on a full-time (32-40 hours) job that relates to his class work. This affords the student the opportunity to make practical application of the knowledge and skills acquired in his class work.

With each succeeding cooperative term, the student is able to assume more responsibility and perform higher level duties on the job because of what he has learned from the previous term(s) of employment and the added knowledge and skills acquired in each school term.

Graphic Communications students examine poster fresh off press.



CIVIL ENGINEERING TECHNOLOGY

CIVIL ENGINEERING TECHNOLOGY

The increasing complexity of modern structural designs requires well-trained technicians capable of handling construction problems. Civil engineers are in critical need of technicians who are able to prepare and verify construction specifications with a minimum of supervision.

Cincinnati Technical Institute Civil Engineering Technology students make soil, concrete, water pollution, soil mineralogy, and percolation tests. Surveying duties include such activities as marking off building sites, making plot plans, drafting proposed highways, making route surveys, and drafting topographic maps.

The curriculum is designed to give the student a technical knowledge necessary for effective craftsmanship and scientific management skills. Regular classroom instruction is supplemented by laboratory experiments and site training.

The civil engineering technicians will, in most cases, be working with the top men in the field. Others may become part of a highly skilled team, whose joint effort is necessary to cope with today's increasingly complex equipment and construction.

Civil Engineering Technology offers an excellent opportunity for continued advancement to the individual seeking personal growth and development.

CIVIL ENGINEERING TECHNOLOGY
CURRICULUM

■ First School Term	Class Hours	Lab Hours	Credit Hours
1001 Communication Skills I	5	-	3
1141 Technical Mathematics I	5	-	4
1341 Engineering Graphics I	3	7	4
2241 Physics I	3	2	3
3101 Surveying I	2	6	4
			18

■ First Co-op Term			
3151 Cooperative Employment	-	40	2
			2

■ Second School Term			
1003 Communication Skills III	5	-	3
1142 Technical Mathematics II	5	-	4
1342 Engineering Graphics II	3	7	4
2242 Physics II	3	2	3
3111 Highway Construction	2	3	3
			17

■ Second Co-op Term			
3152 Cooperative Employment	-	40	2
			2

■ Third School Term			
1004 Technical Writing	5	-	3
1145 Mathematics for Advanced Graphics	3	-	2
1343 Engineering Graphics III	3	2	2
2243 Physics III	3	2	3
3102 Surveying II	2	3	3
3112 Soil and Material Testing	3	2	3
3114 Municipal Engineering	3	-	2
			18

■ Third Co-op Term			
3153 Cooperative Employment	-	40	3
			3

CIVIL ENGINEERING TECHNOLOGY CURRICULUM

■ Fourth School Term	Class Hours	Lab Hours	Credit Hours
1143 Technical Mathematics III	5	-	4
1501 Human Relations	5	-	4
1541 Logic	5	-	4
3113 Strength of Materials	3	2	3
3129 Office Practice and Legal Procedures	5	-	3
			18

■ Fourth Co-op Term			
3154 Cooperative Employment	-	40	3
			3

■ Fifth School Term			
1005 Effective Speaking	5	-	3
1344 Engineering Graphics IV	1	4	2
1511 Principles of Economics	5	-	4
3103 Surveying III	1	6	3
3115 Construction Management & Estimating	4	1	3
3117 Fluid Mechanics	3	2	3
			18

■ Fifth Co-op Term			
3155 Cooperative Employment	-	40	3
			3

CIVIL ENGINEERING TECHNOLOGY

ADVISORY COMMITTEE

Francis Cornelius, ... City Engineering Department
Principal Public Works
Construction Engineer

Roy Federle, ... Building Trade Council
Supervisor, Apprentice Training

Ed Harding, Jr. . . . . Allied Contractors
Assistant Manager

Charles Johnson, ... Cincinnati Public Schools
Director of Maintenance

Kent Rollins, ... County Engineering Department
Hamilton County Engineer

CIVIL ENGINEERING TECHNOLOGY

COURSE DESCRIPTIONS

1001 COMMUNICATION SKILLS I

5 Clock Hours — 3 Credit Hours

Syntax, paragraph development, mechanics, usage, spelling and vocabulary. Analysis of each student's strengths and weaknesses.

1003 COMMUNICATION SKILLS III

5 Clock Hours — 3 Credit Hours

Continuation of Communication Skills I, stressing expository writing.

1004 TECHNICAL WRITING

5 Clock Hours — 3 Credit Hours

Informal and formal written reports. Techniques for collecting and presenting data, particularly as they apply to industry. Some work with business letters.

1005 EFFECTIVE SPEAKING

5 Clock Hours — 3 Credit Hours

Organization, development, and presentation of general speeches with emphasis on the oral report as a form of business communication.

1141 TECHNICAL MATHEMATICS I

5 Clock Hours — 4 Credit Hours

Review and extension of high school mathematics. Designed to bridge the gap between a weak mathematical foundation and the knowledge needed for the study of math for technical courses. To include—functional notations, systems of linear equations, quadratic, exponents and logarithms, etc.

1142 TECHNICAL MATHEMATICS II

5 Clock Hours — 4 Credit Hours

Plane trigonometry. Angles and trigonometric ratios, equations and approximations. Trigonometry applied to mensuration.

1143 TECHNICAL MATHEMATICS III

5 Clock Hours — 4 Credit Hours

Continuation of Technical Math II. Combination of college algebra and trigonometry. Emphasis on translation of engineering problems into mathematical terms. Trigonometric and algebraic background necessary in analytic geometry. Sectors and complex numbers. Binominal theorem.

1145 MATHEMATICS FOR ADVANCED GRAPHICS

3 Clock Hours — 2 Credit Hours

A course in descriptive and projected geometry, with special emphasis on applications to advanced engineering graphics.

1341 ENGINEERING GRAPHICS I

10 Clock Hours — 4 Credit Hours

Basic drawing techniques required for high quality drafting.

1342 ENGINEERING GRAPHICS II

10 Clock Hours — 4 Credit Hours

Precision drafting also sectional and auxiliary views.

1343 ENGINEERING GRAPHICS III

5 Clock Hours — 2 Credit Hours

Map making and land descriptions.

1344 ENGINEERING GRAPHICS IV

5 Clock Hours — 2 Credit Hours

Architectural and structual drafting.

1501 HUMAN RELATIONS

5 Clock Hours — 4 Credit Hours

Principles of human behavior. Problems of the individual studied in relation to society, group membership, and relationships within the work situation. Development of effective motivation, communication, attitudes, supervision and leadership.

1511 PRINCIPLES OF ECONOMICS

5 Clock Hours — 4 Credit Hours

Basic economics with attention to central problems of price, competition and money; supply and demand; business organizations; firm and family income, labor and industrial relations; government and the economy; gross national product; relationship of income to expenditures; business cycles.

1541 LOGIC

5 Clock Hours — 4 Credit Hours

Sequential reasoning applied to problem solving and planning for the future.

2241 PHYSICS I

5 Clock Hours — 3 Credit Hours

Measurement techniques; functions and scaling. Kinematics; vectors; motion near the earth; forces; laws of force and motion. Friction as a force; moments of forces. Equilibrium; work; energy; power. Conservation of energy and momentum. Uniform circular motion. Rotational kinematics; simple harmonic motion.

2242 PHYSICS II

5 Clock Hours — 3 Credit Hours

Properties of waves; wave equations. Resonance; sound waves and energy. Electro-magnetic waves. Reflection, refraction and diffraction of waves. Spectroscopy; sources of electro-magnetic waves. Structure of matter; molecular energy; expansion and temperature scales. Heat transfer; specific heat; and change of state. Ideal gases; heat energy measurement. Energy conversion; laws of thermodynamics. Heat engines.

2243 PHYSICS III

5 Clock Hours — 3 Credit Hours

Electric nature of matter; electric force; the electric field. Capacitance and dielectrics; electric units. Charges in motion. Electric energy and power. D.C. electric circuits. Magnetic force; the magnetic field; electro-magnetism. Induction; generators and motors. A.C. circuits; inductance; electric resonance. Electron tubes; particle accelerators.

3101 SURVEYING I

8 Clock Hours — 4 Credit Hours

Introduction to transit and level. The tripod sketching board. Locating an object from bench marks. Translation and interpretation of notes. Assembly, disassembly, and care of instruments. Abbreviations and symbols, A.S.A. standards.

3102 SURVEYING II

5 Clock Hours — 3 Credit Hours

Physical use of instruments in field surveys and place field problems on board.

3103 SURVEYING III

7 Clock Hours — 3 Credit Hours

Field problems, converted to a working plan designed for construction in field.

3111 HIGHWAY CONSTRUCTION

5 Clock Hours — 3 Credit Hours

Highway planning, cost consideration, specifications and construction procedures. Effect upon public and private interests.

3112 SOIL AND MATERIAL TESTING

5 Clock Hours — 3 Credit Hours

Basic concepts of instrumentation and measuring stressing concrete mixes, stone and sand, reinforcing steel and uses for mesh, and curing of concrete.

3113 STRENGTH OF MATERIALS

5 Clock Hours — 3 Credit Hours

Effects of forces and stresses on materials in various forms and configurations found in engineering and mechanical constructions. Use of elementary mathematics in analyzing forces, stresses, moments and equilibrium by use of such factors as moment of inertia, radius of gyration; and centroids. Determination of dimensions and material specifications.

3114 MUNICIPAL ENGINEERING

5 Clock Hours — 2 Credit Hours

City and subdivision planning and regulations, water supply, drainage control, and sewage collection systems.

3115 CONSTRUCTION MANAGEMENT AND ESTIMATING

5 Clock Hours — 3 Credit Hours

Computation of materials, cost analysis, completion date, and job bidding.

3117 FLUID MECHANICS

5 Clock Hours — 3 Credit Hours

Properties of fluids; fluid pressure; pressure measurement. Submerged surfaces; Pascal's Law. Surface tension; adhesion and cohesion; buoyancy. Archimedes Principle. Hydrometry. Specific gravity; viscosity. Bernoulli's theorem. Quantity flow; fluid impact; horsepower. Orifices; wiers. Venturi meter. Reynolds number.

3129 OFFICE PRACTICE AND LEGAL PROCEDURES

5 Clock Hours — 3 Credit Hours

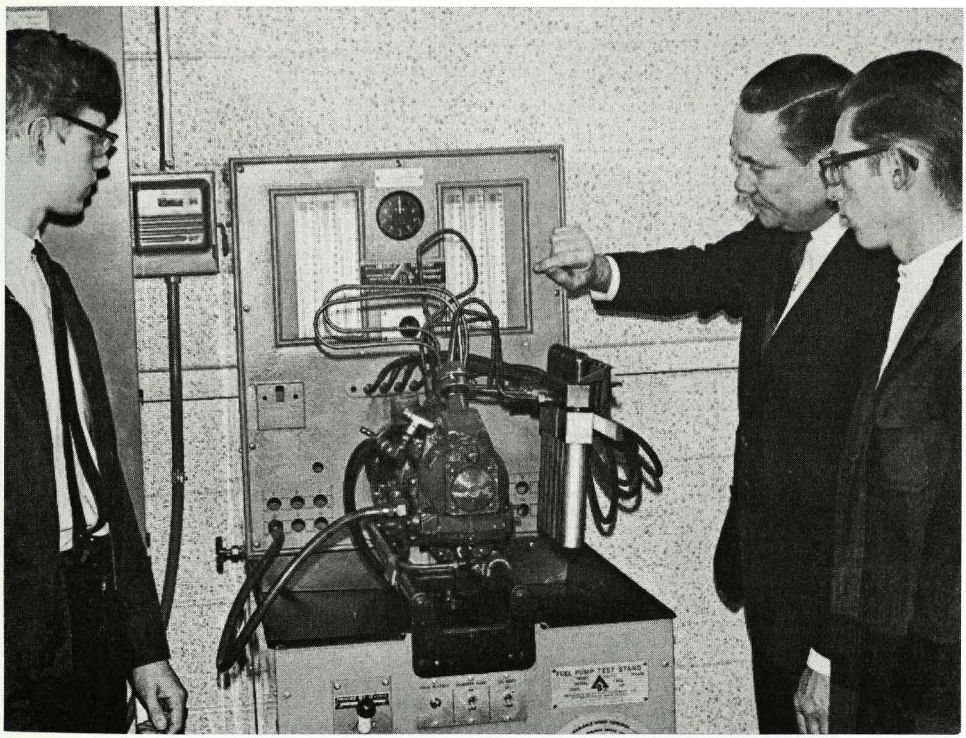
Standard office operations, and coordination of departments. Legal responsibilities and liabilities of contracts.

