**INFORMATION TECHNOLOGY SPECIALIST II**

## DEFINITION
Under general supervision, maintains and modifies departmental and City-wide enterprise software application(s); configures and maintains the City's network, server, and telecommunications systems and infrastructure; identifies end user requirements, evaluates system and infrastructure capabilities, and recommends upgrades and enhancements; performs systems administration, troubleshoots problems, and ensures data integrity; trains and assists end users in using new applications and systems; and performs related work as required.

## SUPERVISION RECEIVED AND EXERCISED
Receives general supervision from the Information Technology Manager. Exercises no supervision of staff.

## CLASS CHARACTERISTICS
This is the journey-level class in the Information Technology Specialist classification series responsible for the maintenance, modification, and customization of, and training on departmental and/or City-wide enterprise software application(s) and implementing and maintaining the City's network, server, and telecommunications systems and infrastructure. Positions serve as a technical resource in area of assignment. Incumbents use independent judgment and decision-making authority to resolve complex problems. Work is typically reviewed upon completion for technical soundness, appropriateness, and conformity to policy and requirements. This classification is distinguished from the Information Technology Analyst in that the latter serves as a technical leader providing analytical support for more complex application systems, as well as designing and engineering the City's network and server infrastructure and managing inter-system, inter-departmental, and/or City-wide information technology projects.

## EXAMPLES OF TYPICAL JOB FUNCTIONS (ILLUSTRATIVE ONLY)
Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

- Maintains and modifies departmental and City-wide enterprise software application(s); documents end user work processes and systems requirements; conducts systems walk-throughs and technical reviews; develops or refines system specifications, including evaluating and testing vendor software packages for conformance with user requirements and priorities.
- Installs, configures, maintains, troubleshoots, and monitors physical and virtual network and server infrastructure including hardware, software, real-time monitoring tools, peripherals, and devices ensuring effective performance and proper integration of components and systems with existing architecture; assists in infrastructure changes and upgrades to limit interrupted services.
- Administers automated deployment of software and updates over the network.
- Monitors and maintains security control of City network and server infrastructure; configures and monitors security features and firewall rules; verifies and ensures proper user accessibility; identifies and addresses vulnerabilities; researches, recommends, and applies security updates as needed.
- Monitors disaster recovery and backup processes and schedules; verifies that backups are successful and data can be recovered.

- Builds interfaces between enterprise databases and end-user query tools; implements automated processes, scripts, triggers, specialized views, and reports in response to user needs.
- Maintains database infrastructure; organizes and converts data into relational tables; makes recommendations for data standardization and normalization; integrates data and functionality with other specialized applications.
- Identifies table relationships and builds Structured Query Language (SQL) data manipulation scripts to extract data; troubleshoots data extraction issues.
- Ensures database security by preparing access and control policies and procedures and reviewing permissions on a regular basis.
- Installs, configures, maintains, troubleshoots, and monitors City-wide telecommunications systems including voice and data communications infrastructure and equipment; sets up and maintains user accounts, access groups, extensions, and voicemail boxes; troubleshoots system-wide outages.
- Works on systems and infrastructure conversion, installation, and maintenance projects, including planning, organizing, and defining project requirements, methods, and end objectives in consultation with end users; coordinates project activities with IT Manager and IT staff, end users, and vendors.
- Maintains information on scheduled systems maintenance, including upgrades and outages; informs customers as needed.
- Creates email boxes for users and departments; troubleshoots email servers, connection, access, security, firewall, and storage issues; monitors email servers and performs scheduled maintenance; sets up, supports, and troubleshoots problems with synching email to smart devices.
- Maintains and supports active directory services by adding, removing, and/or editing users; creates access rights to users and user groups; creates groups and mailing lists.
- Responds to and resolves users' inquiries and complaints and escalates problems or issues to vendor representatives as needed.
- Stays abreast of new trends and innovations in technology related to systems, network, server, and telecommunications; researches, recommends, and evaluates vendor solutions and technologies; implements improvements upon approval.
- Writes and maintains user and technical operating instructions and documentation; prepares training materials and conducts formal and informal training programs and advises on best practices.
- Performs incident management of service tickets and performs technical help desk support.
- Performs other duties as assigned.

**QUALIFICATIONS**
**Knowledge of**
- Modern principles and practices of installing, configuring, maintaining, troubleshooting, and monitoring application, network, server, and telecommunications systems and infrastructure.
- Physical and virtual network and server infrastructure including hardware, software, real-time monitoring tools, peripherals, and devices.
- Principles and practices of information security.
- Principles and practices of project life cycles and vendor relationship management.
- Various information technology platforms, operating systems, and software packages including word processing, spreadsheet, SQL database and database management, and reporting tools.
- Principles of relational database management and systems integration.
- Principles and practices used in the installation, evaluation, configuration, operation, troubleshooting, and maintenance of computer hardware, software, and other related technologies and equipment.
- Techniques and methods of writing and maintaining user and technical operating instructions and documentation.

- The organization, operation, and functions of the department as necessary to assume assigned responsibilities.
- Recent and on-going developments, current literature, and sources of information related to assigned programs.
- Applicable federal, state, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Principles of record keeping.
- Modern office practices, methods, and computer equipment and applications related to the work.
- English usage, grammar, spelling, vocabulary, and punctuation.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and City staff.

**Ability to**
- Configure, integrate, and maintain assigned application(s) to meet business needs with or without vendor support.
- Install, configure, maintain, troubleshoot, and monitor physical and virtual network, server, and telecommunications infrastructure and systems.
- Participate in design sessions and process improvement sessions to identify business and user needs and discuss application capabilities and design modifications needed for improvement.
- Participate in system and infrastructure development, enhancement, and maintenance projects.
- Identify, research, and recommend cost-effective technical system and infrastructure improvements.
- Perform a variety of technical support functions in the installation, evaluation, configuration, operation, troubleshooting, and maintenance of computer hardware, software, servers, network and data communication, mobile, audiovisual, web based applications, and other related technologies and equipment.
- Prepare clear and concise technical documentation, user procedures, reports of work performed, and other written materials.
- Interpret, apply, explain, and ensure compliance with federal, state, and local policies, procedures, laws, rules, and regulations.
- Deal tactfully with the customers and staff in providing information, answering questions, and providing customer service.
- Establish and maintain a variety of filing, record keeping, and tracking systems.
- Organize and prioritize a variety of multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.
- Use tact, initiative, prudence, and independent judgment within general policy and legal guidelines.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

**EDUCATION AND EXPERIENCE**
Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be
- Equivalent to the completion of the twelfth (12th) grade supplemented by college-level coursework and/or training in information systems, computer science, or related field.
- Four (4) years of increasingly responsible network and server infrastructure management, systems administration, or related experience.

- Licenses and Certifications – none

**PHYSICAL DEMANDS**
Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone. Standing in and walking between work areas is frequently required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification frequently bend, stoop, kneel, and reach to perform assigned duties, as well as push and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects up to 30 pounds with the use of proper equipment.

**ENVIRONMENTAL ELEMENTS**
Employees work in an office environment with moderate levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.