

## APPLICATIONS PROGRAMMER I

This is technical work in the performance of applications programming activities in microcomputer, minicomputer, and/or mainframe environments at large computer centers, state agencies, and university departmental or school facilities devoted to business, administrative, research, academic, or scientific computation.

Under the direction of a technical or administrative supervisor, employees independently develop less complex computer programs, or develop more complex computer programs from detailed specifications provided by higher level programmers, department heads, or researchers. Employees detail user instructions and perform related work as required.

### I. DIFFICULTY OF WORK:

Variety and Scope - Employees are responsible for determining, developing, and documenting a logical flow of program instructions; coding the program instructions using a programming language; testing the program product; and debugging the program. Programming assignments are for a variety of applications in administrative, academic, or research settings. The exclusive use by a position of menu-driven software packages in a report-generating context would not warrant allocation to the class. Employees may provide program clarification to users and, in academic and research settings, may work more closely with users in defining program parameters and data needs.

Intricacy - Work involves the design and maintenance of programs with a limited number and type of files used and less variety of input/output devices required than is seen at the Applications Programmer II level. -Work entails the use of fewer variables and may require less knowledge of the intricacies of the programming language(s) used. Work requires the use of less complex data processing tools and a less extensive role in program decision-making.

Subject Matter Complexity - Work requires an understanding of programming languages) and logic. Employees may be required to be familiar with a user's administrative, academic, research, or scientific field of work.

Guidelines - Guidelines include programming language references, computer hardware and operating system specifications, applications documentation, and detailed specifications of the goals, objectives, and intent of the assigned application. Guidelines are applicable to most situations.

### II. RESPONSIBILITY:

Nature of Instructions - Employees receive applications specifications and output instructions as programs are assigned. Specifications and instructions are more detailed for more complex programs or new situations or features.

Nature of Review - Work is performed independently following the detailed specifications provided with problems being discussed with the supervisor or other technical staff. Programs are tested and debugged upon completion. Program documentation-and user guides are drafted for review by the supervisor.

Scope of Decisions - Employees determine the logic flow and develop program code for administrative, academic, research, or scientific users. The programs generate output data essential to user needs and may impact on other interrelated, programs.

Consequence of Decisions - Errors in the determination of the program logic and code impact on the accuracy and completeness of the output of the program. Errors could result in some delay in fulfilling user needs for information.

### III. INTERPERSONAL COMMUNICATIONS:

Scope of Contacts - Employees may have contact with users and/or other data processing professionals.

Nature and Purpose - Contact with users is to clarify program usage. Contact with other data processing personnel is to discuss specifications or programming technique.

### IV. OTHER WORK DEMANDS:

Work Conditions - Work is performed in an office setting and requires the use of data processing equipment.

Hazards - Employees are not exposed to workplace hazards.

### V. JOB REQUIREMENTS:

Knowledges, Skills, and Abilities - Working knowledge of programming techniques, the appropriate programming language(s), operating systems, and the capabilities and limitations of computer and peripheral equipment. Ability to understand operations and organize component parts into a logical system. Ability to communicate effectively in oral and written form. Ability to establish and maintain effective working relationships.

Minimum Education and Experience - Graduation from a four-year college or university with nine semester hours in computer programming; or graduation from a two-year college with a degree in data processing; or an equivalent combination of education and experience.

Degrees must be received from appropriately accredited universities.

Special Note: This is a generalized representation of positions in this class and is not intended to identify essential functions per ADA. Examples of work are primarily essential functions of the majority of positions in this class, but may not be applicable to all positions.