

**MONTGOMERY COUNTY GOVERNMENT  
ROCKVILLE, MARYLAND  
CLASS SPECIFICATION**

**Code No. 000552  
Grade 26  
FLSA: E**

**INFORMATION TECHNOLOGY SPECIALIST III**

**DEFINITION OF CLASS:**

This is full performance professional level information systems technology work. Contacts include other technology specialists, technicians, agency technology end users at all levels, vendors, and individuals outside the government to exchange information, offer technical advice, resolve problems, and coordinate projects or activities. The work involves providing limited service and assistance to the public.

The work of this class involves duties such as writing computer programs/code; preparing test data and test programs; installing, customizing, and maintaining operating and network system hardware and software; troubleshooting and resolving computer operating system problems; assisting with the design and development of databases; performing systems analysis functions; and developing system specification requirements. The work requires a high level of expertise in specific applications, programming languages, systems, hardware or emerging technology applications. The work is performed independently, and is reviewed for technical soundness, appropriateness and conformity to policy. Guidelines for performing the work are of limited use, and the employee uses judgment and resourcefulness to depart from the guides and modify procedures. An employee develops new methods or criteria or may propose new policies to govern the work performed. The complexity of the work is characterized by varied duties involving a wide range of systems design, installation, operation maintenance and security issues and problems requiring the analysis and assessment of unusual or nonstandard matters or data which is incomplete or contradictory.

The work involves establishing criteria and thorough analysis of a variety of complex issues. The work products affect the ongoing operations of a program, activity, agency or department. The work is primarily sedentary, primarily performed in an office environment, and involves no significant hazards to an employee. An incumbent uses a keyboard and video display terminal in the work; however, use of this equipment is not production-oriented. An employee in this class may occasionally be required to lift equipment weighing up to 50 pounds. A driver's license may be required for some positions; however, this is atypical of the class.

**EXAMPLES OF DUTIES: (Illustrative Only)**

- Performs the full range of client support activities. Serves as a troubleshooter in the day-to-day operation of a specific operating system at the department/agency level or below. Addresses daily operational issues identified by end users. Quickly identifies problems and takes the necessary corrective action.
- Performs a wide range of technical tasks such as providing support, writing programs, and systems documentation or protocols in data access and security administration.

- Determines requirements, designs, develops, and implements components of new technology applications for a program, activity or department. In conjunction with this task, leads business requirements review; develops approaches, methods to be used, timetables, and data collection techniques; presents findings and recommendations to appropriate officials and subject matter experts; develops and oversees testing; and assesses and directs technical changes necessary for successful implementation. May coordinate workload, review and schedule assignments for information technology technicians and lower-level specialists on project assignments.
- Plans, installs and supports network services.
- Develops or assists in the development of the technical specification requirements for technology procurements at the agency/department level or below based on the needs of the organization, as well as determining capability/compatibility with existing technology operating environment.
- Provides advice and assistance in the design, implementation, security and evaluation of database organization and integrity, and performs on-going database administration functions.
- Writes new code that modifies existing technology to meet current demands and needs.
- Conducts studies and recommends alternative technology solutions including hardware, software, web-based systems, and communications to an activity, program or agency.
- Sets up and configures systems, equipment and software; develops and implements backup and recovery procedures considering user requirements and technical constraints.
- Writes, implements, and maintains complex data files and databases in support of such advanced technology systems such as geographical information systems (GIS), legacy systems, and other large-scale applications.
- Performs related duties as required.

## **CORE COMPETENCIES/ KNOWLEDGE, SKILLS AND ABILITIES:**

**Technical Competencies** (An incumbent possesses competency in one or more of the technical areas below):

- Competency in/knowledge of operating systems, including a basic understanding of desktop applications, database management, help desk operations and troubleshooting, user training/support, LAN support, departmental programs, server administration, network administration, system design, emergency control center, and mainframe operating systems and their applications in order to assure continual, uninterrupted operation of computer systems and equipment.
- Competency in/knowledge of programming languages and software packages such as JCL, SQL, Visual basic, Windows, word processing, and other database and data presentation packages to design, develop and support end users.
- Basic competency in/knowledge of program menus, project planning and evaluation, program development, systems application development, management reporting, web development/maintenance, software/hardware support, troubleshooting, program support, strategic planning, network management, training and emergency control center. Some positions in this class may require the knowledge of job control language and ROSCOE in order to initiate certain operational requests, standard reports and other applications associated with computer operations.

