

County of Orange
Class Code: 7974 & 7976
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INFORMATION TECHNOLOGIST I (7974)
INFORMATION TECHNOLOGIST II (7976)

DEFINITION

This is a generalist position that performs a variety of professional technical duties pertaining to the analysis, development, maintenance and administration of computer hardware and software systems to meet business needs. This position may perform any of the following functions: sets up, maintains and monitors a variety of information systems including network, servers, peripherals, operating systems and user applications; plans, implements and monitors hardware and software upgrades, patches, security and backup/recovery processes; installs, configures and administers a variety of commercial, off-the-shelf (COTS) applications; meets with customers to identify business system needs and recommend hardware/software solutions; provides professional support for systems design and development projects; performs other related duties as assigned. Work is often broad in scope and may encompass multiple information technology specialties (e.g., Application Development, Network, Database, or Security).

CLASS CHARACTERISTICS

Information Technologist I - This is the entry level class in the Technologist series. Positions in this class are distinguished from Information Technologist II by the performance of less than the full range of duties assigned to the Information Technologist II level. Incumbents work initially under general supervision while learning job tasks, progressing to reduced direction as the procedures and processes of the assigned areas of responsibilities are learned.

Information Technologist II - This is the journey-level class in the Information Technologist series. Positions in this class are distinguished from Information Technologist I by the performance of the full range of duties which may include serving as a project lead on small to medium IT projects. Incumbents at this level work under minimal direction, receiving occasional supervision while working toward a definite objective.

This class is distinguished from the class of Senior Information Technologist because incumbents in that class may perform supervisory and/or advanced professional duties that include coordinating, administering and/or managing large technology projects.

EXAMPLES OF DUTIES

Both Class Levels

1. Analyzes, develops, maintains and administers information systems. Maintains and monitors a variety of information systems including networks, servers, desktop computers, peripherals, operating systems and user applications; identifies and implements system requirements and specifications; builds, customizes, tests,

implements, maintains and enhances hardware and software as needed to meet business needs.

2. Plans, implements and monitors hardware and software upgrades, patches, security and backup/recovery processes; obtains new and upgraded system hardware and software from vendors; utilizes appropriate tools to install and test upgrades and patches; may develop utility programs as needed to ensure that new and upgraded systems work effectively with current systems and programs; determines and documents proper installation parameters for software and hardware in order to ensure smooth integration, transition and efficiency.
3. Installs, configures, customizes and administers a variety of commercial, off-the-shelf (COTS) applications; may write programs/scripts and develop reports using standard application development products and tools.
4. Monitors the performance and capacity of information system components; uses performance monitoring and capacity planning tools to ensure that assigned systems and applications are performing effectively; monitors the capacity of disk drives; adjusts system resource thresholds to assure optimum performance and efficiency of resource utilization.
5. Provides professional customer support for system-related software and hardware; interacts with clients to analyze changes in business requirements that may impact system function; recommends technology solutions to improve business operations.
6. Performs routine information system security duties; implements network and data security standards; implements administrative and technical safeguards as needed to ensure appropriate security monitoring, mitigation, documentation and auditing for compliance as well as investigation purposes.
7. Creates and maintains network shares, printers and server monitoring devices; configures network communication devices (e.g., switches) for optimum server and network connectivity.
8. Performs various system quality assurance activities; tests and troubleshoots system issues using appropriate technology; executes testing plans to validate functionality and resolve issues.
9. Coordinates assigned system activities with vendors; maintains effective communications with users regarding vendor activities, problems, status, timelines and other details.
10. Prepares reports, correspondence and other documents; participates on committees and task forces; attends meetings, conferences and training sessions.
11. May be assigned to provide routine professional analytical support pertaining to data processing operations, database administration and business process analysis; assists in Local Area Network (LAN) or Wide Area Network (WAN) administration and monitoring.

12. May conduct online, group and/or one-on-one training sessions with system users and/or technology staff in order to provide information on system functions; may design and prepare training materials.
13. Performs other related duties as assigned.