COOPERATIVE EMPLOYMENT PROGRAM

2-3 Credit Hours Each Term

On an alternating term basis, the student is placed on a full-time (32-40 hours) job that relates to his class work. This affords the student the opportunity to make practical application of the knowledge and skills acquired in his class work.

With each succeeding co-op term, the student is able to assume more responsibility and performs higher level duties on the job because of what he has learned from the previous term (s) of employment and the added knowledge and skills acquired in each school term.



Automotive Service Management students check Fuel Pump Tester.

CLINICAL TECHNOLOGY

CLINICAL TECHNOLOGY

The health field provides a challenging career with great responsibility for every member of the health care team. Potential health personnel must have the ability and desire to serve society in positions which require constant attention to accuracy and detail. A person's life rests in the hands of every member of the health care team.

Present health personnel and facilities are being called upon to provide increased health care services. Additional members of the health-care team are needed now to fill critical positions; it is estimated that by 1975 the health field will be the largest field of employment in the United States.

The Health Technologies Program at Cincinnati Technical Institute is an expanding program built around a core curriculum that enables the addition of specialized career options to meet the changing and increasing needs in the health field.

Currently two options are offered—Medical Office Assistant and Medical Laboratory Technician. Additional options are being planned for the immediate future.

Note: All programs are planned to qualify students for available national certification.

CLINICAL TECHNOLOGY

MEDICAL ASSISTING OPTION

CURRICULUM

	Class Hours	Lab Hours	Credit Hours
First School Term			
2210 General Chemistry	5	-	3
2216 Human Anatomy & Physiology I	5	-	3
2702 Medical Terminology	3	-	2
2710 Basic Lab. Techniques I	4	6	4
3050 Office Practice	3	5	3
2705 Medical Assisting Procedures	2	3	3
			18
First Co-op Term			
2755 Cooperative Employment	-	40	2
			2
Second School Term			
2217 Human Anatomy & Physiology II	5	-	3
1002 Communication Skills I	5	-	3
1101 Business Mathematics	5	-	4
2720 Survey of the Medical Professions	3	-	2
2707 Clinical Office Practice	4	6	4
2706 Medical Office Administration	3	-	2
			18
Second Co-op Term			
2756 Cooperative Employment	-	40	2
			2
Third School Term			
1003 Communication Skills III	5	-	3
1171 Technical Math I	5	-	4
2724 Immunology	2	1	2
2722 Introduction to Pathology I	5	-	3
2703 Medical Terminology II	3	-	2
2709 Pharmacology	5	-	3
			17

CLINICAL TECHNOLOGY

MEDICAL ASSISTING OPTION

CURRICULUM

	Class Hours	Lab Hours	Credit Hours
Third Co-op Term			
2757 Cooperative Employment	-	40	3
			3
Fourth School Term			
1005 Effective Speaking	5	-	3
1004 Technical Writing	5	-	3
1520 Introduction to Sociology	5	-	4
2725 Microbiology	3	2	3
2911 Principles of Accounting	5	-	3
2721 Emergency Procedures	2	-	1
			17
Fourth Co-op Term			
2758 Cooperative Employment	-	40	3
			3
Fifth School Term			
2723 Introduction to Pathology	5	-	3
1521 Current Social Issues	5	-	4
2991 Introduction to Hospital Administration	3	-	2
1505 General Psychology	3	-	3
2708 Radiology	5	-	3
2704 Medical Terminology III	3	-	2
			17
Fifth Co-op Term			
2759 Cooperative Employment	-	40	3
			3

CLINICAL TECHNOLOGY

MEDICAL LABORATORY TECHNICIAN OPTION

CURRICULUM

	Class Hours	Lab Hours	Credit Hours
First School Term			
2210 General Chemistry	5	-	3
2216 Human Anatomy & Physiology I	5	-	3
2702 Medical Terminology	3	-	2
2710 Basic Lab. Techniques I	4	6	4
2711 Basic Lab. Techniques II	4	6	4
			16
First Co-op Term			
2750 Cooperative Employment	-	40	2
			2
Second School Term			
2217 Human Anatomy & Physiology II	5	-	3
1001 Communication Skills I	5	-	3
1101 Business Mathematics	5	-	4
2720 Survey of the Medical Professions	3	-	2
2211 Clinical Chemistry	5	10	6
			18
Second Co-op Term			
2751 Cooperative Employment	-	40	2
			2
Third School Term			
1111 Technical Math I	5	-	4
2724 Immunology III	2	1	2
2712 Basic Lab. Techniques	2	3	3
2722 Introduction to Pathology I	5	-	3
1003 Communication Skills III	5	-	3
2244 Physics II-A	3	2	3
			18
Third Co-op Term			
2752 Cooperative Employment	-	40	2
			2

CLINICAL TECHNOLOGY

MEDICAL LABORATORY TECHNICIAN OPTION

CURRICULUM

	Class Hours	Lab Hours	Credit Hours
Fourth School Term			
1005 Effective Speaking	5	-	3
2721 Emergency Procedures	2	-	1
1004 Technical Writing	5	-	3
1520 Introduction to Sociology	5	-	4
2725 Microbiology	3	2	3
2713 Basic Lab. Techniques IV	5	5	4
			18
Fourth Co-op Term			
2753 Cooperative Employment	-	40	2
			2
Fifth School Term			
2723 Introduction to Pathology II	5	-	3
1505 General Psychology	5	-	3
1521 Current Social Issues	5	4	4
2991 Introduction to Hospital Administration	3	-	2
2714 Medical Laboratory Seminar	5	-	3
			15
Fifth Co-op Term			
2754 Cooperative Employment	-	40	3
			3

CLINICAL TECHNOLOGY ADVISORY COMMITTEE

Harold Civin, M.D.

John Cranley, M.D.

Werner Donath, M.D.

Walter Engel, M.D.

Arthur Evans, M.D.

William Graf, M.D.

Raymond Hilsinger, M.D.

Robert Ritterhoff, M.D.

George Tanner, M.D.

John Wulsin, M.D.

CLINICAL TECHNOLOGY

MEDICAL LABORATORY TECHNICIAN OPTION

AND

MEDICAL ASSISTING OPTION

COURSE DESCRIPTIONS

1001 COMMUNICATION SKILLS I

5 Clock Hours — 3 Credit Hours

Syntax, paragraph development, mechanics, usage, spelling and vocabulary. Analysis of each student's strengths and weaknesses.

1003 COMMUNICATION SKILLS III

5 Clock Hours — 3 Credit Hours

Continuation of Communication Skills I, stressing expository writing.

1004 TECHNICAL WRITING

5 Clock Hours — 3 Credit Hours

Informal and formal written reports. Techniques for collecting and presenting data, particularly as they apply to industry. Some work with business letters.

1005 EFFECTIVE SPEAKING

5 Clock Hours — 3 Credit Hours

Organization, development, and presentation of general speeches with emphasis on the oral report as a form of business and/or industrial communication.

1101 BUSINESS MATHEMATICS I

5 Clock Hours — 4 Credit Hours

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.

1111 TECHNICAL MATHEMATICS I

5 Clock Hours — 4 Credit Hours

Review and extension of high school mathematics. Designed to bridge the gap between a weak mathematical foundation and the knowledge needed for the study of math for technical courses. To include—functional notations, systems of linear equations, quadratic, exponents and logarithms, etc.

1505 GENERAL PSYCHOLOGY

3 Clock Hours — 3 Credit Hours

A scientific study of human behavior with emphasis on motivation, learning, individual differences, and personality.

1520 INTRODUCTION TO SOCIOLOGY

5 Clock Hours — 4 Credit Hours

A study of fundamental sociological concepts involving socialization, culture, social deviation, social institution, race and ethnic relations and social problems and policy.

1521 CURRENT SOCIAL ISSUES

5 Clock Hours — 4 Credit Hours

Current issues, including discussion of government policies in health and the relationship of the health worker to the public.

2210 GENERAL CHEMISTRY

5 Clock Hours — 3 Credit Hours

Fundamental concepts of chemistry, including atoms and molecules, valence and chemical equations, oxidation and reduction, physical and chemical properties of matter, gases, liquids and solids, water, solutions, acids, bases and salts, electrolytes and ionization.

2211 CLINICAL CHEMISTRY

5 Clock Hours — 3 Credit Hours

A review of General Chemistry, organic chemistry as applied to clinical laboratory testing, colorimetry spectrophotometry, quality control and an introduction to clinical laboratory automation.

2211 CLINICAL CHEMISTRY LABORATORY

10 Clock Hours — 3 Credit Hours

The preparation and use of standard solutions, performance of common clinical chemistry procedures.

2216 HUMAN ANATOMY AND PHYSIOLOGY I

5 Clock Hours — 3 Credit Hours

Orientation to body structure and function, detailed study of the muscular, skeletal, circulatory and excretory systems.

2217 HUMAN ANATOMY AND PHYSIOLOGY II

5 Clock Hours — 3 Credit Hours

Detailed study of the nervous, respiratory, alimentary, endocrine, and reproductive systems.

2244 PHYSICS II-A

5 Clock Hours — 3 Credit Hours

Properties of waves. Frequency, wavelength, amplitude, Types of waves, reflection, refraction. Diffraction, Interference, Resonance, Wave nature of Electro-magnetic radiation. Sources and detectors of infra-red, visible, ultraviolet, x-ray and Gamma Radiation. Control and uses of radiation. Optical instruments. Emission and absorption. Spectroscopy. X-ray diffraction. Ionizing Radiation. Laser Radiation. Medical aspects of Ionizing Radiation.

2702 MEDICAL TERMINOLOGY I

3 Clock Hours — 2 Credit Hours

Prefixes, suffixes, word roots and their combining forms, building a basic medical vocabulary.

2703 MEDICAL TERMINOLOGY II

3 Clock Hours — 2 Credit Hours

Development of a vocabulary in urology, obstetrics and gynecology, general and special surgical procedures and radiologic procedures.

2704 MEDICAL TERMINOLOGY III

3 Clock Hours — 2 Credit Hours

Development of a vocabulary in other medical specialties including dermatology, pathology, neurology and psychiatry, gastroenerology, etc.

2705 MEDICAL ASSISTING PROCEDURES

5 Clock Hours — 3 Credit Hours

The role of the medical assistant including an introduction to public relations and medical science; medical histories, recording vital signs, special tests, injections, instrument care, examination room techniques including the preparation of patients and assistance with general and specialized examinations.

2706 MEDICAL OFFICE ADMINISTRATION

3 Clock Hours — 2 Credit Hours

Administrative office procedures—billing procedures including the use of data processing, patient's records, filing systems, insurance in medical practice, medical office economics, personnel administration and medical office housekeeping.

2707 CLINICAL OFFICE PRACTICE

10 Clock Hours — 4 Credit Hours

Filing, typing, and transcription, involving medical terminology, medical records, including patient records, insurance forms including government medical care programs.

2708 RADIOLOGY

5 Clock Hours — 3 Credit Hours

Introduction to basic radiologic concepts and the preparation for, basic use of, and self protection involved in the use of x-ray equipment.

2709 PHARMACOLOGY

5 Clock Hours — 3 Credit Hours

Therapeutic uses, doses, and properties of drugs, toxic reactions and their prevention and treatment.

2710 BASIC LABORATORY TECHNIQUES I
4 Clock Hours — 2 Credit Hours

Blood collection techniques, basic hematologic procedures, including red and white blood cell counts, hemoglobin, hematocrit, and sedimentation rate determination, discussion of blood cell morphology and the differential and routine urinalysis.

