

SENIOR COMPUTER AND NETWORK SUPPORT SPECIALIST

DEFINITION

Designs, implements, and administers local area network(s) at a college or the District Office.

TYPICAL DUTIES

- Designs the layout and develops specifications for local area network(s) and network support infrastructures such as hubs, switches, concentrators, and cables.
- Develops, implements and enforces security for the network.
- Establishes and implements network policies, procedures, and standards in conjunction with the Office of Information Technology 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 personnel of the Office of Information Technology on problems related to technical operations of the computer network and voice and data 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.
- 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.  
Performs related duties as assigned.

## DISTINGUISHING CHARACTERISTICS

A **Senior Computer and Network Support Specialist** designs, implements, and administers local area network(s) at a college or the District Office.

A **Computer and Network Support Specialist** provides technical support in the maintenance and operation of local area networks and uses the full capabilities of a wide range of computer hardware and software to design and implement information processing, reporting, control and management systems for a major organizational unit at a college or the District Office.

A **Data Communications Specialist**, as a member of a technical team, designs, implements and administers the District's Wide Area Network 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 personnel of the Office of Information Technology. Supervision is exercised over assigned technical staff.

## CLASS QUALIFICATIONS

### Knowledge of:

- Principles of design, development, implementation, and operation of voice 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 network computer 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

### Knowledge of: (Cont.)

Principles of supervision and training  
Principles of recordkeeping  
English usage, punctuation, and spelling

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  
Assign and review 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 technical staff from the Office of Information Technology  
Learn the characteristics of new systems and equipment 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, paid, full-time experience in the design, integration, implementation or administration of voice and data networks.

**OR**

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, paid, full-time experience in the design, integration, implementation or administration of voice and data telecommunications networks.

Education and Experience: (Cont.)

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.

Certification in network administration or engineering is desirable.

Special:

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

Access to an automobile.