

### Class Concept

Work in this class involves the analysis, planning and design of moderately complex communications network systems for an agency or institution. Work involves network planning, engineering, architecture, and the development of technical standards and interface applications. Duties include assessing communications network system and software needs, evaluating equipment for compatibility with existing network resources, assisting with network design, and resolving network and communications operational problems. Employees provide technical support to a department, an agency or institution in planning, evaluating and resolving problems with existing network systems and making recommendations for resources required to maintain and/or expand service levels. Network systems include all computing and communications devices, multi-vendor equipment and communications software in an agency or institution. Employees are involved in the evaluation and implementation of new communications technology for network systems. Employees must analyze software and hardware options to assure functionality, reliability, economy, compatibility, and manufacturer or vendor credibility. For some communications problems, several alternative systems configurations must be analyzed and methods utilized to resolve and maintain network integrity and limit user down time.

### Recruitment Standards

#### Knowledge, Skills, and Abilities

- Considerable knowledge of telecommunications network concepts, architecture, protocols, transport systems, and communications hardware and software.
- Considerable knowledge of digital electronics, communications systems design and integrated circuit component technology.
- 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, Computer Information Systems, Computer Engineering, Electronics, or a related curriculum from an appropriately accredited institution and one year of progressive experience in telecommunications network management, analysis, or design, or traffic engineering; or

Bachelor's degree from an appropriately accredited institution and two years of networking related experience such as network design, analysis or network management; or

Associate's degree in Electronics or Networking Technology from an appropriately accredited institution and two years of networking related experience; or an equivalent combination of education and experience.