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

Communications Technician 3

Definition

Performs advanced technical work (e.g., repair of microprocessor components, complex diagnostic equipment, calibration of various testing/monitoring equipment, and work on automotive computers/radios), or leads Communications Technicians engaged in the installation, maintenance, problem solving, and repair of two-way radio, microwave, traffic counting equipment, telephone and data lines communication systems or electronic security systems; 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

Assists supervisor by performing such duties as instructing employees, answering questions, distributing and balancing the workload, and checking work; may make suggestions on selection, promotions, and reassignments.

Performs in-depth troubleshooting on the repair of electronic security systems and related equipment and in-car mobile computers including scanners, printers, PCs, and other peripheral equipment, and diagnostic procedures when other Communication Technicians are unable to solve component or system problems.

Monitors frequency interference as to possible technical causes and informs management of problems in multi-user system.

Performs advanced technical work/repair on consoles, microprocessor components, and complex diagnostic equipment.

Responds to and analyzes emergency and routine requests for assistance in order to perform necessary repairs by answering calls, determining nature and immediacy of problem and whether it requires a visit, and either resolving problem over the phone or dispatching personnel to the site of equipment.

Oversees the repairs of malfunctioning equipment such as mobile radios, base stations, telephone equipment, security and surveillance equipment, and other electronic equipment in order to maintain a fully operational communications network by utilizing various testing methods in searching for and repairing malfunctioning equipment.

Installs electronic communications/security system equipment in order to implement a new or modify an existing system by checking to ensure equipment meets specifications, making necessary adjustments/modifications to ensure compatibility with existing system, placing in designated physical location, performing final testing of equipment, and instructing personnel in the proper care and operation of assigned equipment.

Designs and builds specialized test equipment in order to facilitate the repair of electronic components by obtaining necessary materials and assembling testing devices.

Operates test equipment to isolate and repair malfunctioning equipment by monitoring and interpreting readings as registered on the test equipment and checking to ensure that the equipment and/or components meet specifications using established testing procedures and standards.

Calibrates test equipment to ensure accuracy of readings registered on the equipment by following manufacturers' established procedures.

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.

- Telecommunications – Transmission, broadcasting, switching, control, and operation of telecommunications systems.

- Computers and Electronics – Circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.

- English Language – The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.

- 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.

- Education and Training – Principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.

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.

- Oral Comprehension – Listen to and understand information and ideas presented through spoken words and sentences.

- Problem Sensitivity – Tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.

- 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.

- Manual Dexterity – Quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.

Skills:

- Repairing – Repairing machines or systems using the needed tools.

- Troubleshooting – Determining causes of operating errors and deciding what to do about it.

- Critical Thinking – Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

- Operation Monitoring – Watching gauges, dials, or other indicators to make sure a machine is working properly.

- Quality Control Analysis – Conducting tests and inspections of products, services, or processes to evaluate quality or performance.

- Active Listening – Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

- Equipment Maintenance – Performing routine maintenance on equipment and determining when and what kind of maintenance is needed.

- Reading Comprehension – Understanding written sentences and paragraphs in work related documents.

- Coordination – Adjusting actions in relation to others' actions.

Minimum Qualification Requirements

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

1) All of the following (a and b):
   a. Two years of full-time work experience in telecommunication/radio system design, installation, or service; and
   b. A total of two years of education and/or full-time experience (as described in part a), where thirty semester hours of accredited college or university course work in electronic technology equals one year of full-time experience.

2) Current, continuous experience in the state executive branch that includes eighteen months of full-time work as a Communications Technician 2.

Notes

Within a period of time after hire, as determined by the appointing authority, employees in this class may be required to obtain a chauffer'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: 06/19 SA