

Electronics Technician - Communications

FLSA Status: Covered
Bargaining Unit: District Council of Trade Unions (DCTU)

General Summary

Positions in this broad class install, test, repair and remove electronic equipment and related electronics and communications devices, with a specialization in communications and related technologies.

Electronic Technician I - Communications - 30000234

Distinguishing Characteristics

The journey level of this class typically installs, tests, repairs and removes a variety of electronic equipment and related electronics and communications devices and related technologies. It is distinguished from the Electronics Technician Assistant class by the requirement to work independently and from the other Electronics Technician class by its specialization in communication and related technologies.

Typical Duties/Examples of Work

1. Installs, maintains, troubleshoots, and repairs a variety of communications equipment, and related systems, sub-systems, connections, and controls; interprets and works from plans; works with other electronic equipment and related electronics and communications devices as required.
2. Responds to failures and emergencies involving communications and other electronic systems and equipment; performs routine and preventative maintenance.
3. Performs a variety of communications related installations; operates a variety of hand and power tools and testing equipment perform work.
4. Ensures that repairs and installations are safe and operate properly; evaluates safety and operability of systems; reviews the work of contractors to ensure compliance with specifications and standards; assists users with proper operation and care of equipment.
5. Performs a variety of diagnostic and analytical tests, including those involving programmable logic controls; researches information as necessary to perform duties and maintain currency.

- 6. Maintains records, supplies and equipment; determines materials needs; carries out all required safety procedures.
- 7. As assigned, directs work of crews or work groups; responsible for worker safety, review of work, training and guidance in duties.
- 8. Performs related duties as assigned.

Required Knowledge, Skills and Abilities

Knowledge of: tools, materials, processes and techniques of communications equipment and electronics; troubleshooting techniques

Skill in: repairing, troubleshooting, maintaining, modifying and installing communications and electronic equipment and related electronics and communications devices; operation of specialized equipment.

Special Requirements

Valid state driver’s license. Oregon State Limited Energy, Limited Journeyman or Restricted Energy License may be required for some positions. May be required to climb and work on towers up to 442 feet.

Classification History:

Adopted: 2-03-99: Class created as a result of DCTU Classification and Compensation Study 1998-99. This class is composed of the following classes:

- 3250 Electronics Tech I
- 3251 Adopted: 00-00-00; Revised: 02-17-81; 03-10-95 (Updated format, updated technology to include video.)

Revised: 10-03-03: Corrected tower heights from 410 to 442 feet.

June 2009 - Change Job Class number from 3249 to 30000234, due to system change.

Electronic Technician II – Communications - 30000236

Distinguishing Characteristics

The senior journey level of this class typically serves as a technical expert in communications and related technologies. It is distinguished from the Electronic Technician I class by its responsibility for technical guidance to others and project role and from the other Electronics Technician class by its specialization in communications and related technologies.

Typical Duties/Examples of Work

1. Provides technical expertise in the installation, maintenance, troubleshooting, repair and operation of a variety of communications equipment, and related systems, sub-systems, connections, and controls.
2. Plans, schedules and coordinates work; determines resource needs of work group; as assigned, may provide technical direction to or lead the work of others; reviews the work of and provides training and guidance to assigned workers; ensures safety of workers.
3. Lays out jobs; executes projects from start to finish; provides input on planning processes related to communications equipment and systems and other electronics equipment and systems; provides customer service interface.
4. Performs related duties as assigned.

Required Knowledge, Skills and Abilities

Knowledge of: project planning and layout for communications, video and electronic installations and modifications; effective principles and practices of leadership

Ability to: perform layout and sketch designs for communications, video and electronic installations and modifications; schedule and assign the work of others

Skill in: operation of specialized equipment; demonstrating techniques to others; providing training to others; providing lead direction to staff, including assigning and reviewing work

Special Requirements

Same as for Electronic Technician I – Communications

Classification History:

Adopted: 2-03-99: Class created as a result of DCTU Classification and Compensation Study 1998-99. This class is composed of the following classes:
3251 Electronics Tech II, Adopted: 00-00-00 Revised: 02-17-81
June 2009 - Change Job Class number from 3251 to 30000236, due to system change.

Electronic Technician III - Communications - 30002610

Distinguishing Characteristics

The advanced level of this class typically serves as a technical expert in 7/800MHz public safety trunked radio system communications, Audio/Video (AV) systems, security camera infrastructure, or related technologies. It is distinguished from the Electronic Technician II class by its responsibility for 24-7

maintenance, repair and day to day support of the City's 7/800MHz public safety trunked radio system, AV systems, and security camera infrastructure.

Typical Duties/Examples of Work

1. Provides technical expertise on the 7/800 MHz public safety radio system, Audio/Video (AV) systems, or security camera infrastructure including the installation, maintenance, troubleshooting, repair and operation of a variety of communications equipment, and related infrastructure, sub-systems, connections, and control.
2. Repairs and maintains the collective radio system back-bone that includes; P-25 Digital radio infrastructure, IP and SONET based microwave, dispatch console, ISSI, power systems and back-up radio sub-systems.
3. Performs support and maintenance of the 7/800MHz public safety radio system outside of regular business hours as needed during on-call pager rotation/duty.
4. Plans, schedules and coordinates work; determines resource needs of work group; as assigned, may provide technical direction to or lead the work of others; reviews the work of and provides training and guidance to assigned workers; ensures safety of workers.
5. Lays out jobs; executes projects from start to finish; provides input on planning processes related to communications equipment and systems and other electronics equipment and systems; provides customer service interface.
6. Provides customer service interface to end-users including dispatch centers and public safety responders in a 24-hour environment.
7. Performs related duties as assigned.

Required Knowledge, Skills and Abilities

Knowledge of: P-25 Digital radio infrastructure, IP and SONET based microwave, dispatch console, ISSI, power systems and back-up radio sub-systems; AES256 encryption standards and key management facilities, FCC licensing requirements, frequency spectrum, and related TDMA, FDMA channel spacing requirements, TCP/IP Networking as it relates to P-25 Motorola Astro radio networks, security camera installations, Audio/Video installations, structured cabling best practices, project planning and layout for communications, electronic installations and modifications; effective principles and practices of leadership

Ability to: identify and perform RF interference analysis, perform layout and sketch designs for communications, video and electronic installations and modifications; schedule and assign the work of others

Skill in: operation of specialized equipment including demonstrating techniques to others; providing training to others; providing lead direction to staff, including assigning and reviewing work

Special Requirements

Valid state driver's license. Oregon State Limited Energy, Limited Journeyman or Restricted Energy License may be required for some positions. FCC General Radio Telephone Operator's License preferred. Ability to climb and work on towers up to 442 feet.

Classification History:

Adopted: 7/1/17

Revised: 12/14/22: Updated class spec to reflect duties related to Audio/Video and security camera infrastructure.

Working Conditions

Work in this class is typically performed in a shop environment; some work is performed in a field environment. Incumbent is typically required to lift up to 50 pounds; to work outdoors as required in all weather conditions; to wear protective gear; to work with hand and power tools; to be exposed to electric currents.