



CLASS SPECIFICATION

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FLSA: non-exempt
Probation: 12 months

TECHNOLOGY NETWORK ENGINEER I

DEFINITION

Under general supervision, implements, maintains, programs, monitors and troubleshoots wired and wireless network, telecommunications, public safety radio, cybersecurity and electronic security systems for the County; and performs related work as required.

EXPERIENCE AND TRAINING REQUIREMENTS

Two years of full-time experience providing support for a complex multi-site network system, large multi-campus phone systems, or public safety radio systems OR an associate's degree from an accredited college or university in electrical engineering, computer systems, networking, computer science, cybersecurity or a closely related field; OR an equivalent combination of training and experience.

LICENSE OR CERTIFICATE

A valid driver's license is required at the time of appointment and must be maintained for continued employment in this classification.

DISTINGUISHING CHARACTERISTICS

This is the entry level in the Technology Network Engineer class series which provides for progression to the next level upon meeting the requirements of the class and recommendation of the appointing authority. It is distinguished from the Technology Network Engineer II, which is the journey level, by the latter being responsible for the full range of Network Engineer duties including system analysis and design and working with greater independence.

SUPERVISION EXERCISED

Exercises no supervision.

EXAMPLES OF DUTIES *(The following is used as a partial description and is not restrictive as to duties required.)*

Install, program, manage and troubleshoot switches and routers for wired and wireless data network systems to ensure reliable data communication for internal departments and through the network to other agencies and partners, and to maintain reliable offsite access by County staff and other authorized users.

Coordinate with technical support staff and helpdesk staff in communicating outages and responding to customer tickets for requests for new services or repair of existing services.

Install, troubleshoot, and manage wireless microwave equipment to provide data connectivity to County facilities that do not have access to broadband network services, or to provide emergency communications for sites which do have broadband connections.

Install and manage access points and authentication services for WiFi systems within County facilities to provide access to staff and public mobile devices.

Install, program, maintain and troubleshoot phone handsets and accessories for Voice Over IP systems to provide wired phone communications within County facilities; install and troubleshoot data and phone wiring to ensure reliable data and phone communications to all connected devices.

Implement, program, and monitor County cybersecurity systems such as firewalls, intrusion detection systems, event logging systems and VPN gateways to ensure protection of County and public data and assets from cyber threats both external and internal.

Monitor network devices for abnormal performance or failures to minimize downtime or serious loss of data.

Assist in evaluating new technology and make recommendations to meet current and future County needs involving the network infrastructure.

Complete administrative functions and assigned tasks including reports, time keeping and documentation to maintain accurate records of completed tasks and to aid in future troubleshooting of system failures.

Install, program, repair and manage electronic security systems such as network connected cameras, door controllers, intercoms and intrusion alarms in order to help protect County employees and assets, as well as to maintain security within County run detention facilities.

Implement, monitor and repair communications systems, radios and electronic support systems for the public safety radio communications to ensure reliable and consistent functionality.

Troubleshoot, repair, program and maintain communications equipment, including 800MHz trunked and conventional repeaters, site routers, site switches, site controllers, GPS references, trunked and conventional comparators, RF antenna systems and alarm and control systems to maintain regional communications capabilities.

Troubleshoot, repair, program, and maintain Public Safety Dispatch Center communications equipment including dispatch consoles, servers, routers, switches, recording equipment and telecom circuits to provide 24/7 emergency call services to Washoe County jurisdictions.

Troubleshoot, repair, and maintain the power systems that provide primary and backup power to County networks, radio communications, phones, data centers and dispatch centers to ensure fault tolerance against power outages.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Full Performance *(These may be acquired on the job and are needed to perform the work assigned.)*

Knowledge of:

Departmental/division policies, procedures, and technology standards.

Organizational structure and functions of Washoe County as it relates to area of assignment.

Functions and application of County's specific hardware environment and software systems.

Ability to:

Use and maintain the County's mix of systems monitoring, logging and alerting systems.

Analyze and solve problems independently within assigned areas of technology.

Evaluate options, develop alternatives, and justify recommendations.

Develop and deliver effective presentations using visual aids and other communication tools.

Entry Level (*Applicants will be screened for possession of these through written, oral, performance, or other evaluation methods.*)

Knowledge of:

Principles and practices of information technology utilization and systems management.

Equipment used in the installation, maintenance and repair of data, voice, security or 800MHz networks and components.

Current industry standards and product availability in hardware and software.

Data networking, telecommunications, or radio systems operations.

Ability to:

Read, interpret and apply user and technical manuals.

Follow oral and written instructions.

Maintain awareness of current technology, trends, and practices of the trade.

Communicate effectively to both technical and non-technical individuals, both orally and in writing; communicate and participate in a team environment.

Establish, maintain, and foster effective and positive working relationships with all those contacted in the course of work.

SPECIAL REQUIREMENTS (*Essential duties require the following physical skills and work environment.*)

Washoe County Technology Services employees may be called to work during a disaster or emergency situation.

May be required to travel to Countywide facility locations to install or repair equipment and resolve network issues; may be required to be part of a weekly rotation of on-call support hours that includes evenings, weekends and holidays.

Ability to work in a professional office environment, as well as outdoor settings. Ability to use dexterity, fine motor skills and general strength to lift and move objects up to 50 pounds. Ability to sit for extended periods. Ability to frequently stand, walk, bend, stoop, kneel, reach and stretch. Ability to use data processing and associated equipment. Ability to work in an environment with controlled temperatures.

Some positions may require the ability to work at high altitudes (above 10,000 ASL) for work at radio tower sites; some positions may require the ability to climb a 60-foot tower.

This class specification is used for classification, recruitment and examination purposes. It is not considered a substitute for work performance standards.