

County of Orange  
Class Code: 7977  
Revised: 02-04-14  
Established: 04-01-11

## **SENIOR INFORMATION TECHNOLOGIST**

### **DEFINITION**

This is a generalist position that leads and/or performs advanced professional duties pertaining to the analysis, maintenance and administration of computer hardware and software systems to meet business needs; serves as a lead or supervisor with responsibility for assigning, directing and monitoring the work of subordinate professional staff; manages projects requiring the support of multiple staff and the procurement/utilization of significant resources; designs and implements a variety of information systems including Local and Wide Area Networks and servers; plans, implements and monitors hardware and software upgrades, patches, security and backup/recovery processes; installs, configures, customizes 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 leadership and support for systems design and development projects; performs other related duties as assigned.

Senior Information Technologist positions may be assigned to perform a wide variety of activities within County departments. Duties typically emphasize advanced system administration, maintenance and problem analysis/resolution within client-server environments. Work is often broad in scope and may encompass multiple information technology specialties (e.g., Application Development, Network, Database or Security).

### **CLASS CHARACTERISTICS**

This is the advanced journey-level class in the Information Technologist series. Incumbents at this level work under minimal direction, receiving occasional supervision while working toward a definite objective. A Senior Information Technologist may lead and direct the work of other professional staff and/or may serve as a departmental system administrator. Incumbents may also serve as project managers over large IT projects. This class is distinguished from the class of Information Technologist II by the performance of supervisory and/or advanced professional duties.

### **EXAMPLES OF DUTIES**

1. Serves as a supervisor or lead over subordinate professional information technology staff within an assigned work unit; schedules and assigns work; distributes resources; provides direction and guidance regarding processes and procedures; monitors staff work and work products to help meet unit goals and objectives; may provide input to or perform employee performance evaluations
2. Serves as the designated administrator for one or more departmental information technology systems; researches and identifies system environment requirements and specifications; determines system integration requirements to ensure inter-operability

across multiple platforms and technologies; coordinates with data processing, applications development, database administration, business process analysis, networking and/or telecommunications staff to identify, plan and implement system design specifications and resolve integration issues.

3. Plans and coordinates the implementation of administrative and technical safeguards as needed; ensures appropriate security monitoring, mitigation, documentation and auditing for compliance as well as investigation purposes.
4. May serve as the project lead over large information systems projects requiring the support of multiple staff and the procurement/utilization of significant resources; develops and monitors project budgets and resources; monitors vendor performance to ensure compliance with County standards and specifications; interfaces with clients to define project scope and review project activities, recommendations and outcomes; coordinates the use of project resources based on project specifications.
5. Develops, recommends and establishes policies and procedures pertaining to the administration of assigned systems; ensures that all system-related documentation is current.
6. Analyzes, develops, maintains and administers information systems by setting up, maintaining and monitoring a variety of information systems including LANs, WANs, servers, 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.
7. 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.
8. 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.
9. 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.
10. 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.
11. 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.

12. Performs various system quality assurance activities; tests and troubleshoots system issues using appropriate technology; executes testing plans to validate functionality and resolve issues.
13. Coordinates assigned system activities with vendors; maintains effective communications with users regarding vendor activities, problems, status, timelines and other details.
14. Prepares reports, correspondence and other documents; participates on committees and task forces; attends meetings, conferences and training sessions.
15. 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.
16. Performs other related duties as assigned.

## MINIMUM QUALIFICATIONS

### Knowledge Of:

- Principles of lead supervision, including how to train and motivate staff.
- Advanced principles, methods and techniques used in designing, developing, testing and implementing information technology systems.
- Advanced operations, services, concepts, terms and activities common to a comprehensive, state-of-the-art information systems program.
- Project management principles and techniques such as organizing and managing a project, developing schedules, identifying critical paths, breaking down a project into individual tasks and delegating assignments to project staff.
- Computer hardware and software systems similar to those being used by the hiring department, including operating systems, security systems and backup/recovery systems.
- Advanced concepts and practices of restart and recovery (including disaster).
- Advanced principles and practices of system security.
- System development lifecycle and design principles using flowcharting techniques and prototype development tools.
- Advanced methods and techniques of evaluating business requirements to provide technology solutions.

- Various application and programming control languages.
- Structured analysis and other database concepts.
- Operational characteristics of local and wide area network systems.
- 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:

- Assign, direct and lead the work of others.
- Perform advanced level systems analysis and administration duties, including network, server and platform administration.
- Coordinate and administer large, complex information technology projects.
- Gather and evaluate information in order to reason logically, draw valid conclusions, take appropriate actions and/or make appropriate recommendations.
- 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.
- Troubleshoot and repair a variety of complex and difficult system issues using appropriate program testing methods and tools.
- Plan, organize, prioritize and process work to ensure that deadlines are met.
- Interpret and apply complex and 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.

Experience: Three years performing systems analysis at a level that is comparable to the County of Orange class of IT Systems Technologist II;

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 appointing department 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; infrequent pushing/pulling; infrequent bending, kneeling, squatting and crawling; infrequent lifting up to 25 pounds; constant use of good overall vision for reading/close up work; infrequent use of color perception and occasional 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.