

Iowa Department of Administrative Services – Human Resources Enterprise  
Job Classification Description

## Communications Technician 1

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### Definition

At the entry/trainee level, learns to perform 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; performs related work as required.

*The work examples and competencies listed below are for illustrative purposes only and not intended to be the primary basis for position classification decisions.*

### Work Examples

Learns the maintenance, repair, and installation of two-way radio equipment at base stations and in mobile units; installs and maintains intercommunication and public address systems in offices, garages, and weighing stations; installs and maintains electrical generators and assists in the installation and maintenance of radio antennas and towers.

Under direction, requisitions parts and supplies for radio, teletype, computer, and telephone equipment.

Performs less 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.

Learns the operation of 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.

Lays out and builds basic projects designed by advanced technicians including intercommunications systems, warning light control units, amplifiers, and specialized testing devices.

Modifies components and units to increase operating efficiency of the system under direction.

Learns to 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 stations and interstate communication centers.

### Competencies Required

#### Knowledge:

- Customer Service – Principles and processes for providing customer services, including customer needs assessment, meeting quality standards for services, and evaluating customer satisfaction.
- Communications – The science and art of delivering information.
- Computers and Electronics – Circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.

- Engineering and Technology – The design, development, and application of technology for specific purposes.
- Law and Government – Laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process.
- Telecommunications – Transmission, broadcasting, switching, control, and operation of telecommunications systems.
- Mathematics – Arithmetic, algebra, geometry, calculus, statistics, and their applications.
- Public Safety and Security – Relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.
- Mechanical – Machines and tools, including their designs, uses, repair, and maintenance.

**Abilities:**

- Near Vision – See details at close range (within a few feet of the observer).
- Visual Color Discrimination – Match or detect differences between colors, including shades of color and brightness.
- Arm-Hand Steadiness – Keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.
- Finger Dexterity – Make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.
- Speech Clarity – Speak clearly so others can understand you.
- Speech Recognition – Identify and understand the speech of another person.
- Written Comprehension – Read and understand information and ideas presented in writing.
- Written Expression – Communicate information and ideas in writing so others will understand.

**Skills:**

- Equipment Selection – Determining the kind of tools and equipment needed to do a job.
- Installation – Installing equipment, machines, wiring, or programs to meet specifications.
- Repairing – Repairing machines or systems using the needed tools.
- Talking to others to convey information effectively.
- Troubleshooting – Determining causes of operating errors and deciding what to do about it.
- Writing – Communicating effectively in writing as appropriate for the needs of the audience.

**Minimum Qualification Requirements**

Applicants must meet at least one of the following minimum requirements to qualify for positions in this job classification:

- 1) One year of full-time work experience in telecommunication/radio system design, installation, or service.

- 2) A total of one year of education and/or full-time experience (as described in number one), where thirty semester hours of accredited college or university coursework in electronic technology equals one year of full-time experience.

## Notes

Within a period of time after hire, as determined by the appointing authority, employees in this class may be required to obtain a chauffeur's license.

Positions in this class may require the ability to pass a background investigation.

Travel, including overnight travel, may be required for positions in this class. Employees must arrange transportation to and from assigned work areas.

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

- Possession of a valid driver's license is required.
- 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 Commercial Driver's License with the required endorsements and applicable restrictions must be obtained and subsequently maintained to continue employment.
- 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 are required to have a post offer, pre-employment physical verifying the physical ability to perform the duties described.
- Some positions in this class may require the ability to maintain certification for the Iowa System and the National Crime Information Center (NCIC).

*Effective date: 02/26 KC*