APPLICATIONS PROGRAMMER II

This is technical work in the performance of complex 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 complex computer applications programs, contact users to clarify program capabilities, develop documentation and user guides, and perform related work as required. Work is distinguished from the Applications Programmer I by the complexity and intricacy of programming assignments, independence of professional judgments, and scope of user contacts.

I. DIFFICULTY OF WORK:

Variety and Shoe - 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; debugging the program; and producing program documentation. Programming assignments are for a variety of applications in administrative, academic, and research settings. Employees may have-user contact to clarify program capabilities and, in academic, research, or scientific environments, may have user contact to define program intent. The exclusive use by a position of menu-driven software packages in a report-generating context would not warrant allocation to the class.

Intricacy - In administrative computing environments, work involves the design and maintenance of applications programs with multiple input and output files. Programs use a larger number and variety of files and require a greater depth of programming knowledge than is seen at the Applications Programmer I level. In academic or research environments, applications programming may involve evaluating data previously collected and making significant program changes in order to collect additional variables and/or to report statistically valid data from two or more seemingly inconsistent files. Programming problems have a large number of potential solutions and require the consideration of multiple variables. Programs involve the complex matching of transactions to master records, intricate file updating, extensive calculations, and comprehensive reporting.

Subject Matter Complexity - Work requires a complete understanding of the capabilities of programming language(s) and an understanding of programming logic. Employees are 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 general specifications of the goals, objectives, and intent of the assigned application. Administrative or academic departmental policies and procedures may augment standard programming guidelines. Guidelines, other than specifications, are applicable to most situations.

II. RESPONSIBILITY:

Nature of Instructions - Employees receive general applications specifications and output instructions as programs are assigned. Instructions are set forth by applications analysts, researchers, academic users, or school or department administration as prescribed by the program needs.

Nature of Review - Assignments are discussed when received from the supervisor or researcher and problems are discussed with the supervisor or technical staff as they arise. Programs are tested and debugged upon completion. Work is reviewed by the supervisor, researcher, or academic user based on the successful completion, testing, and implementation of the desired applications program.

Program documentation and user guides are reviewed by the supervisor to verify structural content and assure completeness for future reference.

Scope of Decisions - Employees determine the logic flow and develop program code for the defined departmental, school, or administrative organization. The programs generate output data essential to user needs and 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 desired output of the program. Errors could cause a significant delay in fulfilling user needs for information.

III. INTERPERSONAL COMMUNICATIONS:

Scope of Contacts - Work requires contact with a variety of administrative, academic, and/or research users and data processing professionals.

Nature and Purpose - Employees have contact with users to clarify program capabilities or to define program intent in research and academic environments. In administrative environments, employees have contact with other data processing personnel 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. RECRUITMENT REQUIREMENTS:

Knowedges, Skills, and Abilities, - Considerable knowledge of programming techniques, programming language(s), operating systems, and the capabilities and limitations of computer and peripheral equipment. Considerable knowledge of the principles and techniques of computer programming systems and documentation. 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 and one year of progressive experience its computer programming; or graduation from a four-year college or university with a degree in computer science, information systems management, or a related curriculum; or graduation from a two-year technical school with a degree in computer programming and one year of progressive experience in computer programming; or an equivalent combination of education and experience. A degree directly related to the technical nature of the application(s) assigned may be substituted for up to six months of the experience requirement.

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 position in this class, but may not be applicable to all positions.