

COMPUTER AND NETWORK SUPPORT SPECIALIST

DEFINITION

Provides technical support in the maintenance and operation of campus-wide voice, video, and data network(s) at a college or voice, video, storage, and data network (s) at the District Office.

TYPICAL DUTIES

- Assists in operating and maintaining campus-wide voice, video, storage, and data network(s) at a college or voice, video, storage, and data network(s) at the District Office.
- Installs and maintains network software, including system upgrades, and monitors software license usage.
- Tests and assures software compatibility with the network before release to user.
- Monitors network performance and maintains statistics of network resource data such as space and memory usage.
- Writes program documentation, operating instructions and training materials and manuals for college or District Office staff.
- Designs, develops, updates, and maintains web sites.
- Communicates with users on the telephone and/or on-site regarding equipment and network failures and malfunctions and determines whether problem is related to system, hardware, software, cabling, or operator error.
- Resolves technical problems associated with equipment malfunctions, processing failures, and network operations.
- Meets with users to assist them in defining system project requirements and objectives, to acquire information about data sources and processing methods, and to explain software and system capabilities and limitations.
- Conducts on-the-job training sessions to enable employees to acquire, update, extend, or improve their skills and knowledge of computer equipment, applications, and basic network operational procedures.
- Sets-up user profiles on the network including access rights, resource allocation, log-in script, and electronic mail.
- Assists in developing and implementing network policies, procedures, and standards in conjunction with the Information Technology staff of the District Office and network support staff from other colleges.
- Uses data base management software to create, store, access, sort, change, retrieve and format data.
- Uses spreadsheet software to create, edit, model, and translate data into complex reporting and graphic formats and systems.
- Controls access to common data files and databases on a network to maintain the integrity of data and enable all users to retrieve and manipulate data effectively.
- Writes computer programs to support various administrative and instructional programs and activities.
- Assists users in selecting off-the-shelf software to meet specific needs.
- Evaluates options and recommends the purchase of computer software, equipment, supplies, and services to support college or District Office computer needs.
- Coordinates the installation and relocation of new computer equipment.
- Contacts vendors regarding equipment specifications, repairs, replacements, and tracking and registration of equipment and warranties.

## TYPICAL DUTIES (Cont.)

Maintains records on software and hardware installations and trouble calls.  
Maintains a library of materials for reference by users.  
May assign, review the work of, and provide training to staff with lower-level technical skills.  
May perform data entry duties associated with the system design process.  
Performs related duties as assigned.

## DISTINGUISHING CHARACTERISTICS

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, 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 systems.

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.

An **Assistant Computer and Network Support Specialist** provides technical support functions of moderate difficulty, complexity and scope involving repair/replacement of computer parts and adjustment of computer equipment, basic troubleshooting of system processing failures, and assistance with a wide variety of software applications for a college-wide local area network or the District Office.

**Employees in clerical, technical, professional, and administrative classifications** may be required to use computers in the course of their employment. However, in-depth knowledge of computer hardware and software is not a paramount qualification for these classes.

## SUPERVISION

General supervision is received from a classified supervisor or administrator. May receive technical assistance from District Office Information Technology staff. May provide work direction to staff with lower-level technical skills assigned to unit.

## CLASS QUALIFICATIONS

### Knowledge of:

- Principles of network maintenance and operation
- Basic network concepts
- Basic principles of network security and access control
- Basic data and voice communications concepts
- Information processing procedures and methods
- New trends and developments in computer and network technology
- Programming languages and computer graphics used in web page design and development

Knowledge of: (Cont.)

The operation and application of a wide variety of computer applications software such as data base management, communications, spreadsheets, word processing, desk-top publishing  
Basic operation and application of network operating software  
Methods and equipment used to troubleshoot equipment and basic network malfunctions  
Features, capabilities and limitations of computer hardware  
Program documentation procedures, terms, and use  
Mathematics, algebra, and statistics as they pertain to program development  
Principles of recordkeeping  
Principles of training  
Spelling, punctuation, and English usage

Ability to:

Effectively utilize the commands, functions, and operations commonly used in computer software  
Design and/or modify computer applications to meet computer user requirements where applicable  
Recognize and resolve problems related to computer user programs, equipment, and basic network malfunctions  
Utilize diagnostic test procedures and instruments  
Write clear and logical documentation  
Write instructions in a manner that can be understood by computer users with different levels of computer literacy  
Design, develop, update, and maintain web sites  
Train computer users in the use of a wide variety of computer software, equipment, and basic network operational procedures  
Provide technical assistance to staff members with lower-level technical skills  
Communicate clearly  
Work independently on assigned projects  
Work effectively and cooperatively with staff, students, computer users, and administrators  
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 **AND** one year of recent, full-time paid technical computer experience in a local area network environment.

**OR**

B. Twenty-four (24) semester units in computer science, computer information systems, computer engineering, or closely related subjects from a recognized college or university **AND** two years of recent, full-time paid technical computer experience in a local area network environment.

Education and Experience: (Cont.)

- C. A certification equivalent to the 24 semester units described in option B **AND** two years of recent, paid, full-time technical computer experience in a local area network environment.

Experience in network maintenance and operations is desirable.

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

Special:

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