Class Concept

Work in this class involves the analysis and planning of moderately complex communications network systems for agencies and institutions. Employees provide skilled technical assistance to departments or agencies in network planning, installation, and troubleshooting. Duties include assessing communications network system and software needs, developing an optimal network design, developing technical standards and interface applications, and evaluating equipment necessary to establish, maintain or expand the communications network system. Employees conduct feasibility studies for large projects, develop requests for proposal, evaluate vendor products and make recommendations for selection, and provide resolution for network problems. Work is performed under the general direction of a Network Manager. Employees function as a technical consultant to departments or agencies in developing or upgrading their communications capabilities and connecting their network systems to external communications networks. Network systems are usually very large and include multivendor equipment, a variety of communications media and multiple agency or departmental networks that are connected. Work may involve analyzing numerous software and hardware options to assure functionality, reliability, economy, compatibility, and manufacturer or vendor credibility.

Recruitment Standards

Knowledge, Skills, and Abilities

- Considerable knowledge of telecommunications network software and hardware and the full range of network system requirements.
- Ability to manage projects through implementation.
- Ability to resolve a variety of network operational problems.
- Ability to analyze and design network systems using the application of electronic and communications principles, communications protocols, and network topologies.
- Working knowledge of telecommunications network concepts, architecture, protocols, transport systems, and communications hardware and software.
- Working knowledge of digital electronics and communications systems
- Ability to evaluate vendor equipment, design and fabricate network component parts, and diagnose and resolve network operations problems.
- Considerable knowledge of telecommunications network software and hardware and the full range of network system requirements.
- Knowledge of a variety of network operational problem determination procedures and techniques.

Minimum Education and Experience

Bachelor's degree in computer science, an IT related field, or related technical degree from an appropriately accredited institution and one year of experience in networking or related area; or

Associate degree in computer science, an IT related field, or related technical degree from an appropriately accredited institution and two years of experience in networking or related area; or

High School or General Educational Development (GED) diploma and five years of experience in networking or related area; or an equivalent combination of education and experience.