

Your Career in Data Processing

automatic data processing — the growing need

We are engaged today in a new kind of revolution — a silent revolution to combat the monstrous explosion of paperwork necessary to maintain government and business. This is a revolution to reduce to significant and digestible terms the masses of information produced by modern society, a revolution against the toil and drudgery of meaningless, repetitive, and costly tasks in the office and the factory.

The silent revolution of Automatic Data Processing began with the electronic computer. Its implications for tomorrow are boundless, placing unique demands on the knowledge and skills of the people who use it. The growing need for career professionals who can advance the areas of application in which computers operate is diverse and far reaching.

While the operations jobs do not require the breadth of educational background or abstract logical ability necessary for systems and computer programming work, they do require a high level of manual dexterity, alertness, and practical thinking.



education and training

Every year, new courses in Data Processing are offered by high schools, business schools, colleges, and universities. A number of technical high schools and colleges offer this type of training, usually within their business departments. Training for operating jobs in the computer or tabulating department and for keypunch jobs is offered mainly by private business schools. Some of these schools also are expanding their offerings to include computer programming classes.

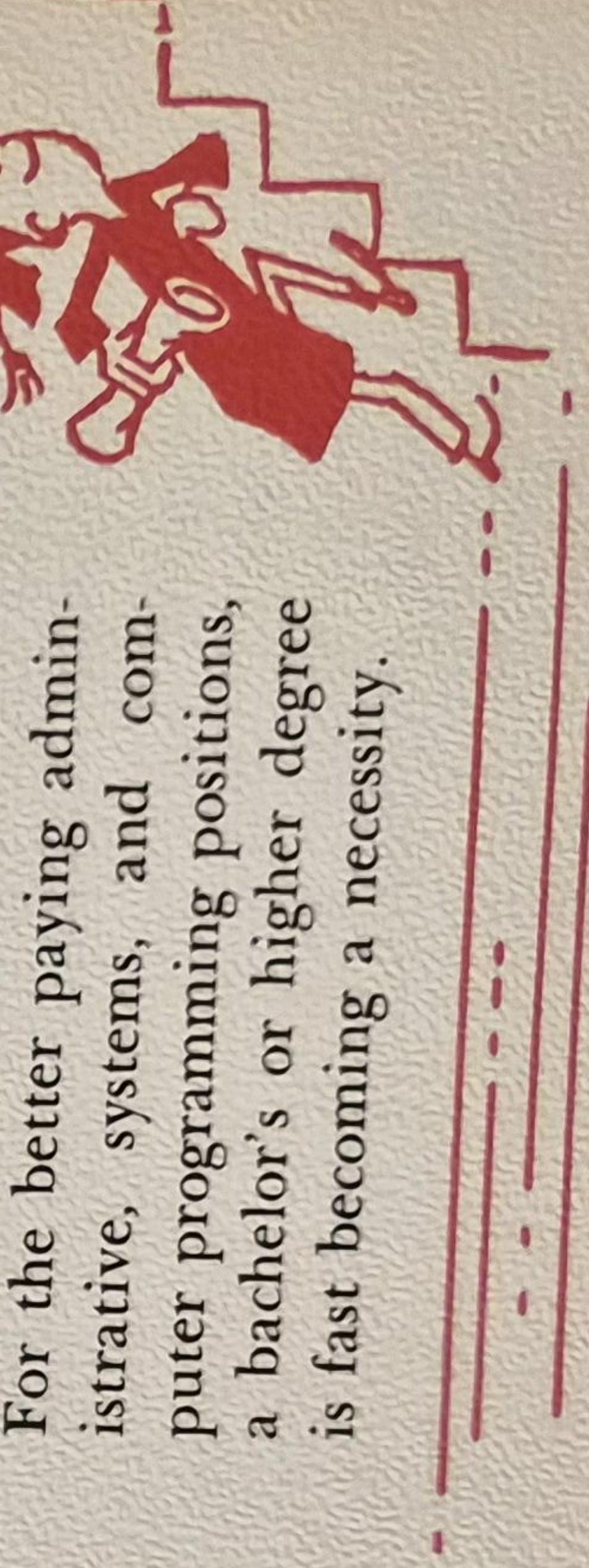
Data Processing courses usually are found within the departments of business, engineering, or mathematics. Full two-year college curricula in business data processing are offered by an increasing number of junior colleges. Some four-year institutions have bachelor's degree programs, and a growing number of graduate schools offer master's and doctor's degrees with majors in computer sciences and business data processing.

what is data processing

Data Processing is an age-old function. Its object is very simple: to take facts and figures (input) and to work on them (process) to create useful information (output). In addition, this information must be filed and available on request.



In business and government, records are vital. To store records compactly, to locate them easily, and to keep them accurate and up-to-date are monumental problems for many organizations.



For the better paying administrative, systems, and computer programming positions, a bachelor's or higher degree is fast becoming a necessity.

Just as important as record-keeping is the control of information in an organization. Managers need information in order to make decisions, and this requires "feedback" of information in time to change the course of events, if necessary. If information does not reach a manager while it is still current, it is of little value. If it is not accurate, his decisions cannot be accurate.

In earlier days, this function was performed with paper and pencil. It was not until the introduction of punched card equipment by U. S. Census Department in 1890 that large scale automation of data processing became feasible. After World War II, the electronic

computer emerged as our most powerful tool to reduce clerical costs, maintain current and accurate records, solve highly complex engineering and research problems, and provide timely information for management decision-making.



Data Processing Managers plan, coordinate, and direct the data processing activities for the organization, supervising computer centers and punched card installations. They must possess high managerial as well as technical skills.

Systems Analysts must develop ordered methods for data collection, processing, and reporting. Their objective is to improve data processing efficiency making the best use of available equipment.



Computer Programmers work closely with systems analysts to define problems, analyze the input data and output report requirements, and prepare a program of instructions which the computer can follow to solve the problems. The highly abstract nature of systems and programming work requires strong logical and creative abilities.

who are the data processors

Computers and punched card equipment do not perform their tasks magically. They require step-by-step human guidance. This calls for the combined talents of a team of data processing managers, programmers, and systems analysts. Behind them, a whole echelon of operating personnel must control the day to day "care and feeding" of the equipment itself. Most of these jobs were unheard of 20 years ago. Some of the promising ADP career positions for which skilled persons are needed include:



Operating personnel are responsible for the smooth day-to-day operation of the machines. Keypunch operators transcribe data from original documents to punched cards. Tabulating operators transfer and control the cards being processed by unit record (punched card) machines. Computer operators load programs into the machine, and monitor the computer console for possible errors.



prepare now for your future



Obviously, there is a place in Data Processing for many types of ability and aptitude. Young women, as well as men, are finding a new world of opportunity in computer programming and systems analysis, as well as the more traditional keypunching and tabulating jobs.

A whole new profession is emerging and the future will belong to those who are technically prepared to handle the increasingly complex tasks that lie ahead.

The constant introduction of new devices and techniques will affect everyone's plans for the future. Those who plan to pursue Data Processing as a career, will find an exciting challenge.

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