

NETWORK ENGINEER**NATURE OF WORK**

Performs technical work of considerable difficulty in supervising, planning and coordinating the design, installation and maintenance of information technology solutions, including computers, software, hardware, security, networking, processes and facilities. This is an Advanced Journey Level position which works under general supervision of the Information Technology Director.

TYPICAL DUTIES

Researches, evaluates, recommends, installs, maintains, and upgrades information technology solutions to ensure the desired performance; analyzes user requirements, designs and implements solutions regarding security, integrity, reliability, and functionality of the IT solution; prepares specifications and operational procedures of these solutions as well as the selection, installation, testing and acceptance of the components; monitors performance of IT systems using management tools and assists in planning for system expansion and enhancements; configures hardware to ensure the desired performance of equipment; responsibilities extend to the maintenance of standards for installation and repair work with regard to the quality of materials, workmanship, and safety precautions exercised throughout the operation; interacts with co-workers and vendors to obtain and disseminate information; advises on project status and coordinates activities; works with other technicians to develop IT solutions; tests, implements and maintains integration hardware and software between operating systems; performs troubleshooting to isolate, diagnose and resolve advanced IT problems; researches, recommends, implements, and monitors security for networks; responds to the needs and questions of users concerning their access to IT resources; upgrades hardware and software components as required; conducts surveys and feasibility studies; trains and provides technical support to department staff members and end users on hardware and software; develops procedures for system users; maintains daily, weekly, monthly and yearly backups; performs engineering studies as assigned, involving the various components of information technology systems; performs related work as required or assigned.

REQUIRED KNOWLEDGE AND SKILLS

Knowledge of the principles, practices, methods, terminology, and trends in information technology; knowledge of network-specific theory and processes; knowledge of electronics communications field including digital computer systems support equipment; knowledge of the principals, capabilities and operation of communication systems including voice and data over wireless point to point circuits; knowledge of preventive maintenance procedures for all IT equipment; knowledge of network capacity engineering, planning, implementation and operation; knowledge of computer and network operating systems, including protocols; knowledge of adult learning techniques; ability to comprehend complex verbal and written instructions; ability to review and check the work product of others to ensure conformance to standards; ability to conduct traffic, network, and toll analysis using statistical methods; ability to read, understand, and follow complex specification, schematics, and instruction manuals; ability to enter data or information into a terminal, PC, or other keyboard device; ability to conduct research, analyze user needs and system capability, and recommend and design networks; ability to identify network problems, causes, and develop effective solutions; ability to recommend the purchase of new equipment, services, and supplies; ability to communicate effectively verbally and in writing; ability to read, interpret and apply the content of technical publications and manuals; ability to establish and maintain effective working relationships with employees, departments, other agencies, and the public.

MINIMUM QUALIFICATIONS

A Bachelor's Degree in Computer Science and two years of progressively responsible and related experience is preferred, or an Associates Degree in Computer Information Technology with five years progressively responsible work experience in network management, application, and system management including two years of analysis, two years of database and two years supervisory experience. Any combination of experience and training of five years duration or more which demonstrates the ability to perform the duties of the position, may be accepted. Applicants must also possess the following certifications: Microsoft Certified Systems Professional (MCSP), Cisco Certified Network Associate (CCNA), and Cisco Certified Voice Professional (CCVP).