

SENIOR COMPUTER AND NETWORK SUPPORT SPECIALIST

DEFINITION

Designs, implements, and administers campus-wide voice, video, storage, and data network(s) at a college or voice, video, storage, and data network(s) at the District Office and supervises assigned technical staff.

TYPICAL DUTIES

Plans, organizes, coordinates, schedules, assigns, and reviews the work of assigned technical staff.
Designs the layout and develops specifications for voice, video, storage, and data network(s) and network support infrastructures such as switches, and cables.
Develops, implements and enforces security for the assigned networks.
Implements network policies, procedures, and standards in conjunction with Information Technology staff of the District Office and network support staff from other colleges.
Assigns, supervises, reviews the work of, and provides training to assigned technical staff.
Coordinates and participates in the installation and maintenance of all network software including system upgrades, and monitors software license usage.
Coordinates and participates in the testing and assurance of software compatibility with the network before release to users.
Coordinates and participates in the set up of user profiles on the network including access rights, resource allocation, log-in script, and electronic mail.
Coordinates and participates in the analysis of network performance and maintenance of statistics of network resource data such as space and memory usage.
Coordinates and participates in the design, development, update, and maintenance of web sites.
Communicates with users on the telephone and/or on-site regarding network failures and malfunctions and determines whether problems are due to system, hardware, software, cabling, or operator error.
Analyzes hardware, software, and network utilization problems using diagnostic and error recovery techniques and initiates corrective action.
Confers with Information Technology staff of the District Office on problems related to technical operations of local area network equipment.
Represents the college or assigned area, as designated, at meetings regarding network operations and information technology.
Maintains network equipment.
Arranges for the installation or modification of electrical, telephone, cabling lines related to the addition of work stations to the network.
Trains users in procedures for network access into general and specific software packages.
Advises users engaged in the development of computer applications for use on the network.
Assists in defining needs and selecting compatible hardware and software for use on the network.
Develops bid specifications for acquisitions of network equipment and service.
Evaluates hardware and software technologies and advises administrators on appropriate improvements of network operations.

TYPICAL DUTIES (Cont.)

Writes instructional and administrative software applications for stand alone and network environments.
Writes program documentation, system documentation, operating instructions and training materials.
Interfaces with vendors regarding software applications, equipment specifications, repairs, replacements, and tracking and registration of equipment and warranties.
Maintains liaison with District's computer center to facilitate the uploading and downloading of data.
Coordinates the maintenance of an inventory of network equipment at a college or assigned area.
Coordinates the maintenance of records on network, software, and equipment installation and trouble calls.
May plan, organize, and coordinate the help desk services for computer and network users at a college.
May coordinate the telephone operations of a college or District Office.
Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

A **Senior Computer and Network Support Specialist** plans, organizes, coordinates, schedules, assigns, and reviews the work of assigned technical staff and designs, implements, and administers campus-wide voice, video, storage, and data network(s) at a college or voice, video, storage, and data network(s) at the District Office.

A **Manager, College Information Systems**, coordinates and manages the installation, performance, maintenance, training, and usage of all information technology activities of a college including implementation of business and instructional systems software, operation of the college's voice, video, storage, and data networks, provision of customer service, provision of media resources (A/V), development of user guides, electronic equipment repairs, and on-site technical support.

A **Computer and Network Support Specialist** provides technical support in the maintenance and operation of campus-wide voice, video, storage, and data network(s) at a college or voice, video, storage, and data network(s) at the District Office and uses the full capabilities of a wide range of computer hardware and software to design and implement information processing, reporting, control, and management.

A **Data Communications Specialist** designs, implements and administers a Metropolitan Area Network (MAN) and complex Local Area Networks (LAN) such as Virtual Local Area Networks (VLAN) and Wireless Local Area Networks (WLAN) and provides technical advice to Local Area Network support staff on complex issues involving network design, configuration, and performance.

SUPERVISION

General supervision is received from a classified administrator or manager. Technical assistance is received from District Office Information Technology staff. Supervision is exercised over assigned technical staff.

CLASS QUALIFICATIONS

Knowledge of:

Principles of design, development, implementation, and operation of voice, video, storage, and data networks
Network concepts
Network security and access control
Network hardware including cabling and network equipment
Data and voice communications concepts
Methods and equipment used to troubleshoot equipment and network malfunctions
Operation and application of a wide variety of computer applications and network software
New trends and developments in computer and network technology
Programming languages and computer graphics used in web page design and development
Features, capabilities and limitations of computer hardware
Principles of supervision and training
Principles of recordkeeping
Spelling, punctuation, and English usage

Ability to:

Design, implement, and administer local area network(s)
Utilize diagnostic test procedures and equipment
Diagnose software, hardware, and network problems and take corrective action
Apply principles and techniques of network design to meet specific computer user/office needs
Analyze and monitor network performance data to assure accuracy and efficiency
Assess computer user needs and provide appropriate training and support
Supervise the work of others
Write clear and precise technical procedures and documentation for system operations and configuration
Coordinate and participate in the design, development, update, and maintenance of web sites
Maintain accurate network operating statistics
Train computer users on network operations and applications
Establish and maintain effective and cooperative working relationships with staff, students, computer users, and Information Technology staff of the District Office
Learn the characteristics of new computer systems, software, and hardware and update technical skills to adapt to changing technology

ENTRANCE QUALIFICATIONS

Education and Experience:

- A. Graduation from a recognized four-year college or university with a major in computer science, computer information systems, computer engineering, or a closely related field which included coursework in computer systems **AND** two years of recent, full-time paid experience in the design, integration, implementation or administration of voice and data networks.

OR

Education and Experience: (Cont.)

- B. Twenty-four (24) semester units from a recognized college or university or completion of an equivalent certification training program in computer science, computer information systems, computer engineering or closely related subjects **AND** four years of recent, full-time paid experience in the design, integration, implementation or administration of voice and data networks.

Experience in a supervisory capacity is desirable.

College level coursework in business administration, educational administration, public administration, English, mathematics, statistics or related fields is desirable.

A current certification as a Microsoft Certified Systems Engineer (MCSE) or equivalent is desirable.

Special:

A valid Class "C" California driver's license.

Access to an automobile.

A current Computing Technology Industry Association (CompTIA) A+ certification.