Information Technologist II

In addition to the duties listed above:

1. May provide professional support for medium-sized information systems projects; assists in monitoring vendor performance to ensure compliance with County standards and specifications; interfaces with clients to define project scope and review project activities, recommendations and outcomes.
2. Provides more advanced support in any of the following disciplines: Application Development, Network, Database or Security.

MINIMUM QUALIFICATIONS

Knowledge Of:

- General principles, methods and techniques used in designing, developing, testing and implementing information technology systems.
- General operations, services, concepts, terms and activities common to a comprehensive, state-of-the-art information systems program.
- Computer hardware and software systems similar to those being used by the hiring department, including operating systems, security systems and backup/recovery systems.
- Local and Wide Area Network administration.
- Typical concepts and practices of restart and recovery (including disaster).
- General principles and practices of system security.
- Information system development lifecycle and design principles using flowcharting techniques and prototype development tools.
- Methods and techniques of evaluating business requirements to provide technology solutions.
- Basic project management principles and techniques such as organizing and managing a project, developing schedules, identifying critical paths, and breaking down a project into individual tasks.
- Structured analysis and other database concepts.

- General operational characteristics of local and wide area network systems.
- General operational characteristics of communication systems, equipment and devices.
- Tools and equipment used in testing the functionality of computer systems.
- Principles and methods of troubleshooting computer hardware, software and network problems.
- Principles and practices of customer service.
- Methods and techniques of developing and presenting technical documentation and training materials.

Ability to:

- Analyze, maintain, administer, troubleshoot and repair a variety of system issues using appropriate program testing methods and tools.
- Communicate technical information to a wide variety of users.
- Plan, organize, prioritize and process work to ensure that deadlines are met.
- Interpret and apply technical information pertaining to computer and network systems.
- Adapt quickly to changes in policies, procedures, assignments and work locations.
- Communicate effectively, both verbally and in writing.
- Establish and maintain effective working relationships with those encountered during the course of the work.

Information Technologist I

Experience: Two years of directly related experience that demonstrates the competencies and attributes listed above; OR

Education: Possession of a bachelor's degree from an accredited college or university with major coursework in computer science, information systems or a closely related field that has provided the candidate with a sound conceptual understanding of information technology concepts.

Special Requirement: Depending upon assignment, demonstrated professional level competency and/or certification pertaining to the information technologies used by the County may be required.

Information Technologist II

Experience: Two years performing systems analysis, maintenance and administration at a level that is comparable to the County of Orange class of Information Technologist I.

Education: College level education or training directly related to the competencies and attributes required of the position may be substituted for up to one year of the required experience at the rate of three semester units or the equivalent, equaling one month of experience and one hour of training equaling one hour of experience. College level education or training beyond a bachelor's degree, which is directly related to the competencies and attributes required of the position, may be substituted for up to an additional year of required experience at the same rate identified above.

Special Requirement: Depending upon assignment, demonstrated professional level competency and/or certification pertaining to the information technologies used by the County may be required.

ADDITIONAL REQUIREMENTS

Depending upon assignment, some positions in this class may require possession of a valid California driver's license, Class C or higher.

PHYSICAL AND MENTAL REQUIREMENTS

Frequent standing or sitting for extended periods; frequent walking; occasional driving may be required, depending upon assignment; occasional pushing/pulling; occasional bending, kneeling, squatting and crawling; occasional lifting up to 25 pounds; infrequent lifting up to 50 pounds; constant use of good overall vision for reading/close up work; infrequent use of color perception and occasional use of eye/hand coordination; frequent repetitive motion from writing and using a computer keyboard; occasional grasping, holding and reaching; frequent hearing/talking to others on the telephone and in person; frequent decision making and concentration; occasional public contact; occasional working alone.

Additional physical/mental requirements or frequencies may be required, depending upon assignment.

ENVIRONMENTAL CONDITIONS

Work is typically performed in an indoor office environment, but occasionally requires travel to other locations. Work environments may include high levels of noise, dust and/or unpleasant odors. Occasional early morning, evening, holiday and/or weekend work may be required.