2710 (L) BASIC LABORATORY TECHNIQUES I LABORATORY
6 Clock Hours — 2 Credit Hours

Performance of red and white blood cell chamber counts, hemoglobin and hematocrit determinations, sedimentation rates, preparation and staining of blood smears, performance of white blood cell differential, and performance of routine urinalysis.

2711 BASIC LABORATORY TECHNIQUES II
4 Clock Hours — 2 Credit Hours

Advanced hemotology including reticulocyte and platelet counts plus coagulation procedures such as the Lee White prothrombin time, etc. Advanced urinalysis including PSP, Diagnex Blue, Porphyrins, Bence Jones Protein, etc. An introduction to histology and cytology.

2711 (L) BASIC LABORATORY TECHNIQUES II LABORATORY
6 Clock Hours — 2 Credit Hours

Practice in selected advanced hemotology and urinalysis procedures to illustrate fundamental principles.

2712 BASIC LABORATORY TECHNIQUES III
2 Clock Hours — 2 Credit Hours

A study of blood banking procedures and theory including the inheritance of blood group determirants and donor procedures.

2712 (L) BASIC LABORATORY TECHNIQUES III LABORATORY

3 Clock Hours — 1 Credit Hour

Performance of routine typing, crossmatching, antibody screens and cell panels.

2713 BASIC LABORATORY TECHNIQUES IV

5 Clock Hours — 2 Credit Hours

Study of diagnostic microbiology with stress on the proper preparation and use of media, aerobic and anaerobic culturing techniques and preparation and staining of slides. Discussion of serological procedures.

2713 (L) BASIC LABORATORY TECHNIQUES IV LABORATORY

5 Clock Hours — 2 Credit Hours

Performance of selected microbiological and serological procedures to illustrate fundamental principles.

2714 MEDICAL LABORATORY SEMINAR

5 Clock Hours — 3 Credit Hours

Discussion of current developments in the medical laboratory, brief review of the various departments of the clinical laboratory and assignment of a research paper on a laboratory related development in medicine.

2720 SURVEY OF THE MEDICAL PROFESSION

3 Clock Hours — 2 Credit Hours

Acquaintance with the whole pattern of comprehensive health care including the various health organizations, occupations, and professions plus a discussion of medical ethics and law.

2721 EMERGENCY PROCEDURES

2 Clock Hours — 1 Credit Hour

Fire safety, disaster planning, and first aid, operating room safety and laboratory safety.

2722 INTRODUCTION TO PATHOLOGY I

5 Clock Hours — 3 Credit Hours

Basic principles of pathogensis, normal and abnormal cytology and histology; traumatic diseases; and circulatory, metabolic and nutritional disturbances.

2723 INTRODUCTION TO PATHOLOGY II

5 Clock Hours — 3 Credit Hours

Study of congenital and heredofamilial diseases, infectuous diseases, and specialized systemic diseases.

2724 IMMUNOLOGY

2 Clock Hours — 1 Credit Hour

Fundamental concepts in immunology, discussion of serology and immunohematology, discussion of infectious diseases and their prevention and detection.

2724 (L) IMMUNOLOGY LABORATORY

1 Clock Hour — 1 Credit Hour

Performance of blood typing, slide agglutination tests and individual immunizing procedures.

2725 MICROBIOLOBY

3 Clock Hours — 2 Credit Hours

Fundamental microbiology and parasitology, the role of micro-organisms in disease and their control.

2725 (L) MICROBIOLOGY LABORATORY

2 Clock Hours — 1 Credit Hour

Preparation and use of media, preparation, staining and examination of slides, culturing techniques, preparations for parasitology.

2750 COOPERATIVE EMPLOYMENT

40 Clock Hours — 2 Credit Hours

Performance of hematologic procedures and routine urinalysis, tests under the close supervision of a M.T. (ASCP) registered medical technoligist in a hospital laboratory.

2751 COOPERATIVE EMPLOYMENT

40 Clock Hours — 2 Credit Hours

Performance of hematologic procedures including coagulation testing under the close supervision of a M.T. (ASCP) registered medical technician in a hospital laboratory.

2752 COOPERATIVE EMPLOYMENT

40 Clock Hours — 3 Credit Hours

Performance of clinical chemistry procedures gastric analysis and routine stool tests, under the close supervision of an M.T. (ASCP) registered hospital technologist in a hospital laboratory.

2753 COOPERATIVE EMPLOYMENT

40 Clock Hours — 3 Credit Hours

Performance of procedures in clinical chemistry (2 weeks) and blood banking (8 weeks), under the close supervision of an M.T. (ASCP) registered medical technologist in a hospital laboratory.

2754 COOPERATIVE EMPLOYMENT

40 Clock Hours — 3 Credit Hours

Performance of procedures in bacteriology, parasitology and serology, under the close supervision of an M.T. (ASCP) registered medical technologist in a hospital laboratory.

2755 COOPERATIVE EMPLOYMENT
2759

2-3 Credit Hours Each Term

On an alternating term basis, the student is placed on a full-time (32-40 hours) job in a physician's office or related situation. This affords the student the opportunity to make practical application of the knowledge and skills acquired in his class work.

With each succeeding co-operative term, the student is able to assume more responsibility and perform higher level duties on the job because of what he has learned from the previous term (s) of employment and the added knowledge and skills acquired in each school term.

2911 PRINCIPLES OF ACCOUNTING

5 Clock Hours — 3 Credit Hours

Principles and practices of basic accounting with practical application, as related to other fields of business.

2991 INTRODUCTION TO HOSPITAL ADMINISTRATION

3 Clock Hours — 2 Credit Hours

Survey of the organization of a hospital, including the use of data processing in the health facility.

3050 OFFICE PRACTICE

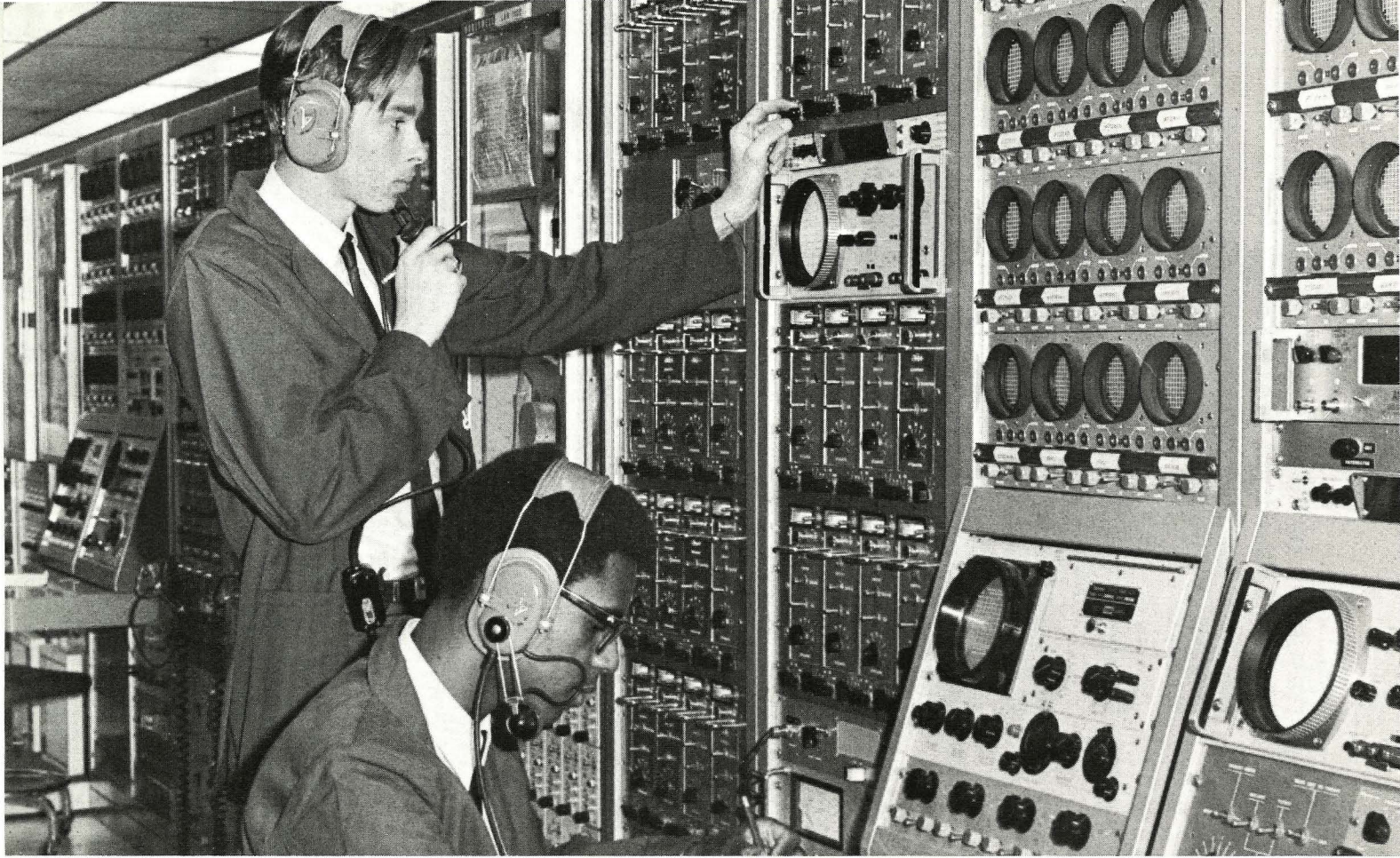
3 Clock Hours — 1 Credit Hour

Filing, typing, business machines, receptionist duties and dictaphone transcription.

3050 (L) OFFICE PRACTICE LABORATORY

5 Clock Hours — 2 Credit Hours

Practice in typing, transcription and receptionist duties.



ELECTRONIC ENGINEERING TECHNOLOGY

ELECTRONIC ENGINEERING TECHNOLOGY

The growth of industrial and consumer electronic devices, automation, and computer electronics has generated a demand for electronic technicians that cannot be filled by those presently qualified. There exists a need for trained electronic technicians.

The electronic technician is a valuable member of the engineering team. He normally assists engineers in designing, building, troubleshooting and testing functions. As his skills grow, it is not unusual to find him in field service work. He uses specialized instruments in his work such as voltmeters, oscilloscopes, signal generators and pulse counters.

Students in the Electronic Engineering Technology program perform their cooperative work in many companies. Typical products of these companies are machine tools, jet engines, military electronic gear, radio communication equipment, and telephone service. Most graduates choose to continue working for the companies that employed them as co-op students. Many will continue their education in company-sponsored programs.