- Competency in/knowledge of information systems/network security methods, including plan network implementation, system security, training, mainframe use, network administration, systems analysis, emergency control center, and RFP development, for ensuring, protecting and resolving the security of information systems and network services.
- Competency in infrastructure design, including system integration, planning and evaluating, program development, systems applications development, troubleshooting, network management, internet/intranet, contractor management, LAN support, network security, user support, hardware/software support, systems analysis, systems design, voice systems, and RFP development.
- Competency in web technology, including database management, new systems solutions, web development/maintenance, internet/intranet, applications development, data warehousing, and eCommerce.
- Competency in systems integration, including program menus, application integration, plan network integration, new systems solutions, troubleshooting, strategic planning, contractor management, system security, training, hardware/software support, project management, system design, and voice systems.
- Competency in database administration, including program menus, database management, disaster recovery, troubleshooting, data processing and analysis, data warehousing, and customer maintenance service.
- Competency in technology applications to conduct research and development activities to plan, implement and administer new technologies.

### **General Competencies**

- Knowledge of the principles, methods, and tools for automating, developing, implementing and administering database management systems.
- Knowledge of principles, methods, and procedures for optimizing, integrating and installing information system components.
- Knowledge of the principles and methods of web technologies, tools and delivery systems.
- Knowledge of the architecture and typology of software, hardware and networks, including LANs, WANs and telecommunications systems, their components and associated protocols and standards.
- Knowledge of computer network, desktop, mainframe operating systems and their applications in order to provide customer support, to resolve problems, and to troubleshoot operational problems.
- Knowledge of methods for ensuring, protecting and resolving the security of information systems and network services.
- Knowledge of computer languages and their applications to modify existing systems or to develop new technology applications.
- Knowledge of data models and structures (such as arrays, stacks, queues, linked lists, and trees), file organization and data modeling techniques to provide updates, report requests; and ability to modify existing systems and develop new systems.
- Knowledge of budgeting, procurement, contracting, licensing and related administrative procedures to serve in a lead capacity on major components of large-scale information technology solutions.
- Skill in project planning, design, implementation and acceptance testing.
- Skill in developing workflow diagrams in support of system analysis activities and functions.
- Ability to define organizational data requirements in support of technology applications.

- Ability to work with clients and customers with courtesy and tact to satisfy their expectations.
- Ability to communicate effectively, both orally and in writing.
- Ability to apply analysis and programming logic to solve basic technology problems.
- Ability to organize work, set priorities, and determine resource requirements.
- Ability to identify problems; use creative thinking and sound judgment to generate and evaluate alternatives; make sound, well-informed, creative and objective decisions; perceive the impact and implications of decisions; and commit to action, even in uncertain situations, in order to accomplish organizational goals.
- Ability to quickly adapt to change.
- Ability to cooperatively work as a member of a team.
- Ability to plan work, set well-defined and realistic goals, evaluate and monitor progress, and effectively manage time.
- Ability to attend meetings or perform other assignments at locations outside of the office, if necessary.

#### **MINIMUM QUALIFICATIONS:**

**Experience:** Three (3) years of professional experience in the information technology field in such areas as programming, systems analysis, and data/telecommunications, depending on the duties of the position.

**Education:** Bachelor's degree in computer science or a related field from an accredited college or university, or certifications in specific programming languages or operating systems may be required, depending on the duties of the position. Programming languages might include Visual C++, Visual J++, C++, C, SQL, PowerBuilder, Oracle Developer 2000, and COBOL.

**Equivalency:** An equivalent combination of education and experience may be substituted. For applicants possessing very hard-to-find skills which are a critical need to the department/agency, training and certification may be accepted in lieu of full degree requirements.

**Physical Ability:** Ability to lift boxes containing computer support items and equipment such as printers, computers, modems, and monitors weighing up to 50 pounds.

**LICENSE:** Possession and maintenance at all times of a valid Class "C" (or equivalent) driver's license from the employee's state of residence when required for job related duties.

#### **PROBATIONARY PERIOD:**

Individuals appointed to a position in this class will be required to serve a probationary period of twelve (12) months and, if promoted to a position in this class, will be required to serve a probationary period of six (6) months. Performance will be carefully evaluated during the probationary period. Continuation in this class will be contingent upon successful completion of the probationary period.

**MEDICAL EXAM PROTOCOL:** Medical History Review. Positions assigned to Fire and Rescue require Medical History with Drug/Alcohol Screen.

**Class Established:** July, 2001

**Revised:** March, 2004

January, 2008

October, 2011

August, 2013

September, 2014

**Revised (Medical Protocol):** February 2022

**Revised (Medical Protocol):** August 2023

**Revised (Driver's License Requirement):** March 2025