

CLASSIFICATION SPECIFICATION

Network Systems Engineer

FT/PT Class Code: 5066, 5566 Pay Grade: B/C 22 FLSA Exempt Rev. 11/13/18

SUMMARY STATEMENT: An incumbent is responsible for activities related to the design, installation, management, and maintenance of the enterprise-wide systems, LAN, WAN and wireless networks and infrastructure.

NATURE AND SCOPE:

An incumbent in this class reports directly to the director of information technology systems. The network systems engineer (NSE) will maintain systems and network availability and reliability and will ensure security and performance that conform to all service level agreements. This position will establish and maintain current/best-practice enterprise data network standards, analyze and resolve complex network related problems, analyze and test all elements of the network infrastructure; and administer as directed, Information Security related technologies and procedures including, but not limited to: penetration testing, table top exercises, enterprise-wide training, internal phishing exercises, dark web credential monitoring. The NSE will also design and implement network solutions based on business requirements as necessary.

PRINCIPAL ACCOUNTABILITIES:

An incumbent may perform any combination of the below listed accountabilities:

1. Maintains an enterprise-class data center, including providing support for all enterprise Linux and Windows Server environments; resolving systems-related issues escalated from the Systems, Applications, and Computing and Media Support Information and Instructional Technology groups; and performing hands-on support, system monitoring, security, backup, and recovery. Optimizes all LAN/WAN infrastructure including physical cable plant, wireless, and associated equipment.
2. Serves as the technical subject matter expert in network analysis, design, and engineering. Troubleshoots the most complex network issues as level 2 and level 3 engineering support.
3. Ensures that system improvements are successfully implemented and monitored to gain the greatest efficiencies and establishes network priorities as they relate to the achievement of short and long-term business goals and objectives.
4. Manages network projects related to technology testing, conversions and implementations and ensures deadlines are met. Provides technical consultation to other project managers on impacts to network infrastructure. Provides planning and technical support to determine network business needs throughout the college.
5. Supervises senior level technical systems team members.
6. Evaluates, tests, recommends, and implements specific network solutions and manages assigned network-related tasks for projects.

PRINCIPAL ACCOUNTABILITIES, (cont'd):

7. Schedules and coordinates installation and maintenance of software/hardware on the network and ensures compatibility of all communications and computer hardware/software. Manages the installation of data communication lines, networking and security equipment. Ensures compatibility and connection of networks between intra-campus buildings and inter-campus links.
8. Maintains vendor relationships and interfaces with vendors to learn about new data communications technology and system upgrades. Recommends new network technologies as appropriate.
9. Ensures Network Operations notification and escalation procedures are accurately followed.
10. Communicates with the director of information technology systems and senior management regarding network event status and impact as needed.
11. Performs other related duties as required.

KNOWLEDGE, SKILLS, AND ABILITIES:

- ◇ Knowledge of methods, concepts, and techniques of advanced networking technologies and related best-practices.
- ◇ Knowledge of a variety of network management tools, test equipment, circuits, and routers.
- ◇ Knowledge of cable and telecommunications products and services, as well as networking fundamentals.
- ◇ Knowledge of TCP/IP protocol stacks and firewall security in an inter-networking environment.
- ◇ Knowledge of Quality of Service and experience designing/implementing QoS in an enterprise environment.
- ◇ Knowledge in Cisco Networking including firewalls, switches, routers and wireless access points.
- ◇ Excellent interpersonal, organizational, customer service, communications, and presentation skills.
- ◇ Excellent oral and written communication skills.
- ◇ Ability to serve as a technical mentor to others and guides less experienced technicians in resolving complex problems.
- ◇ Ability to apply expert knowledge of network engineering to the most complex problems and to direct, train, and guide less experienced technical staff.
- ◇ Ability to learn new and complex technologies at an accelerated pace.
- ◇ Ability to prioritize and manage competing work requests and deadlines.
- ◇ Ability to integrate new technologies and methods into existing systems framework.
- ◇ Ability to think critically and develop solutions quickly.
- ◇ Ability to respond to emergency situations at all hours.
- ◇ Ability to handle multiple tasks and projects with minimum supervision within a deadline-driven environment.
- ◇ Ability to solve complex technical problems with creative and functional solutions.
- ◇ Ability to work independently and be an effective contributor in a diversified team.

MINIMUM QUALIFICATIONS:

- ◇ Associate degree in a relevant field such as Computer Science or Network Engineering and five (5) years of relevant experience; or equivalent combination of education and experience. Experience should include: enterprise data networking and server administration experience, supervision; experience working in a Cisco networking environment, and project management experience.
- ◇ Must have obtained at least one of the following certifications: CCNA, RHCE, MCSE.