ELECTRONIC ENGINEERING TECHNOLOGY CURRICULUM

	Class Hours	Lab Hours	Credit Hours
First School Term			
1001 Communication Skills I	5	-	3
1151 Technical Mathematics I	5	-	4
1901 Electronic Engineering Technology I	5	10	8
2251 Physics I	2	3	3
			18
First Co-op Term			
1951 Cooperative Employment	-	40	2
			2
Second School Term			
1003 Communication Skills III	5	-	3
1152 Technical Mathematics II	5	-	4
1351 Electronic Drafting	1	4	2
1902 Electronic Engineering Technology II	3	7	5
2252 Physics II	3	2	3
			17
Second Co-op Term			
1952 Cooperative Employment	-	40	2
			2
Third School Term			
1153 Technical Mathematics III	5	-	4
1512 Economics	3	-	3
1903 Electronic Engineering Technology III	5	10	8
1912 Survey of Machine Tool Operation	3	2	3
			18
Third Co-op Term			
1953 Cooperative Employment	-	40	3
			3

ELECTRONIC ENGINEERING TECHNOLOGY

CURRICULUM

■ Fourth School Term	Class Hours	Lab Hours	Credit Hours
1004 Technical Writing	3	2	3
1153 Technical Mathematics IV	3	2	4
1501 Human Relations	5	-	4
1910 Machinery I	2	3	2
1904 Electronic Engineering Technology IV	2	8	5
			18

■ Fourth Co-op Term			
1954 Cooperative Employment	-	40	3
			3

■ Fifth School Term			
1005 Effective Speaking	2	3	3
1504 Industrial Psychology	5	-	4
1905 Electronic Engineering Technology V	5	10	8
1911 Machinery II	3	2	3
			18

■ Fifth Co-op Term			
1955 Cooperative Employment	-	40	3
			3

ELECTRONIC ENGINEERING TECHNOLOGY

ADVISORY COMMITTEE

Robert Bernhard, ... R. K. LeBlond, Inc.
Staff Engineer

Gary Graf, ... Cincinnati Milling
Supervisor of Management and Machine Company
Technical Education

Kenneth Hagedorn, ... Cincinnati Gas &
Coordinator, Employment Office Electric Company

Paul Houillion, ... Ohmart Corporation
Factory Supervisor

D. O. Lindsey, Mgr. . . . . Avco Corporation
Scientific and Electronics Division
Administrative Employment

Vic Pareece, ... American Telephone
Supervisor of Management and and Telegraph Co.
Technical Education

Warren G. Rhodes, ... General Electric Company
Consultant, Education Relations Service

Clay Strider, ... General Electric Company
Specialist, Education and Training

Art Wehrman, ... Cincinnati Bell
Employment Supervisor Telephone Company

ELECTRONIC ENGINEERING TECHNOLOGY

COURSE DESCRIPTIONS

1001 COMMUNICATION SKILLS I
5 Clock Hours — 3 Credit Hours

Syntax, paragraph development, mechanics, usage, spelling and vocabulary. Analysis of each student's strengths and weaknesses.

1003 COMMUNICATION SKILLS III
5 Clock Hours — 3 Credit Hours

Continuation of Communication Skills I, stressing expository writing.

1004 TECHNICAL WRITING
5 Clock Hours — 3 Credit Hours

Informal and formal written reports. Techniques for collecting and presenting data, particularly as they apply to industry. Some work with business letters.

1005 EFFECTIVE SPEAKING
5 Clock Hours — 3 Credit Hours

Organization, development, and presentation of general speeches with emphasis on the oral report as a form of business communication.

1151 TECHNICAL MATHEMATICS I
5 Clock Hours — 4 Credit Hours

Review of arithmetic. Fractions, decimals, ratio, and percentage. Powers and roots, physical quantities, slide rule, conversion factors. Beginning algebra. Introduction to equations, formulas, and proportion.

1152 TECHNICAL MATHEMATICS II
5 Clock Hours — 4 Credit Hours

Elementary D.C. circuits. Algebraic fractions, factoring and fractional equations. Parallel and series-parallel, D.C. circuits. Linear functions, graphs, simultaneous equations. Kirchoff's laws, and networks.

1153 TECHNICAL MATHEMATICS III

5 Clock Hours — 4 Credit Hours

Introduction to trigonometry, trigonometric functions. Exponents and radicals, calculations with logarithms. Imaginary and complex numbers, quadratic equations, vectors, and periodic functions.

1154 TECHNICAL MATHEMATICS IV

5 Clock Hours — 4 Credit Hours

Elementary A.C. theory, essentials of A.C. circuits and their solutions. Limits, average rate, the derivative, differentiation forms and applications, maxima and minima, introduction and application of the integral.

1351 ELECTRONIC DRAFTING

5 Clock Hours — 2 Credit Hours

Schematic diagrams, component wiring diagrams, printed circuit boards, and pictorial assembly drawings. Graphs, nomographs and characteristic curves.

1501 HUMAN RELATIONS

5 Clock Hours — 4 Credit Hours

Principles of human behavior. Problems of the individual studied in relation to society, group membership, and relationships within the work situation. Development of effective motivation, communication, attitudes, supervision and leadership.

1504 INDUSTRIAL PSYCHOLOGY

5 Clock Hours — 4 Credit Hours

Behavior in business and industry. Behavior of workers, management, and consumers. Direct application of psychological principles to assist with inter-personal problems. Techniques include role playing and case studies.

1512 ECONOMICS I

3 Clock Hours — 3 Credit Hours

An introductory study of the analysis and application of basic economic theory as applied to the problems of labor and industrial relations. Income and spending of the aggregate of individuals, business firms, and various levels of government. Money, commercial, and central banking. Price levels and inflation. The role of the national government in fiscal and monetary policy in a private enterprise economy. Current economic issues introduced and analyzed.

1901 ELECTRONIC ENGINEERING TECHNOLOGY I

15 Clock Hours — 8 Credit Hours

Direct current theory involving electronic components and symbols, schematic diagrams, assembly of electronic circuits, the use of oscilloscopes and meters, color codes, Ohm's law in complex circuits, Kirchhoff's laws, Thevenin's theorem, Norton's theorem, maximum power transfer, voltage divider circuits, nonlinear resistances, meter movements and circuits, and an introduction to reactance.

1902 ELECTRONIC ENGINEERING TECHNOLOGY II

10 Clock Hours — 5 Credit Hours

Alternating current theory involving characteristics of inductance, series and parallel inductances, characteristics of capacitors, series and parallel capacitances, RC time constants, measurement and testing of capacitors and inductors, characteristics of circuits containing series and parallel combinations of R, L, and C, series and parallel resonant circuits, transformer characteristics, phase-shift networks, study of lissajous patterns, and use of oscilloscope.

1903 ELECTRONIC ENGINEERING TECHNOLOGY III

15 Clock Hours — 8 Credit Hours

Active components involving semiconductor-diode characteristics, zenier diodes, tunnel diodes, vacuum tube diodes, diodes in logic, limiting, and rectifier circuits. Transistor familiarization, current gain, characteristic curves. Vacuum tube familiarization, voltage gain, characteristic curves. Introduction to amplifiers.

1904 ELECTRONIC ENGINEERING TECHNOLOGY IV

10 Clock Hours — 5 Credit Hours

Active circuits involving transistor and vacuum tube amplifiers and oscillators: amplifier configurations, AC and DC types, Class A, B and C types, frequency response, load line analysis, resistance and voltage defect analysis, Hartley oscillator, phase-shift oscillator, multivibrator, signal and power transformer characteristics.

1905 ELECTRONIC ENGINEERING TECHNOLOGY V

15 Clock Hours — 8 Credit Hours

More complex active circuits involving sawtooth generator, IC linear amplifier, IC Schmitt trigger, IC multivibrator, resistor-transistor logic circuits, phase-shift bridge circuit for control of a thyratron, speed control of a D-C shunt motor, superheterodyne receiver, transistorized cathode-ray oscilloscope.

1910 MACHINERY I

5 Clock Hours — 2 Credit Hours

Investigation of D.C. motors and generators; principles, construction, and characteristics; starting, speed control, speed regulation, efficiency rating, and selection.

Transformer principles and construction. Connections, efficiency, regulation.

1911 MACHINERY II

5 Clock Hours — 3 Credit Hours

Investigation of A.C. motors and generators. Principles, construction, and characteristics; emphasis on single-phase and polyphase induction motors. Starting, braking, efficiency, rating, selection.

1912 SURVEY MACHINE TOOL OPERATION

5 Clock Hours — 3 Credit Hours

Standard and special portable tools and equipment used in installation, change-over, maintenance of units requiring metal cutting and unit alignment.

Material processing and conversion power machinery and inspection equipment. Automatic feeds, repetitive automatic precision machining, and automation setups.

1951 COOPERATIVE EMPLOYMENT PROGRAM
1952
1953
1954
1955

2-3 Credit Hours Each Term

On an alternating term basis, the student is placed on a full-time (32-40 hours) job that relates to his class work. This affords the student the opportunity to make practical application of the knowledge and skills acquired in his class work.

With each succeeding co-op term, the student is able to assume more responsibility and perform higher level duties on the job because of what he has learned from the previous term(s) of employment and the added knowledge and skills acquired in each school term.

2251 PHYSICS I

5 Clock Hours — 3 Credit Hours

Physical measurements and units, vectors, forces and equilibrium, motion of a particle, force and motion, work, energy, and power, circular motion, harmonic motion, fluids at rest, fluids in motion, properties of matter, rotational motion, temperature, heat, and work, Kinetic theory of matter, change of phase, transfer of heat, heat engines. Laboratory experiments illustrating the above theories.

2252 PHYSICS II

5 Clock Hours — 3 Credit Hours

Wave motion, vibration and sound, light and its measurements, reflection and refraction, lenses and mirrors, optical instruments, light as wave motion, magnetism, electro-statics, capacitors, the electric circuit, electro-magnetism, alternating currents, foundations of atomics and nucleonics. Laboratory experiments illustrating the above theories.

Physics students test strength of metal part.

EXECUTIVE SECRETARIAL TECHNOLOGY

EXECUTIVE SECRETARIAL TECHNOLOGY

Secretaries are essential to business, industry, government, and the professions. The demand for good secretaries far exceeds the supply; thus, 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 classrooms and laboratories of the Cincinnati Technical Institute 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 operation of office management.

The cooperative work experience program provides real, practical, work experience early in the career of the executive secretary. Upon graduation, students in the Executive Secretarial Technology program will have two years of education—and work experience in one of Cincinnati's major firms.

EXECUTIVE SECRETARIAL TECHNOLOGY CURRICULUM

■ First School Term	Class Hours	Lab Hours	Credit Hours
1005 Effective Speaking	2	3	3
1520 Introduction to Sociology	3	3	4
2921 Introduction to Business	5	-	2
3001 Beginning Typing	2	3	2
3011 Beginning Shorthand	2	3	4
3021 Office Procedures and Techniques	2	3	3
			18

■ First Co-op Term			
3051 Cooperative Employment	-	40	2
			2

■ Second School Term			
1001 Communication Skills I	3	2	3
1501 Human Relations	2	3	4
3002 Intermediate Typing	2	3	2
3012 Intermediate Shorthand	2	3	4
3022 Office Machines I	1	4	2
3032 Filing and Records Management	2	3	2
			17

■ Second Co-op Term			
3052 Cooperative Employment	-	40	2
			2

■ Third School Term			
1002 Communication Skills II	3	2	3
1101 Business Mathematics I	4	1	4
1823 Business Law	5	-	3
3003 Advanced Typing	1	4	2
3013 Advanced Shorthand	2	3	4
3023 Office Machines II	1	4	2
			18

EXECUTIVE SECRETARIAL TECHNOLOGY CURRICULUM

	Class Hours	Lab Hours	Credit Hours
Third Co-op Term			
3053 Cooperative Employment	-	40	3
			3
Fourth School Term			
1006 Technical Writing	3	2	3
1102 Business Mathematics II	5	-	4
2911 Accounting Principles I	2	3	3
3014 Dictation and Transcription	3	7	4
3024 Secretarial Procedures	2	3	3
			17
Fourth Co-op Term			
3054 Cooperative Employment	-	40	3
			3
Fifth School Term			
1009 Business English	5	-	3
1511 Principles of Economics	5	-	4
1799 Survey of Data Processing	5	-	4
2912 Accounting Principles II	2	3	3
3015 Dictation & Transcription	3	7	4
			18
Fifth Co-op Term			
3055 Cooperative Employment	-	40	3
			3

EXECUTIVE SECRETARIAL TECHNOLOGY

ADVISORY COMMITTEE

Roger Engstrand, ... Procter and Gamble Co.
Operations and Planning Officer

Larry Klems, ... Provident Bank
Manager Linn Street Branch

Harry Martin, ... City of Cincinnati
Coordinator Model City Plan

John R. Quinn, ... Shillito's
Vice President

Eileen Robinson, ... Procter and Gamble Co.
Supervisor Typewriting Pool

Father James E. Shappelle, ... Catholic School Board
Assistant Superintendent of the Archiocese
of Schools of Cincinnati

Penn Z. Zeigler, ... Major Federal Savings and
President Loan Association of Cincinnati

EXECUTIVE SECRETARIAL TECHNOLOGY

COURSE DESCRIPTIONS

1001 COMMUNICATION SKILLS I

5 Clock Hours — 3 Credit Hours

Syntax, paragraph development, mechanics, usage, spelling and vocabulary. Analysis of each student's strengths and weaknesses.

