

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼
HUMAN RESOURCES ENTERPRISE
COMMUNICATIONS ENGINEER

DEFINITION

Performs professional level engineering work in designing, developing, and maintaining an integrated telecommunications system plan for the State of Iowa; performs related work as required.

The Work Examples and Competencies listed are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

WORK EXAMPLES

Assists supervisor by instructing employees, answering questions and distributing, balancing and checking work; may make suggestions on appointments, promotions, performance and reassignments.

Writes bid specifications to assure the purchase of acceptable and usable equipment by examining and evaluating the requirements for two-way radio units and other communications equipment.

Designs and develops communications sub-systems to insure integration with the total system by utilizing applicable professional level engineering principles, practices, and standards.

Manages communications development projects to meet the required provisions of federally funded grants by planning the work, consulting with, and coordinating the work of technicians, technical writers, draftpersons, and engineers.

Develops general acceptance test procedures to comply with established performance and operating standards by monitoring communications sub-systems.

Makes presentations to explain telecommunication plans by speaking to individual or joint groups of state, county, and municipal agencies.

Studies methods of updating the operational procedures of communications sub-systems to realize economies and provide more efficient equipment utilization by monitoring processes and procedures and evaluating technological advances.

Acts as a consultant to state, county, and municipal government personnel to upgrade their knowledge and capabilities by providing professional expertise on matters related to telecommunications, and providing technical training on a periodic basis to agencies requesting the aid.

COMPETENCIES REQUIRED

Knowledge of the principles, techniques and standards of the engineering profession.

Knowledge of the current principles and practices of telecommunications engineering.

Knowledge of the tools, techniques, equipment, and materials employed in the installation, testing, operation, and maintenance of telecommunications systems.

Knowledge of the applicable rules and regulations regarding the installation, testing, and operating of telecommunications systems.

Ability to plan, organize, and execute needed maintenance and repair of telecommunications equipment.

Ability to coordinate sub-systems with other established telecommunications systems.

Ability to interact with superiors, colleagues, public officials, and the public in order to establish and maintain effective working relationships.

Ability to analyze technical data and develop recommendations and conclusions for an effective course of action.

Ability to present thoughts and ideas clearly and concisely, both orally and in writing.

Skill in the use of specialized equipment commonly used in telecommunications engineering, as required by specific assignments.

Displays high standards of ethical conduct. Exhibits honesty and integrity. Refrains from theft-related, dishonest or unethical behavior.

Works and communicates with internal and external clients and customers to meet their needs in a polite, courteous, and cooperative manner. Committed to quality service.

Displays a high level of initiative, effort and commitment towards completing assignments efficiently. Works with minimal supervision. Demonstrates responsible behavior and attention to detail.

Responds appropriately to supervision. Follows policy and cooperates with supervisors.

Aligns behavior with the needs, priorities and goals of the organization.

Encourages and facilitates cooperation, pride, trust, and group identity. Fosters commitment and team spirit.

Expresses information to individuals or groups effectively, taking into account the audience and nature of the information. Listens to others and responds appropriately.

EDUCATION, EXPERIENCE, AND SPECIAL REQUIREMENTS

Graduation from an accredited four year college or university with a degree in electrical or electronic engineering and one year of professional level engineering work experience involving the design, testing, installation, and/or maintenance of radio, television, and/or telecommunications systems;

OR

substitution of eight years of progressively responsible, practical electrical or electronic engineering experience or an equivalent combination of education and experience in engineering work which is of a character satisfactory to the Iowa State Board of Engineering Examiners for the accredited four-year course of study in engineering.

Effective Date: 05/07 DF