The application of electronics to problem solving and computing has expanded to many fields, such as business, medical, chemical, physical research, and automated industrial production. Nowhere are these changes more apparent than in the occupations associated with the handling of business, industrial, and scientific information. As a direct consequence, the educational requirements for many occupations have changed beyond that obtained in the general high school curriculum. The Electronic Data Processing Program at the Vocational-Technical Institute is designed to meet the expressed needs of business, industry and professional organizations for trained programming personnel in the field of data processing.

The series of courses offered in the Electronic Data Processing Program have been designed to prepare programmers and applications analysts. The programmer must first solve a problem himself, then prepare a series of instructions for electronic data processing machines so that the equipment can logically and systematically process the data that flows through it. The programmer tells the machines exactly what they must do in order to achieve the desired results. This series of instructions, when coded, or translated into machine language, is called the program.

**Career Opportunities**

The individual who wants to become a *Programmer* will be working with people, therefore he must possess imagination and ability to get along well with people. He must be able to think logically and accurately, he must enjoy solving complex problems. For those who are willing to put forth the effort to master the techniques, the future is unlimited. Many exciting new job opportunities are available for qualified graduates in the field of electronic data processing and advancement to management level responsibility is quite common in business and industry.
High School Preparation

High school students planning for a career in electronic data processing should get a good foundation in English, mathematics, science, and general business. Plane geometry is especially helpful in developing logical thought processes. However, students with quite varied high school backgrounds have become successful programmers. The important thing is to develop good study habits and a good scholastic record.

Course Offerings at the Vocational-Technical Institute

Students may select one of two options of specialization. The business data processing option which leads to the Associate in Business Degree and the industrial data processing option which leads to the Associate in Technology Degree.

The business option includes accounting courses and programming courses using business-type problems. The industrial option includes courses related to manufacturing processes and programming courses including problems involving numerically controlled machine tools.

Graduates from the program are qualified to (1) apply currently available programming techniques to a defined program with minimum supervision; (2) program and operate any particular computer with a minimum of orientation; (3) understand and master special techniques as the point of need occurs; and (4) communicate his properly documented programming decisions to personnel concerned.

Admission to the Program

A student must be officially admitted to the University before registering for classes. The student, to be permitted to attend classes at Southern Illinois University, must have completed registration, which includes admission, advisement, sectioning, and payment of fees.

Admission policies for undergraduate students are stated in the Undergraduate Catalog. Inquiries concerning admission should be directed to the Admissions Office at Carbondale. Applications for admission are accepted any time during the calendar year but should be initiated in ample time to permit the necessary work of processing to be completed.

Placement Services

The Vocational-Technical Institute works closely with the University's Placement Services for students and alumni. No charge is made for this service. Graduates are advised concerning employment opportunities in the fields for which they have studied and Placement Services endeavors to arrange interviews and placement which is satisfactory to both the employer and the graduate.

Graduation

The student should apply for graduation no later than the beginning of his last quarter. At this time his courses and grades are reviewed by the Registrar's Office to determine whether the requirements of the University have been met and by the Division of Technical and Adult Education office to determine whether the requirements for the Associate in Business degree have been met.

For further information write to:
E. J. Simon, Dean
Division of Technical and Adult Education
Southern Illinois University
Carbondale, Illinois 62901

CURRICULUM SERIES NUMBER 109C, issued by Central Publications, Southern Illinois University. This series is intended as a guide to prospective students of Southern Illinois University in choosing a career and selecting a course of study leading to the realization of a chosen career. Other folders in this new series will be issued intermittently and will be sent on request as they become available. Numerical coding will be followed by C (Carbondale Campus), E (Edwardsville Campus) for courses of study offered on one campus. Absence of C or E denotes offerings on both campuses. For additional copies of this series, class schedules, or other bulletins, write to Central Publications, Southern Illinois University, Carbondale, Illinois 62901.