1002 COMMUNICATION SKILLS II

5 Clock Hours — 3 Credit Hours

A continuation of Communication Skills I, stressing reading improvement, both rate and comprehension.

1005 EFFECTIVE SPEAKING

5 Clock Hours — 3 Credit Hours

Organization, development, and presentation of general speeches with emphasis on the oral report as a form of business communication.

1006 TECHNICAL WRITING (BUSINESS)

5 Clock Hours — 3 Credit Hours

Business letters with emphasis on various types according to their purposes. Some work with informal and formal reports.

1009 BUSINESS ENGLISH

5 Clock Hours — 3 Credit Hours

Spelling and defining commonly used prefixes, suffixes, root words and their combining forms. Vocabulary, pronunciation, and definitions.

1101 BUSINESS MATHEMATICS I

5 Clock Hours — 4 Credit Hours

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.

1102 BUSINESS MATHEMATICS II

5 Clock Hours — 4 Credit Hours

Application of mathematics to trade discounts, markons, commissions, installment charges, freight expenses, corporate earnings, stocks and bonds, insurance, taxes, loans, and data processing systems of billing and inventory.

1501 HUMAN RELATIONS

5 Clock Hours — 4 Credit Hours

Principles of human behavior. Problems of the individual studied in relation to society, group membership, and relationships within the work situation. Development of effective motivation, communication, attitudes, supervision and leadership.

1511 PRINCIPLES OF ECONOMICS

5 Clock Hours — 4 Credit Hours

Basic economics with attention given to central problems of price, competition and money; supply and demand; business organizations; firm and family income, labor and industrial relations; government and the economy; gross national product; relationship of income to expenditures; business cycles.

1520 INTRODUCTION TO SOCIOLOGY

5 Clock Hours — 4 Credit Hours

A study of fundamental sociological concepts involving socialization, culture, social deviation, social institution, race and ethnic relations and social problems and policy.

1799 SURVEY OF DATA PROCESSING

5 Clock Hours — 4 Credit Hours

Terminology and basic concepts of automation. History of punched card data processing, the development of computer systems, the manual methods and the stored program are introduced.

1823 BUSINESS LAW

5 Clock Hours — 3 Credit Hours

Treatment of fundamental principles of business law, including contracts, negotiable instruments, and agencies.

2911 PRINCIPLES OF ACCOUNTING I

5 Clock Hours — 3 Credit Hours

Principles and practices of basic accounting with practical application as related to other fields of business.

2912 PRINCIPLES OF ACCOUNTING II

5 Clock Hours — 3 Credit Hours

A continuation of Principles of Accounting I. Permits the student to solve accounting problems in supervised accounting labs.

2921 INTRODUCTION TO BUSINESS I

5 Clock Hours — 2 Credit Hours

A broad concept of business and the development of an awareness of the economic framework which constitutes our capitalistic system.

3001 BEGINNING TYPEWRITING

5 Clock Hours — 2 Credit Hours

An introduction to touch typewriting with emphasis on correct techniques and mastery of the keyboard. Meets the needs of students who have previously had typewriting, needing a term of remedial practice on correct techniques with emphasis on simple business correspondence, tabulation and manuscripts.

3002 INTERMEDIATE TYPEWRITING

5 Clock Hours — 2 Credit Hours

Develops increased speed, a better control of the machine and a working knowledge of business papers. Emphasis is placed on production typing problems. Speed building attention is given to the development of the student's ability to produce mailable copies. The production units are tabulation, manuscripts, correspondence and business forms.

3003 ADVANCED TYPEWRITING

5 Clock Hours — 2 Credit Hours

Improvement of individual production rates. Planning and typing projects that closely approximate various fields of study. Review of letter forms, methods of duplication, statistical tabulations, reports, manuscripts, and legal documents.

3011 BEGINNING SHORTHAND

5 Clock Hours — 4 Credit Hours

Gregg Diamond Jubilee Shorthand, with emphasis on mastery of brief forms and word building principles. A beginning course in the theory and practice of reading and writing shorthand.

3012 INTERMEDIATE SHORTHAND

5 Clock Hours — 4 Credit Hours

Continued study of theory with greater emphasis on dictation and elementary transcription.

3013 ADVANCED SHORTHAND

5 Clock Hours — 4 Credit Hours

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.

3014 DICTATION AND TRANSCRIPTION I

5 Clock Hours — 4 Credit Hours

Taking dictation and transcribing at the typewriter. Review of theory and dictation of familiar and unfamiliar material at varying rates of speed.

3015 DICTATION AND TRANSCRIPTION II

5 Clock Hours — 4 Credit Hours

Development of expert dictation speed. Integration of office-style dictation. High speed transcription according to office standards.

3021 OFFICE PROCEDURES AND TECHNIQUES
5 Clock Hours — 3 Credit Hours

Office organization, duties of office workers, personal qualifications, office problems and their solutions.

3022 OFFICE MACHINES I
5 Clock Hours — 2 Credit Hours

A general survey of business and office machines. Techniques, processes, operation and applications of office machines.

3023 OFFICE MACHINES II
5 Clock Hours — 2 Credit Hours

Duplicating equipment and dictating and transcribing machines.

3024 SECRETARIAL PROCEDURES
5 Clock Hours — 3 Credit Hours

Responsibilities encountered by a secretary during the work day. Receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, and office organization.

3032 FILING AND RECORD MANAGEMENT
5 Clock Hours — 2 Credit Hours

Principles and procedures used in organization and control of records. Transfer, storage and retention.

3051 COOPERATIVE EMPLOYMENT PROGRAM
3052
3053
3054
3055
2-3 Credit Hours Each Term

On an alternating term basis, the student is placed on a full-time (32-40 hours) job that relates to his class work. This affords the student the opportunity to make practical application of the knowledge and skills acquired in his class work.

With each succeeding co-op term, the student is able to assume more responsibility and perform higher level duties on the job because of what he has learned from the previous term(s) of employment and the added knowledge and skills acquired in each school term.

GRAPHIC COMMUNICATIONS TECHNOLOGY

GRAPHIC COMMUNICATIONS TECHNOLOGY

The influence of printing radiates through all the fields of endeavor known to man; the printed word is necessary to sustain our civilization and to support social, educational, technological, and commercial growth. As society becomes more complex, more communication via printing becomes increasingly important.

At Cincinnati Technical Institute, modern computerized typesetting equipment, high speed letterpress and offset presses, excellent ancillary equipment, and expert instruction combine to provide a quality graphic arts program.

Although each Graphic Communications student masters all of the major modern graphic arts processes, the scope of the program is not limited to the development of craftsmanship. Technicians in a dynamic, growing industry constantly address themselves to new problems. The Graphic Communications program provides the scientific and technical knowledge necessary to resolve those problems.

As important as they are, craftsmanship and scientific-technical knowledge do not fully describe the Graphic Communications program. The graphic arts industry urgently requires mid-management personnel. Courses in Human Behavior, Effective Speaking, Business Law, etc., provide the management skills necessary for mid-management positions in shop leadership, estimating, producting planning, and cost control.

GRAPHIC COMMUNICATIONS TECHNOLOGY CURRICULUM

		Class Hours	Lab Hours	Credit Hours
First School Term				
1001	Communication Skills I	5	-	3
1161	Mathematics for Printers	5	-	4
1512	Economics I	3	-	3
1401	Layout and Design	2	-	2
1402	Typography	5	5	4
1450	Estimating	5	-	2
				18
First Co-op Term				
1451	Cooperative Employment	-	40	2
				2
Second School Term				
1002	Communication Skills II	5	-	3
1513	Economics II	3	-	3
2261	Printing Science (Chemistry)	3	2	3
1410	Machine Composition	5	5	4
1405	Proofreading and Copy Preparation	2	-	2
1460	Bindery Methods and Procedures	2	3	3
				18
Second Co-op Term				
1452	Cooperative Employment	-	40	2
				2
Third School Term				
1005	Effective Speaking	3	-	2
1007	Expository Writing	5	-	3
2262	Printing Science II (Physics)	3	2	3
1506	Human Relations	3	-	3
1415	Graphics Arts Processes	2	-	2
1420	Electronic Processes	2	-	2
1421	Cold Type Processes	5	5	3
				18

GRAPHIC COMMUNICATIONS TECHNOLOGY CURRICULUM

	Class Hours	Lab Hours	Credit Hours
Third Co-op Term			
1453 Cooperative Employment	-	40	3
			3
Fourth School Term			
1004 Technical Writing	3	-	2
1419 Survey of Graphics Communications I	3	-	3
1430 Press Work	5	5	4
1480 Photolithography	3	2	3
1823 Business Law I	5	-	3
2911 Accounting I	5	-	3
			18
Fourth Co-op Term			
1454 Cooperative Employment	-	40	3
			3
Fifth School Term			
1428 Survey of Graphic Communications II	3	-	3
1440 Offset Press Operations	5	10	5
1481 Photolithography II	3	2	3
1520 Introduction to Sociology	5	-	4
2916 Printing Cost Accounting	5	-	3
			18
Fifth Co-op Term			
1455 Cooperative Employment	-	40	3
			3

GRAPHIC COMMUNICATIONS TECHNOLOGY
ADVISORY COMMITTEE

William Bell, ... Standard Publishing Company
Vice President

William Bedinghaus, ... Bedinghaus Business Forms
President

Harry Brinkman, ... Cincinnati Lithographers
President

Mel Brower, ... Melbro Color Service
President

James Burton, ... Johnston Paper Company
President

Larry Cherricosta, ... Stockton, West, Burkhardt
Production Manager

Charles Dye, Jr., ... Quality Electrotype
Treasurer

Carl Ford, ... J. W. Ford Company
President

Norb Giver, ... Volts-Thomas Printing Company
President

Edward Kobman, ... Gibson Greeting Card Company
Supervisor

Wilbert Rosenthal, ... S. Rosenthal Company
President

Hal Stearne, ... S. Rosenthal Company
Production Manager

James Wood, ... Standard Publishing Company
Superintendent of Offset Pressroom

GRAPHIC COMMUNICATIONS TECHNOLOGY

COURSE DESCRIPTIONS

1001 COMMUNICATION SKILLS I

5 Clock Hours — 3 Credit Hours

Syntax, paragraph development, mechanics, usage, spelling and vocabulary. Analysis of each student's strengths and weaknesses.

1002 COMMUNICATION SKILLS II

5 Clock Hours — 3 Credit Hours

A continuation of Communication Skills I, stressing reading improvement, both rate and comprehension.

1004 (A) TECHNICAL WRITING

3 Clock Hours — 2 Credit Hours

Informal and formal written reports. Techniques for collecting and presenting data, particularly as they apply to industry.

1005 (A) EFFECTIVE SPEAKING

3 Clock Hours — 2 Credit Hours

Organization, development and presentation of general speeches with emphasis on the oral report as a form of business and/or industrial communication.

1007 EXPOSITORY WRITING

5 Clock Hours — 3 Credit Hours

Organization and development of expository compositions, stressing logical and fallacious reasoning.

1161 MATHEMATICS FOR PRINTERS

5 Clock Hours — 4 Credit Hours

An introduction to printers' units of measure from the standpoint of the composing room, pressroom and the offset lithographic department.

Problems concerning calculation of weights of paper and quantity of paper needed to produce particular projects.

1401 LAYOUT AND DESIGN

2 Clock Hours — 2 Credit Hours

Principles of printing design and art work. Conventional layout, modern layout, type design, color usage, scaling photographs and art work, copy preparation for camera, newspaper layouts, designing folders, broadsides and booklets.

1402 TYPOGRAPHY

10 Clock Hours — 4 Credit Hours

History of the alphabet; evolution and development of movable type. Selection of proper type styles and sizes. Study and comparison of metal type and cold type. Methods of type setting—hand and machine composition. Copyfitting of text matter to space allocation. Basic requirements of hot metal, punched tape for cold composition (photographic and strike-on composition), hot metal and cold type display composition.

