

## INFORMATION TECHNOLOGY PROGRAMMING ENGINEER III

### NATURE AND VARIETY OF WORK

This is full performance technical software and applications development work. Incumbent develops and maintains software, and, integrates software packages to satisfy user requirements. Responsibilities include designing, coding, testing and analyzing software programs and applications, including research, design, documentation, and modifying software specifications throughout the production lifecycle. Work is performed under the supervision of a higher level applications developer or designated supervisor and evaluated in terms of technical adequacy and accuracy.

### EXAMPLES OF WORK: (ILLUSTRATIVE ONLY)

Assists higher level programming engineer with performing requirements analysis.

Designs software applications utilizing modeling tools.

Designs and develops file structures according to application requirements.

Writes software programs and applications according to design specifications and standards.

Tests, verifies, and validates accuracy and completeness of software applications; corrects program errors, and improves development techniques.

Resolves production problems.

Recommends, schedules, and performs software improvements and upgrades.

Prepares user training environment for software systems.

Writes user and technical documentation for software systems.

Writes and submits miscellaneous reports and informational material.

Writes data processing instructions for operating personnel.

Willingly and cooperatively performs tasks and duties which may not be specifically listed in the class specification or position description, but which are within the general occupational category and responsibility level typically associated with the employee's class of work.

### REQUIRED KNOWLEDGE, SKILLS AND ABILITIES

Knowledge of standard computer operating environments.

Knowledge of database concepts.

Knowledge of requirements analysis, and systems analysis and design.

Knowledge of screen and user interface design concepts.

Experience with modeling tools.

Knowledge of software development life cycle methodologies.

Knowledge of project management practices.

Experience in software development.

Ability to read and understand technical manuals and information, and apply knowledge gained to the work environment.

Ability to apply fundamental logic in analyzing methods and procedures and to present logical and intelligible solutions to software development problems.

Ability to test, verify, and validate application programs.

Ability to identify, troubleshoot, and correct production-processing problems.

Ability to write basic user and technical documentation for software systems.

Ability to communicate effectively, both orally and in writing, with internal and external customers.

Ability to establish and maintain effective working relationships with other technical staff, vendors, and customers.

Ability to work independently and as a member of a team.

Ability to demonstrate excellence in customer service.

### MINIMUM QUALIFICATIONS

Bachelor's degree in computer science, mathematics, or business or public administration, plus two (2) years of experience in information technology programming; or an equivalent combination of education, training and experience.