IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼
HUMAN RESOURCES ENTERPRISE

TELECOMMUNICATIONS TECHNOLOGY ENTERPRISE EXPERT

DEFINITION
This job classification is used only by the Iowa Communications Network.

As the recognized enterprise expert in an area of telecommunications, designs and recommends future technological services and direction for the Iowa Communication Network (ICN); 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 performing such duties as instructing employees, answering questions, distributing and balancing the workload, and checking work; may make suggestions on appointments, promotions, and reassignments.

Oversees capacity planning to determine enterprise and agency needs; analyzes customer service business needs; assesses industry direction and analyzes new capabilities that may be applied to the business units within the enterprise; evaluates new products, documents characteristics, and makes recommendations for, and takes the lead in, the integration of new or improved technologies.

Designs, coordinates and implements complex installation projects for major, statewide systems that have high risk/high impact on public services, implements new development or major maintenance that have executive sponsorship; integrates and certifies software/hardware for enterprise-wide systems.

Identifies and independently resolves operational problems for major, enterprise-wide systems that have high risk/high impact on public services, coordinates the resolution of telecommunications providers operational problems.

Oversees the development of requests for information and/or requests for proposals, feasibility studies and decision packages for high visibility/impact or multi-customer initiatives; leads the implementation of telecommunications policies and strategies; defines project action plans, conducts cost/benefit analysis, oversees requests for proposals and evaluates responses for major telecommunications providers.

Analyzes trends and makes recommendations for improvements and efficiencies in system performance; develops and writes enterprise and volume purchase acquisition plans for review and implementation by the ICN.

Prepares operational and performance reports on major telecommunications technology systems and services.

Creates and supports testing environment for the future deployment of new technologies for the enterprise.

COMPETENCIES REQUIRED
Knowledge of protocols, topologies and technologies (HTTP, SNMP, TCP/IP, FTP, TDM, DWDM, SONET, WAN, LAN, Ethernet, ATM, Wireless, etc.).

Knowledge of a broad range of current telecommunications technology including: hardware, software and server operating systems, networking, internet/intranet development, deployment, utilization, telecommunications.

Knowledge of voice and data circuit and video technology.
Knowledge of system management processes/systems, as required in designated positions.
Knowledge of wireless communications technology.
Knowledge of equipment performance management, and network monitoring.
Knowledge of electronic and physical principals of telecommunications systems.
Knowledge of packet switching and virtual circuit theory.
Knowledge of telephony, digital theory and digital hierarchy.
Knowledge of network element configuration.
Knowledge of operating systems, or utility programs used as required by the position.
Knowledge of methods and techniques of systems analysis, design and development, as required in designated positions.
Knowledge of advanced system security methods and techniques.
Knowledge of methods/tools used to troubleshoot information processing system problems and monitor system performance.
Knowledge of administrative aspects relative to planning, budget, accounting, operations management, organization structure, personnel policy and procedures.
Knowledge of accepted principles and standards of research and analysis relative to recommending, coordinating, and implementing telecommunications systems.
Knowledge of business process analysis methods and techniques used in systems analysis, design and development.
Ability to look beyond immediate problems to implement and integrate successful solutions to meet enterprise requirements.
Ability to creatively evaluate and meet complex enterprise-wide telecommunications needs.
Ability to effectively plan, organize, monitor and coordinate teams carrying out customer telecommunications objectives.
Ability to analyze current and emerging technology to evaluate and recommend improved and potential uses enterprise-wide.
Ability to plan work, think conceptually, observe and evaluate trends, analyze data, draw logical conclusions and make sound decisions and recommendations.
Displays high standards of ethical conduct. Refrains from dishonest behavior.
Works and communicates with all clients and customers providing quality professional service.
Displays a high level of initiative, effort, attention to detail and commitment by completing assignments efficiently with minimal supervision.
Follows policy, cooperates with supervisors and aligns behavior with the goals of the organization.
Fosters and facilitates cooperation, pride, trust, group identity and team spirit throughout the organization.
Exchanges information with individuals or groups effectively by listening and responding appropriately.

**EDUCATION, EXPERIENCE, AND SPECIAL REQUIREMENTS**

Graduation from an accredited college or university and experience equal to six years of full-time work in one or more of the following areas: telecommunications engineering, electrical engineering, networking (LAN, WAN) maintenance and testing; server operating systems; telecommunications carrier operations, application of fiber optic principles, and/or Internet/Intranet development and deployment;
OR

an equivalent combination of education and experience substituting the completion of an approved curriculum/specialized training program developed and implemented by or in cooperation with state government; or twenty-four semester hours of accredited post high school course work in one of the specialty areas listed above for the required education;

OR

an equivalent combination of education and experience substituting one year of the required experience for thirty semester hours of the required education;

OR

employees with current continuous experience in the state executive branch that includes experience equal to two years of full-time work as a Telecommunications Engineer Senior or Telecommunications Specialist Senior.