1405 PROOFREADING AND COPY PREPARATION

2 Clock Hours — 2 Credit Hours

Checking the typesetter's work; use of special symbols to mark changes, corrections, additions, or eliminations. How to check copy for errors. Duties of the proofreader and the copyholder. Reference books for the proofreader. Rules of syllabication of words. Acquiring speed and accuracy in proofreading.

1410 MACHINE COMPOSITION

10 Clock Hours — 4 Credit Hours

An extended study of various typesetting machines, both magnetic tape controlled and punched tape controlled, utilizing hot metal, photographic, and strike-on machines. Analysis, evaluation and recommendations based on individual research in order to select the best method for a particular kind of work. The basic operations of manually operated machines are also investigated.

1415 GRAPHIC ARTS PROCESSES

2 Clock Hours — 2 Credit Hours

Development and evaluation of printing devices. Graphic arts processes in use today—letterpress, gravure, flexographic, offset and silk screen presses; newspaper and rotary presses. How they work, and the kinds of work for which they were designed.

1419 SURVEY OF GRAPHIC COMMUNICATIONS I

3 Clock Hours — 3 Credit Hours

Descriptions and discussions concerning the various forms of printing and reproducing copies to include letterpress, lithography, gravure, silk screen and others. New forms of printing such as dry offset and screenless halftone printing will be studied with emphasis on the feasibility of implementation of such systems into present systems.

1420 ELECTRONIC PROCESSES

2 Clock Hours — 2 Credit Hours

The use of electronics, computers, and tape operated controls. Use of precise measuring instruments, darkroom instruments, pressroom and quality control equipment.

1421 COLD TYPE PROCESSES

10 Clock Hours — 3 Credit Hours

Classification of cold type devices—hand assembled paper or plastic alphabets, dry transfer fonts; keyboarded text—on paper machines; keyboarded phototypesetting; photo-lettered displays. Principles and operation of various keyboards.

1428 SURVEY OF GRAPHIC COMMUNICATIONS II

3 Clock Hours — 3 Credit Hours

Continuation of Graphic Communications 1419.

1430 PRESSWORK

10 Clock Hours — 4 Credit Hours

Survey and justification studies of press equipment to assist in suggesting capital expenditures for future growth and replacement cycles for letterpress, offset, and flexographic systems. Press usage and depreciation methods, replacement policies.

1440 OFFSET PRESS OPERATION

15 Clock Hours — 5 Credit Hours

Techniques of operation and control, study of various moistening systems, comparison of wet and dry forms of lithography. Plate comparisons to include wipe on, presensitized, albumin surface, deep etch, bi-metal, tri-metal, dycril and other synthetics, grained and grainless. Understanding the required adjustments necessary for top quality printing.

1450 ESTIMATING

5 Clock Hours — 2 Credit Hours

Determine job costs; elements of job costs—labor, materials, burden, profit and markup. Conversion of manuscript copy to specific type sizes and styles. Characteristics and types of paper; paper sizes; selection and purchase of paper; determining proper cuts from mill size sheets; use of manufacturers' catalogues and price books.

1451 COOPERATIVE EMPLOYMENT PROGRAM
1452 2-3 Credit Hours Each Term
1453
1454 On an alternating term basis, the student is placed
1455 on a full-time (32-40 hours) job that relates to his class work. This affords the student the opportunity to make practical application of the knowledge and skills acquired in his class work.

With each succeeding co-op term, the student is able to assume more responsibility and perform higher level duties on the job, because of what he has learned from the previous term(s) of employment and the added knowledge and skills acquired in each school term.

1460 BINDERY METHODS AND PROCEDURES

5 Clock Hours — 3 Credit Hours

Drilling, stitching and cutting. Investigations into the more complex operations of page imposition, automatic signature assembly and book finishing. Automatic tape operated cutters demonstrated and explained. Automatic folders with pile feed and continuous feed.

1480 PHOTOLITHOGRAPHY I

5 Clock Hours — 3 Credit Hours

Types and uses of photocopy and process cameras. General and special use films. Darkroom techniques. Detailed investigation of policies, principles and systems for wet offset and dry offset processes —sheet fed and web fed. Electronic computer controls over basic systems and automation of present machinery. Study of improved methods and use of auxiliary devices. Recommendations and reports to management for improvements.

1481 PHOTOLITHOGRAPHY II

5 Clock Hours — 3 Credit Hours

Continuation of Photolithography I.

1506 HUMAN RELATIONS

3 Clock Hours — 3 Credit Hours

Human behavior individually and in groups. Supervisory relationships.

1512 ECONOMICS I

3 Clock Hours — 3 Credit Hours

An introductory study of the analysis and application of basic economic theory as applied to the problems of labor and industrial relations. Income and spending of the aggregate of individuals, business firms, and various levels of government. Money, commercial and central banking. Price levels and inflation. The role of the national government in fiscal and monetary policy in a private enterprise economy. Current economic issues introduced and analyzed.

1513 ECONOMICS II

3 Clock Hours — 3 Credit Hours

An introductory study of the pricing and allocation mechanism of the classical market economy using the theory and analysis of supply and demand on an individual basis in the determining of the nature of production, consumption, and distribution of the national output. International trade, the balance of payments, economic growth and development and comparative economic systems.

1520 INTRODUCTION TO SOCIOLOGY

5 Clock Hours — 4 Credit Hours

A study of fundamental sociological concepts involving socialization, culture, social deviation, social institution, race and ethnic relations and social problems and policy.

1823 BUSINESS LAW I

5 Clock Hours — 3 Credit Hours

Treatment of fundamental principles of business law, including contracts, negotiable instruments, and agencies.

2261 PRINTING SCIENCE I (Chemistry)

5 Clock Hours — 3 Credit Hours

Basic chemical principles as they relate to definite applications in printing.

The chemistry of process photography and platemaking. Chemical basis of offset lithography. The chemistry of paper making.

2262 PRINTING SCIENCE II (Physics)

5 Clock Hours — 3 Credit Hours

Basic principles of work, energy, time, electricity, heat, magnetism, light and illumination, as they relate to printing. Laboratory experience in the application of principles.

2911 PRINCIPLES OF ACCOUNTING I

5 Clock Hours — 3 Credit Hours

Principles and practices of basic accounting with practical application as related to other fields of business.

2916 COST ACCOUNTING FOR THE PRINTING INDUSTRY

5 Clock Hours — 3 Credit Hours

Introduction to cost accounting principles as they apply to the printing and graphic arts industry. Accounting for materials. Labor, factory burden, job cost accounting, process cost principles and procedures, estimated costs, standard costs principles and procedures.

MECHANICAL DESIGN TECHNOLOGY

MECHANICAL DESIGN TECHNOLOGY

As the American economy expands, each new product passes through various design and development stages. To achieve the effective use of engineering talent, design departments are usually organized on a team basis. The mechanical design technician is an important member of that team.

Engineers can communicate verbally, or through rough sketches, with mechanical design technicians who clarify specifications and prepare initial drawings. From these specifications and initial drawings, detail draftsmen prepare working drawings which are used to produce the new product.

Cincinnati Technical Institute Mechanical Design students co-op with companies which produce machine tools, air conditioning equipment, jet engines, and many other types of industrial and consumer products. Recognizing the increasing complexity of these industries, the Cincinnati Technical Institute provides the equipment and instruction necessary to familiarize the student with computerized numerical control processes, data processing to control the retrieval of drawings microfilmed in aperture cards, and other facets of automation significant to the mechanical design field.

The curriculum offers all the technical core courses necessary for success as a mechanical design technician, and management courses (job relations, supervision, etc.) which support personal growth and development.

Working directly with key management personnel, the mechanical design technician is in an excellent position for continued advancement.

MECHANICAL DESIGN TECHNOLOGY

CURRICULUM

	Class Hours	Lab Hours	Credit Hours
First School Term			
1001 Communication Skills I	5	-	3
1171 Technical Mathematics I	5	-	4
2271 Physics	3	2	3
2101 Engineering Materials	2	3	3
1371 Engineering Graphics	5	5	5
			18
First Co-op Term			
2151 Cooperative Employment	-	40	2
			2
Second School Term			
1511 Principles of Economics	5	-	4
1172 Technical Mathematics II	5	-	4
1372 Engineering Graphics II	2	3	2
2102 Machine Tools	2	3	2
2103 Manufacturing Processes	2	3	3
2272 Physics II	2	3	3
			18
Second Co-op Term			
2152 Cooperative Employment	-	40	2
			2
Third School Term			
1003 Communication Skills II	5	-	3
1173 Technical Mathematics III	5	-	4
1514 Industrial Organization	5	-	2
2273 Physics III	3	2	3
Hydraulics and Pneumatics	3	2	3
2105 Strength of Materials	4	1	3
			18

MECHANICAL DESIGN TECHNOLOGY

CURRICULUM

		Class Hours	Lab Hours	Credit Hours
Third Co-op Term				
2153	Cooperative Employment	-	40	3
				3
Fourth School Term				
1004	Technical Writing	5	-	3
1174	Technical Mathematics IV	5	-	4
1504	Industrial Psychology	5	-	4
2106	Machine Design	8	2	4
2108	Systems Development and Design	5	-	3
				18
Fourth Co-op Term				
2154	Cooperative Employment	-	40	3
				3
Fifth School Term				
1005A	Effective Speaking	3	-	2
1531	American Government	3	-	3
2107	Thermodynamics	3	2	3
2109	Machine Design II	7	3	4
2110	Engineering Laboratory	2	3	3
2111	Tool and Die Design	3	2	3
				18
Fifth Co-op Term				
2155	Cooperative Employment	-	40	3
				3

MECHANICAL DESIGN TECHNOLOGY

ADVISORY COMMITTEE

Glenn Ashley, ... Cincinnati Milling
Supervisor of Technical Drawing Machine Company

Donald Blaney, ... General Electric Co.
Director of Apprentice Training

Robert A. Bowen, ... Cincinnati Chamber
Director of Human Relations of Commerce

Kenneth Hagedorn, ... Cincinnati Gas and
Coordinator-Employment Office Electric Company

Theodore Herklotz, ... Cincinnati Public Schools
Associate Supervisor

Werner Jessen, ... Alexander and Associates
President

Ben Kearns, ... Keco Industries
Chief Draftsman

Robert J. Keller, ... R. K. LeBlond
Drafting Trainee Supervisor Machine Tool Company

Russell Little, ... Little Design Engineering Company
Owner

Ron McDaniel, ... McCleod Company
Chief Draftsman

Don Suer, ... Plastic Molding, Inc.
Chief Engineer

James Wyler, ... Allis-Chalmers
Manager of Community Relations and
Professional Placement

MECHANICAL DESIGN TECHNOLOGY

COURSE DESCRIPTIONS

1001 COMMUNICATION SKILLS I

5 Clock Hours — 3 Credit Hours

Syntax, paragraph development, mechanics, usage, spelling and vocabulary. Analysis of each student's strengths and weaknesses.

1003 COMMUNICATION SKILLS III

5 Clock Hours — 3 Credit Hours

Continuation of Communication Skills I, stressing expository writing.

1004 TECHNICAL WRITING

5 Clock Hours — 3 Credit Hours

Informal and formal written reports. Techniques for collecting and presenting data, particularly as they apply to industry. Some work with business letters.

1005A EFFECTIVE SPEAKING

3 Clock Hours — 2 Credit Hours

Organization, development, and presentation of general speeches with emphasis on the oral report as a form of business communication.

1171 TECHNICAL MATHEMATICS I

5 Clock Hours — 4 Credit Hours

Review and extension of high school mathematics. Designed to bridge the gap between a weak mathematical foundation and the knowledge needed for the study of mathematics for technical courses. To include: functional notations, systems of linear equations, quadratic and cubic equations, exponents and logarithms, etc.

1172 TECHNICAL MATHEMATICS II

5 Clock Hours — 4 Credit Hours

Plane trigonometry. Angles and trigonometric ratios. Identities, equations and approximations. Trigonometry applied to mensuration.

