

COMPUTER AND NETWORK SUPPORT SPECIALIST

DEFINITION

Provides technical support in the maintenance and operation of voice and data networks at a college or the District Office.

TYPICAL DUTIES

- Assists in operating and maintaining voice and data networks at a college or 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 computer programs to support various administrative and instructional programs and activities.
- 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 Office of Information Technology 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.
- 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.

TYPICAL DUTIES (Cont.)

- Coordinates the installation and relocation of new computer equipment.
- Contacts vendors regarding equipment specifications, repairs, replacements, and tracking and registration of equipment and warranties.
- 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 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 **Senior Computer and Network Support Specialist** designs, implements, and administers local area network(s) at a college or 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 in a local area network environment at a college 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 personnel of the Office of Information Technology. 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
- 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
- The operation and application of a wide variety of computer software such as data base management, communications, spreadsheets, word processing, desk-top publishing

Knowledge of: (Cont.)

Basic operation and application of network operating software
Methods and instruments 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:

Fully 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 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 **AND** one year of recent, paid, full-time 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, paid, full-time technical computer experience in a local area network environment.

ENTRANCE QULIFICATIONS (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.