



Cañada College ♦ College of San Mateo ♦ Skyline College

GENERIC POSITION DESCRIPTION

NETWORK INFRASTRUCTURE TECHNICIAN

A Classified Position

[Grade 35A – Salary Schedule 60](#)

A. General Statement

The Network Infrastructure Technician performs technical work involving the installation, operation, configuration, repair, modification, and support of the District's telephone system and data network. Under general supervision, the employee works as a member of the Districtwide technology support team to provide responsive and effective telecommunications support services at all District locations. Public contact is extensive, and includes information technology department team members, administrators, faculty, staff, and students. The position also works closely with a wide-range of technology vendors and suppliers for the purpose of determining and resolving telecommunications problems, planning upgrades and/or making improvements. A high degree of independent judgment is required to resolve frequent minor and occasional major problems that occur. Consequences of errors in judgment could be costly in terms of equipment damage, loss of staff time and productivity, financial loss to the District and a negative impact on customer service; however, the ability to collaborate and rely on the assistance of managers and other members of the technology support team will reduce the risk of serious errors. A Network Infrastructure Technician can lead the work of student assistants and technical support team members or other staff as assigned.

B. Duties & Responsibilities

The duties below are representative of the duties of the classification and are not intended to cover all of the duties performed by the incumbent(s) of any particular position. The omission of specific statements of duties does not exclude them from the position if the scope of work is similar, related, or a logical assignment to this classification.

1. Responsible for the design, installation, maintenance and overall performance of the District's converged voice and data network, including voicemail and fax servers supporting unified messaging, analog and digital line configurations and installations, call-detail reporting, voice gateways, IP call processing equipment, E911 services and call-processing applications
2. Provide technology support by installing telephone and VoIP equipment, troubleshooting, maintaining, upgrading, and providing solutions to voice quality issues and call routing problems and to other complex hardware/software problems
3. Provides reports to supervisory and other technology support team members regarding equipment problems or failures, policy changes, work requests and support requirements that are related to the reliable operation of the District's telephone, fax and voicemail systems
4. Coordinates repair services with external contractors

5. Makes recommendations for improving and enhancing services to users by defining cost-effective voice solutions that optimize the balance between business needs and communications capabilities through researching, preparing cost-benefit analyses, and proposing findings
6. Receive, process, and resolve telephone service requests, including voice systems moves, additions and changes; issues with telecommunications vendors, and telecommunications technical support to faculty, staff and students
7. Set work priorities based on severity and impact, and communicates with customers to keep them informed of work in progress or completed
8. Assess the requirements and need for cable plant and related infrastructure improvements for building remodeling projects and the construction of new buildings on each college campus
9. Assist architects and contractors as necessary to ensure adequate infrastructure is provided to meet the voice and data requirements for each facility
10. Perform technical work involving the installation, configuration, modification, and maintenance of VoIP equipment, servers, software applications, audio/video equipment, and local area networks
11. Use diagnostic equipment to test, monitor and repair equipment
12. Use the HelpCenter system to track and monitor work orders and service requests
13. Develop and maintain technical documentation as needed to ensure operational integrity for the converged voice and data network
14. Participate with supervisory and other technology support staff in the planning, purchasing, and installation of new hardware and software related to telecommunications
15. Assist technology support staff in administering, maintaining and operating local area networks on each campus and also the wide-area network as needed
16. Define and document converged voice and data network processes and standards
17. Perform technical work involving advanced troubleshooting with the support of other members of the technology support team and supervisory staff, for the installation, configuration, modification, and maintenance of telecommunications equipment, servers, software applications, operating systems, and local and/or wide-area network services
18. Conduct training for faculty and staff across the District in the use of the unified messaging system as required
19. Provide on-call support in the event that system problems are experienced after-hours, on weekends and holidays
20. Monitor and audit monthly telephone bills for accuracy and process department "charge-backs" as appropriate
21. Maintain comprehensive cable plant records for both voice and data networks
22. Drive a motor vehicle to provide support to the Colleges and the off-campus site
23. Performs other related duties as assigned

C. Requirements

1. An Associate's degree in Telecommunications, Computer Science, or a closely related field
2. Successful work experience of increasing responsibility with converged voice and data networks
3. Extensive public contact experience with people at various levels within the organization who diverse in their cultures, language groups and abilities
4. Demonstrated skills in effective oral and written communication
5. Demonstrated skill in the installation and modification of telecommunications equipment
6. Demonstrated skill in data analysis and interpretation
7. Demonstrated skill in setting up and maintaining accurate technical documentation and records related to the network, cable plant, station equipment, software applications and servers
8. Demonstrated skill in working effectively as part of a customer service team
9. Possession of a valid California Drivers' License and the ability to drive a motor vehicle to off-site locations

OR

An acceptable equivalent combination of education and experience

D. Physical/Other Requirements

This classification requires physical activity to install and handle the equipment; reaching, bending, stooping, pushing, pulling, kneeling, moving objects of light to moderate weight, and working in limited physical spaces.

E. Knowledge, Skills & Abilities

1. Knowledge of traditional telephone systems and expertise in call routing, PBX/ACD concepts and practices, interaction voice response (IVR) unit concepts and practices, Voice over IP (VoIP) technologies, LAN technologies, and Windows and UNIX servers
2. Knowledge of advanced converged voice and data network equipment and applications, including installation, configuration, maintenance and repair
3. Knowledge of information systems analysis and design concepts
4. Ability to analyze, define, and quickly resolve problems with telecommunications systems, including VoIP and unified messaging
5. Skill in respectful and sensitive communication with people at all levels in an organization that is diverse in their cultures, language groups, and abilities
6. Knowledge of best practices within the industry
7. Ability to solve complex problems of a wide scope and complexity following established procedures
8. Skill in the use of a variety of computer software to prepare procedures, documentation, and other reports for use by others as required
9. Skill in installing, configuring, troubleshooting, and maintaining local area networks, wireless networks, network applications such as voice mail and assisting with maintenance of the wide area network
10. Ability to communicate clearly and concisely on both technical and non-technical matters both orally and written
11. Ability to apply applicable safety procedures to the handling of electronics equipment, tools and components
12. Ability to work effectively as part of a customer service team
13. Ability to learn and use new technologies as required to remain current in the field

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