1173 TECHNICAL MATHEMATICS III

5 Clock Hours — 4 Credit Hours

Continuation of Technical Mathematics II. Combination of college algebra and trigonometry. Emphasis on translation of engineering problems into mathematical terms. Trigonometric and algebraic background necessary in alalytic geometry and calculus. Series and complex numbers. Binominal theorem and expansion.

1174 TECHNICAL MATHEMATICS IV

5 Clock Hours — 4 Credit Hours

Analytic geometry and Calculus I. Derivatives, antiderivatives, integrals, differentials. Emphasis on application. Plane analytic geometry or coordinate geometry, parametric equations, the parabola, ellipse, and hyperbola.

1371 ENGINEERING GRAPHICS I

10 Clock Hours — 5 Credit Hours

Techniques and functions of drafting. Use of technical terms, modern drafting equipment, sections, multi-view projection and basic reference materials. Development of individual skills and techniques.

1372 ENGINEERING GRAPHICS II

5 Clock Hours — 2 Credit Hours

Advanced study in field drawing.

1504 INDUSTRIAL PSYCHOLOGY

5 Clock Hours — 4 Credit Hours

Behavior in business and industry. Behavior of workers, management, and consumers. Direct application of psychological principles to assist with inter-personal problems. Techniques include role playing and case studies.

1511 PRINCIPLES OF ECONOMICS

5 Clock Hours — 4 Credit Hours

Basic economics with attention given to central problems of price, competition and money; supply and demand; business organizations; firm and family income, labor and industrial relations; government and the economy; gross national product; relationship of income to expenditures; business cycles.

1514 INDUSTRIAL ORGANIZATION

5 Clock Hours — 2 Credit Hours

History, characteristics, and productivity of modern manufacturing in the United States. Manufacturing processes, plant location and equipment, manufacturing control, purchasing production planning, quality, etc.

1531 AMERICAN GOVERNMENT

3 Clock Hours — 3 Credit Hours

A survey of the fundamental structure and operations of federal, state and local governments.

2101 ENGINEERING MATERIALS

5 Clock Hours — 3 Credit Hours

Metallic, organic and inorganic non-metallic substances. Testing, uses, and fabrication of these materials. Emphasis on testing procedures and interpretation of test data. Introduction to stress and strain. Use of various testing machines.

2102 MACHINE TOOLS

5 Clock Hours — 3 Credit Hours

Instruction in the operation and application of drill press, lathe, shaper, milling machine, grinder, etc.

2103 MANUFACTURING PROCESSES

5 Clock Hours — 3 Credit Hours

Powder metallurgy, cermets, carbide, electrochemical, electrical discharge, and electrolytic grinding. Duplicating and automatic metal working machines. Sheet metal working, fabricating, welding. Tool and die procedures.

2104 HYDRAULICS AND PNEUMATICS

5 Clock Hours — 3 Credit Hours

Basic principles of hydraulics and pneumatics. Distribution and control. Application of fluid mechanics, including pressure, density and viscosity. Basic physical laws governing fluids and gases. Application in design circuits and systems.

2105 STRENGTH OF MATERIALS

5 Clock Hours — 3 Credit Hours

Effects of forces and stresses on materials in various forms and configurations found in engineering and mechanical constructions. Use of elementary mathematics in analyzing forces, stresses, moments and equilibrium by use of such factors as moment of inertia, radius of gyration; and centroids. Determination of dimensions and material specifications.

2106 MACHINE DESIGN I

10 Clock Hours — 4 Credit Hours

Principles of mechanics and strength of materials as applied to components of mechanisms and power trains as well as beams, pressure vessels, and other bodies under static load. Shafts, gears, couplings, threaded units, and riveted constructions are treated in detail.

2107 THERMODYNAMICS

5 Clock Hours — 3 Credit Hours

Work, temperature and heat. First and second laws of thermodynamics. Processes involving the control or use of energy. Relationship among gaseous, liquid, and solid states. Analysis of heat transfer as encountered in machine members.

2108 SYSTEMS DEVELOPMENT AND DESIGN

5 Clock Hours — 3 Credit Hours

The "automation revolution". Numerical control equipment. Automated production techniques. Cybernetics. Design and development of automated systems.

2109 MACHINE DESIGN II

10 Clock Hours — 4 Credit Hours

A continuation of Machine Design I. Detailed study of jig and fixture design. Emphasis on application of design theory.

2110 ENGINEERING LAB

5 Clock Hours — 3 Credit Hours

Laboratory problems. Performance tests conducted on various machines as studied in hydraulics, thermodynamics, strength of materials, etc.

2111 TOOL AND DIE DESIGN

5 Clock Hours — 3 Credit Hours

A comprehensive study and analysis of cutting, forming, and drawing sheet metal, using modern tools and dies. Application of mathematics and mechanics to determine forces and stresses occuring in these metal working operations. Provides experience of designing a die to produce a simple sheet metal product.

2151 COOPERATIVE EMPLOYMENT PROGRAM
2152
2153 2-3 Credit Hours Each Term
2154
2155 On an alternating term basis, the student is placed on a full-time (32-40 hours) job that relates to his class work. This affords the student the opportunity to make practical application of the knowledge and skills acquired in his class work.

With each succeeding co-op term, the student is able to assume more responsibility and performs higher level duties on the job because of what he has learned from the previous term(s) of employment and the added knowledge and skills acquired in each school term.

2271 PHYSICS I

5 Clock Hours — 3 Credit Hours

Introduction to mechanics. Concepts of motions (kinetics). Particles, rigid bodies, laws of force and motion, type of motion, impulse and momentum, mechanical vibrations, Statics-force system. Components, resultants, equivalence, equilibrium and center of gravity. Laws of friction and moments.

2272 PHYSICS II

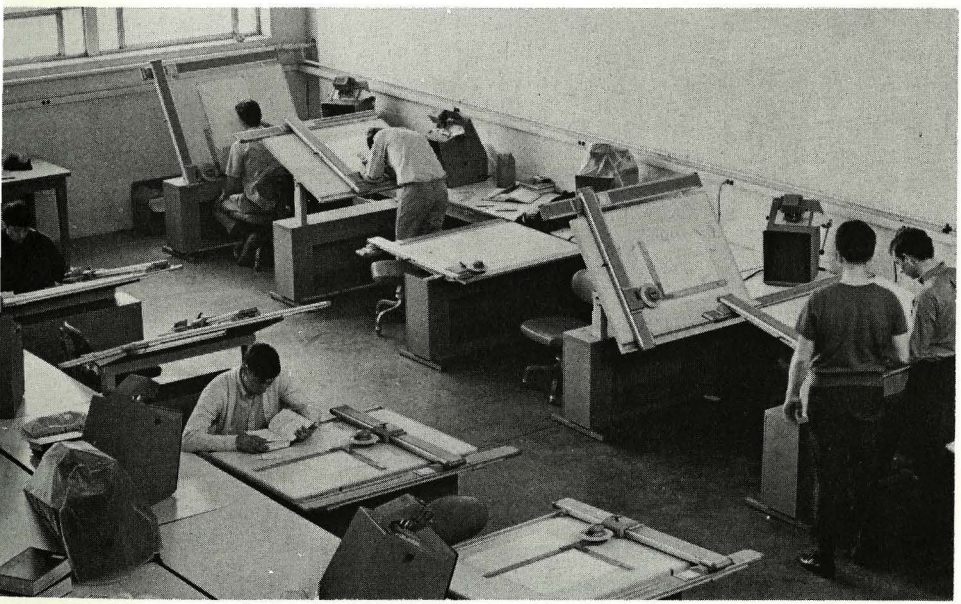
5 Clock Hours — 3 Credit Hours

Continuation of Physics I with emphasis on application of statics. To include introduction to concepts of quantum theory. Development and need for quantum theory. Wave equation. Periodic potentials and the solid state.

2273 PHYSICS III

5 Clock Hours — 3 Credit Hours

Introduction to principles of electricity and magnetism. Charge, field, and potential. Electrostatic and electro-dynamic energy. Direct and alternating currents. Magnetic fields. Emphasis on physical concepts.



Mechanical Design students absorbed in classroom work.

SALES MARKETING TECHNOLOGY

SALES MARKETING TECHNOLOGY

Nationally, the field of sales-marketing generates more income than any other profession. Eighty percent of those who earn more than $20,000 a year are directly engaged in sales-marketing.

In the Sales Marketing department at Cincinnati Technical Institute, small classes, an approach which presupposes adult attitudes, and expert guidance, instruction and coordination, all focus on a single objective: developing talent for the sales-marketing professions. Advertising, display, sales promotion, market research analysis, mid-management supervision, data processing, accounting, and other studies develop the attitudes and skills necessary for success.

The business-industrial community in Cincinnati provides a unique laboratory in which Sales Marketing students acquire their cooperative employment experience. Greater Cincinnati is such a diverse marketing complex that this area is used by many national agencies for market research. The kinds of cooperative employment presently held by Sales Marketing students are as varied as the marketing area itself.

On-the-job training is not a substitute for the critical analysis and careful exposition undertaken in school; nor is schooling a substitute for field experience. The Cincinnati Technical Institute cooperative employment system offers both in the proper proportions for optimum personal and professional growth.

SALES MARKETING TECHNOLOGY CURRICULUM

■ First School Term	Class Hours	Lab Hours	Credit Hours
1001 Communication Skills I	5	-	3
1101 Business Mathematics I	5	-	4
1512 Economics I	3	-	3
1811 Salesmanship I	2	-	2
2901 Principles of Marketing I	5	-	2
2921 Introduction to Business I	5	-	2
			16

■ First Co-op Term			
1851 Cooperative Employment	-	40	2
			2

■ Second School Term			
1002 Communication Skills II	5	-	3
1102 Business Mathematics II	5	-	4
1513 Economics II	3	-	3
1812 Salesmanship II	2	-	2
2902 Principles of Marketing II	5	-	2
2922 Introduction to Business II	5	-	2
			16

■ Second Co-op Term			
1852 Cooperative Employment	-	40	2
			2

■ Third School Term			
1007 Expository Writing	5	-	3
1505 General Psychology	3	-	3
1832 Personnel Management	5	-	3
1842 Advertising and Display	5	-	3
1833 Business Statistics	5	-	4
1844 Retailing I	2	-	2
			18

SALES MARKETING TECHNOLOGY

CURRICULUM

■ Third Co-op Term	Class Hours	Lab Hours	Credit Hours
1853 Cooperative Employment	-	40	3
			3

■ Fourth School Term			
1006 Technical Writing	5	-	3
1803 Case Studies (Retail)	5	-	3
1813 Management I	2	-	2
1823 Business Law I	5	-	3
1834 Wholesaling	2	-	2
2911 Accounting I	5	-	3
			16

■ Fourth Co-op Term			
1854 Cooperative Employment	-	40	3
			3

■ Fifth School Term			
1005 Effective Speaking	2	-	2
1506 Human Relations	3	-	3
1798 Survey of Data Processing	2	-	2
1814 Management II	2	-	2
1823 Business Law II	5	-	3
1835 Case Study (Wholesaling)	5	-	3
2912 Accounting II	5	-	3
			18

■ Fifth Co-op Term			
1855 Cooperative Employment	-	40	3
			3

SALES MARKETING TECHNOLOGY

ADVISORY COMMITTEE

Robert Davis, ... Swallen's Discount Incorporated
Employment Manager

Ralph Estes, ... Self-Employed
Sales Consultant

Nel Faust, ... Shillito's
Training Director

Richard Kuck, ... Cincinnati Chamber of Commerce
Advertising Manager

Richard Mashburn, ... Coca-Cola Bottling Works
Personnel Manager

Jack Overback, ... Kroger Company
Employment Manager

John Roman, ... South-Western Publishing Co.
Special Projects Coordinator

Albert Schaefer, ... H & S Pogue Co.
Personnel Manager

James Schroeder, ... Mutual Mfg. Co.
Personnel Manager

Floyd Shorts, ... Brendamour's Sporting Goods
Sporting Goods - Sales

SALES MARKETING TECHNOLOGY

COURSE DESCRIPTIONS

1001 COMMUNICATION SKILLS I

5 Clock Hours — 3 Credit Hours

Syntax, paragraph development, mechanics, usage, spelling and vocabulary. Analysis of each student's strengths and weaknesses.

