

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼
HUMAN RESOURCES ENTERPRISE
COMMUNICATIONS TECHNICIAN 2

DEFINITION

Performs difficult/complex electronic work, installing, maintaining, and repairing a variety of communications equipment (e.g., two-way radio, microwave, traffic counting equipment, telephone and data lines) in an assigned communication center, geographic area or central service shop; 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

Designs, installs, and services voice and data telecommunications systems and their respective interface components.

Installs, maintains, and repairs complex two-way radio equipment at base stations and in mobile units; installs and maintains intercommunication and public address systems; installs and maintains electrical generators and assists in the installation and maintenance of radio antennas and towers.

Determines electronic part and supply orders for radio, teletype, computer and telephone equipment.

Performs difficult and complex regularly scheduled preventative maintenance tests on radio units for operating frequency, modulation level, and power output; maintains Federal Communications Commission records, log books, and service records as required.

Operates updated diagnostic testing and measuring equipment including distortion analyzer, TDR and transistor analyzers, oscilloscopes, signal and tone generators, frequency and deviation meters, and other testing devices to test and locate malfunctions.

Plans and builds various projects including intercommunication systems, warning light control units, amplifiers, and specialized testing devices.

Modifies subsystem components and units according to engineering specifications to improve operating efficiency.

May receive, transmit, and monitor messages from or between all criminal justice agencies through operation of two-way radio, teletype, computer and telephone; relays and dispatches messages to state and interstate communication centers.

COMPETENCIES REQUIRED

Knowledge of Federal Communications Commission Rules and Regulations.

Knowledge of electronic theory, digital circuits and components.

Knowledge of mobile and fixed two-way radio communication methods, procedures, and equipment.

Knowledge of the techniques and technical aspects of installing, maintaining, and repairing telecommunications systems and related equipment.

Knowledge of the methods used in microwave transmission, Doppler radar and video systems used in two-way communications.

Knowledge of algebra and trigonometry.

Knowledge of state of the art improvements and developments in electronics and communications.

Knowledge of the occupational hazards and safety precautions applicable to the work.

Ability to respond quickly and accurately in an emergency situation related to regular assignments.

Ability to use mathematical theory and logic in troubleshooting complex components and systems.

Ability to lay out and construct specialized electronic circuits.

Ability to express ideas effectively, orally and in writing.

Ability to travel and work under adverse weather conditions.

Ability to establish and maintain effective working relations as necessitated by work assignments.

Ability to use and care for electronic test equipment, tools, and materials.

Ability to read and write English.

Ability to understand and follow verbal and written directions/instructions given in English.

Sufficient color perception in order to differentiate among various colors according to Electronic Institute of American standards.

Designated Department of Transportation positions will also require the:

Ability to occasionally (1-33% of the time) lift/lower, carry and push/pull various amounts of force within the "heavy work" as defined by the US Department of Labor; team lift or mechanical assist recommended for weights over 75 pounds. Related work examples: 60 pound concrete pre-mix, 20 pound traffic recorder, 98 pound concrete saw, 55 and 64 pound 12 volt batteries, etc.

Ability to operate heavy equipment to travel to various worksites statewide.

Ability to drive vehicles in a safe and conscientious manner.

Ability to work outdoors in all types of weather conditions, day or night, in normal and emergency situations.

Ability to walk on uneven ground.

Ability to climb, kneel, crouch, crawl, stoop and twist and perform duties using appropriate tools and equipment within safety standards.

Ability to operate computers and/or other electronic devices and use programs/applications to conduct Department of Transportation business.

Displays high standards of ethical conduct. Refrains from dishonest behavior.

Works and communicates with all clients and customers providing polite, 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

Two years (sixty semester hours or the equivalent) of post high school course work in electronic technology;

OR

an equivalent combination of education and experience substituting post high school education the equivalent of two years full-time work experience in either telecommunication/radio system design, installation, or service for each year of the required education;

OR

employees with current continuous experience in the state executive branch that includes the equivalent of eighteen months of full time experience as a Communications Technician 1 shall be considered qualified.

NECESSARY SPECIAL REQUIREMENTS

Designated positions in this job class require applicants to obtain the required Chauffeur's License within a period of time determined by the appointing authority at the time of hire.

The following applies to Department of Public Safety positions only:

Ability to pass a thorough background investigation conducted by the Division of Criminal Investigation in the Department of Public Safety.

All of the following apply to Department of Transportation positions only:

Designated positions in this class require possession of a valid Commercial Learner's Permit upon hire. Within a timeframe determined by the appointing authority, a valid Class A Commercial Driver's License with the required endorsements and applicable restrictions must be obtained and subsequently maintained in order to continue employment.

If a CDL is not required, designated positions are required to have and maintain a minimum of a valid Class C Non-Commercial Operator's License.

In conjunction with Title 49 of the Code of Federal Regulations (parts 40 and 382), designated positions in this job class require a pre-employment drug screen and will require ongoing participation in the employer's random drug and alcohol testing program and will be subject to the regulations regarding the Federal drug and alcohol testing program.

Prior to starting employment, all persons in designated positions are required to have a post offer pre-employment physical verifying the physical ability to perform the duties described.

All persons in designated positions must successfully pass a background check and maintain certification for the Iowa System and the National Crime Information Center (NCIC).

NOTES

The following applies to Department of Transportation positions only:

Employees in designated positions must be able to travel and may be required to stay away from home overnight during assignments.

Effective Date: 11/17 SA