1002 COMMUNICATION SKILLS II

5 Clock Hours — 3 Credit Hours

A continuation of Communication Skills I, stressing reading improvement, both rate and comprehension.

1005A EFFECTIVE SPEAKING

3 Clock Hours — 2 Credit Hours

Organization, development and presentation of general speeches with emphasis on the oral report as a form of business and/or industrial communication.

1006 TECHNICAL WRITING (BUSINESS)

5 Clock Hours — 3 Credit Hours

Business letters with emphasis on various types according to their purposes. Some work with informal and formal reports.

1007 EXPOSITORY WRITING

5 Clock Hours — 3 Credit Hours

Organization and development of expository compositions, stressing logical and fallacious reasoning.

1101 BUSINESS MATHEMATICS I

5 Clock Hours — 4 Credit Hours

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.

1102 BUSINESS MATHEMATICS II

5 Clock Hours — 4 Credit Hours

Application of mathematics to trade discounts, markons, commissions, installment charges, freight expenses, corporate earnings, stocks and bonds, insurance, taxes, loans, and data processing systems of billing and inventory.

1505 GENERAL PSYCHOLOGY

3 Clock Hours — 3 Credit Hours

A scientific study of human behavior with emphasis on motivation, learning, individual differences, and personality.

1506 HUMAN RELATIONS

3 Clock Hours — 3 Credit Hours

Human behavior individually and in groups. Supervisory relationships.

1512 ECONOMICS I

3 Clock Hours — 3 Credit Hours

An introductory study of the analysis and application of basic economic theory as applied to the problems of labor and industrial relations. Income and spending of the aggregate of individuals, business firms, and various levels of government. Money, commercial, and central banking. Price levels and inflation. The role of the national government in fiscal and monetary policy in a private enterprise economy. Current economic issues introduced and analyzed.

1513 ECONOMICS II

3 Clock Hours — 3 Credit Hours

An introductory study of the pricing and allocation mechanism of the classical market economy using the theory and analysis of supply and demand on an individual basis in the determining of the nature of production consumption, and distribution of the national output. International trade, the balance of payments, economic growth and development and comparative economic systems.

1798 SURVEY OF DATA PROCESSING

2 Clock Hours — 2 Credit Hours

An overview of data processing and systems analysis.

1803 CASE STUDY (RETAIL)

5 Clock Hours — 3 Credit Hours

Individual projects and studies related to actual cases which provide opportunities for the student to develop better understandings of the principles of retailing as they are practically applied in retail stores in this community.

1811 SALESMANSHIP I

2 Clock Hours — 2 Credit Hours

The personal and economic aspects of selling. An overview of what is necessary for the individual to be successful in selling.

1812 SALESMANSHIP II

2 Clock Hours — 2 Credit Hours

Study of the selling process. A point by point observation of the steps of a sale and an introduction to industrial and wholesale selling.

1813 MANAGEMENT I

2 Clock Hours — 2 Credit Hours

Overview of the principles and practices of management.

1814 MANAGEMENT II

2 Clock Hours — 2 Credit Hours

Continuation of Management I. The psychology of management.

1823 BUSINESS LAW I

5 Clock Hours — 3 Credit Hours

Treatment of fundamental principles of business law, including contracts, negotiable instruments, and agencies.

1824 BUSINESS LAW II

5 Clock Hours — 3 Credit Hours

A continuation of Business Law I with a treatment of government regulations, trust, and insurance.

1832 PERSONNEL MANAGEMENT

5 Clock Hours — 3 Credit Hours

A look at the many facets of personnel mangement and its contribution to the employer.

1833 BUSINESS STATISTICS

5 Clock Hours — 4 Credit Hours

Fundamentals of statistics. Application of statistical-decision theory in business. Construction, use, and interpretation of statistical data. Probability theory, sampling distributions, risk and uncertainty. Marketing applications stressed.

1834 WHOLESALING I

2 Clock Hours — 2 Credit Hours

A comprehensive introduction to the wholesaling field in its many phases.

1835 CASE STUDY (WHOLESALE)

5 Clock Hours — 3 Credit Hours

Individual projects and studies related to actual cases which provide opportunities for the student to develop better understandings of the principles of wholesaling as they are practically applied in wholesale companies in this community.

1842 ADVERTISING AND DISPLAY

5 Clock Hours — 3 Credit Hours

Advertising media and their effects upon business. Practical applications of display theories as they relate to window and internal displays. Display and its relation to interior decorating and design.

1844 RETAILING I

2 Clock Hours — 2 Credit Hours

Designed to promote skills and attitudes necessary to achieve success in the important field of distribution.

1851 COOPERATIVE EMPLOYMENT PROGRAM
1852 2-3 Credit Hours Each Term
1853
1854 On an alternating term basis, the student is placed
1855 on a full-time (32-40 hours) job that relates to his class work. This affords the student the opportunity to make practical application of the knowledge and skills acquired in his class work.

With each succeeding co-op term, the student is able to assume more responsibility and perform higher level duties on the job because of what he has learned from the previous term(s) of employment and the added knowledge and skills acquired in each school term.

2901 PRINCIPLES OF MARKETING

5 Clock Hours — 2 Credit Hours

Details the principles and functions of marketing. The essential concepts of competition, demand, and the structure of distribution. The roles of marketing management and the marketing executives are emphasized.

2902 PRINCIPLES OF MARKETING II

5 Clock Hours — 2 Credit Hours

The analysis, interpretation, application, and forecasting of research findings in marketing management. The case study method is used in relating these techniques to actual marketing problems.

2911 PRINCIPLES OF ACCOUNTING I

5 Clock Hours — 3 Credit Hours

Principles and practices of basic accounting with practical application, as related to other fields of business.

2912 PRINCIPLES OF ACCOUNTING II

5 Clock Hours — 3 Credit Hours

A continuation of Principles of Accounting I. Permits the student to solve accounting problems in supervised accounting labs.

2921 INTRODUCTION TO BUSINESS I

5 Clock Hours — 2 Credit Hours

A broad concept of business and the development of an awareness of the economic framework which constitutes our capitalistic system.

2922 INTRODUCTION TO BUSINESS II

5 Clock Hours — 2 Credit Hours

Personnel functions, methods of finance, controls for decision making, and the legal and regulatory environment of business.

APPENDIX

RESIDENCE OF STUDENTS

The following rules of the Ohio Board of Regents and the Board of Trustees of the Cincinnati Technical Institute shall govern the assessing of student fees:

Residents of the Cincinnati Technical Institute District

(1) An adult student, twenty-one years of age or older, is considered to be a District resident if he has resided in the District for a minimum of twelve consecutive months preceding the date of enrollment and if he has an evident present intent to remain in the District indefinitely, provided that his residence in the District has not been for the purpose of attending a college or university. Teachers in the District schools and colleges shall be considered to have completed the twelve months' requirement when they have signed a contract for the second year of teaching.

(2) A minor student is considered to be a District resident if his parents or his legal guardian have resided in the District for a minimum of twelve consecutive months preceding the student's enrollment and if the parents' or guardian's residence during that year has been maintained with the evident present intent to remain in the District indefinitely, provided that such action has not been taken for the purpose of gaining residence status for the minor student.

(3) For the purpose of determining residence requirements under these rules, a person will be considered a minor until he has reached his twenty-first birthday even though such person may have been emancipated. An emancipated minor who is completely self-supporting, however, may be considered as an adult in determining residence, provided he presents satisfactory proof that his parents, if living, neither contribute to his welfare nor claim him as a dependent for Federal Income Tax purposes. Married minors and veterans also are entitled to establish and to maintain their own residence pursuant to section (1).

(4) The residence of a married woman is determined by the rules which would apply to her husband if he were to seek enrollment; except that a woman who would have been classified as a District resident immediately prior to her marriage to a nonresident of the District may continue to be classified as a District resident, provided that she continues to live in the District.

(5) A woman who is legally separated from her husband may establish her own residence pursuant to section (1).

(6) The resident of any student may be re-evaluated for each term of re-enrollment. At such time, any student who has not been classifed as a District resident, and requests to be so classified, must prove that he has met all requirements for District residence as stated in these rules.

(7) A student who has been classified as a District resident shall be considered to have lost his residence in this District twelve consecutive months after he or, in the case of a minor, his parents or legal guardian move(s) beyond the city limits with the intention of remaining there and making such location their place of residence, notwithstanding the fact that he or they may entertain an intention to return at some future period.

(8) Aliens admitted to this country on immigrant visas may establish District residence in the same manner as any other nonresidents. All aliens admitted to this country on student visas shall be classified as nonresident students.

(9) Service personnel who entered the service as residents of the District and their dependents shall be considered residents if they provide proof of continued District domicile such as evidence that (a) they have not acquired a domicile in another city and (b) they have maintained a continuous voting record in the District.

(10) Service men and women who enter the service from another city or state and their dependent children shall be classified as District residents during the period of their active duty assignments and domicile in the District.

Residents of the State of Ohio Outside of the Technical Institute District

(1) An adult student, twenty-one years of age or older, is considered to be an Ohio resident if he has resided in the state for a minimum of twelve consecutive months preceding the date of enrollment and if he has an evident present intent to remain in the state indefinitely, provided that his residence in Ohio has not been for the purpose of attending a college or university. Teachers in Ohio schools and colleges shall be considered to have completed the twelve months' requirement when they have signed a contract for the second year of teaching.

(2) A minor student is considered to be an Ohio resident if his parents or his legal guardian have resided in the state for a minimum of twelve consecutive months preceding the student's enrollment and if the parents' or guardian's residence during that year has been maintained with the evident present intent to remain in the state indefinitely, provided that such action has not been taken for the purpose of gaining residence status for the minor student.

(3) For the purpose of determining residence requirements under these rules, a person will be considered a minor until he has reached his twenty-first birthday even though such person may have been emancipated. An emancipated minor who is completely self-supporting, however, may be considered as an adult in determining residence, provided he presents satisfactory proof that his parents, if living, neither contribute to his welfare nor claim him as a dependent for Federal Income Tax purposes. Married minors and veterans also are entitled to establish and to maintain their own residence pursuant to section (1).

(4) The residence of a married woman is determined by the rules which would apply to her husband if he were to seek enrollment; except that a woman who would have been classified as an Ohio resident immediately prior to her marriage to a nonresident may continue to be classified as an Ohio resident, provided that she continues to live in the State of Ohio.

(5) A woman who is legally separated from her husband may establish her own residence pursuant to section (1).

(6) The residence of any student may be re-evaluated for each term of re-enrollment. At such time, any student who has not been classified as an Ohio resident, and requests to be so classified, must prove that he has met all requirements for Ohio residence as stated in these rules.

(7) A student who has been classified as an Ohio resident shall be considered to have lost his residence in this state twelve consecutive months after he or, in the case of a minor, his parents or legal guardian move(s) to another state with the intention of remaining there and making such state their place of residence, notwithstanding the fact that he or they may entertain an intention to return at some future period.

(8) Aliens admitted to this country on immigrant visas may establish Ohio residence in the same manner as any other nonresidents. All aliens admitted to this country on student visas shall be classified as nonresident students.

(9) Service personnel who entered the service as residents of Ohio and their dependents shall be considered residents if they provide proof of continued Ohio domicile such as evidence that (a) they have not acquired a domicile in another city and (b) they have maintained a continuous voting record in Ohio.

(10) Service men and women who enter the service from another city or state and their dependent children shall be classified as Ohio residents during the period of their active duty assignments and domicile in Ohio.

Responsibility of the Student

The burden of registering under proper residence is placed upon the student.

If there is any question of the student's right to claim legal residence in Ohio, an application for resident status must be presented to the Registrar at least five days prior to the day of registration.

Student fee assessments are subject to audit at any time throughout an enrollment period or the academic career of the student. Students who do not pay the appropriate sum within thirty days after they have been notified that the fee for nonresidence in the State of Ohio has been assessed against them will have their registrations in the Institute canceled.

CINCINNATI TECH