



## Telecommunications Engineer

Classified Range: 44

Board Approved: 08/29/1985 P. 1|3

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job; however, any additional duties will be reasonably related to this class.*

### **SUMMARY DESCRIPTION**

---

Under direction, performs specialized technical duties involving the design, installation, operation and maintenance of television equipment; operates and maintains a variety of audio and video monitoring equipment; and maintains a variety of records and reports.

### **REPRESENTATIVE DUTIES**

---

*The following duties are typical for this classification.*

1. Participates in the design, installation, alteration, operation, and maintenance of District broadcasting and closed-circuit television equipment including transmitters, receivers, audio and video monitors, television cameras, audio and video recorders/reproducers, audio and video switching systems, and audio and video processing equipment.
2. Monitors and maintains equipment in conformance with federal regulations.
3. Designs, develops, and installs new systems and equipment as necessary.
4. Evaluates and makes recommendations regarding the purchase of new equipment and materials; orders parts and supplies as necessary.
5. Participates in setup and operation of remote broadcasting equipment.
6. Operates and maintains a variety of telecommunications test equipment including oscilloscopes, digital meters, vectorscopes, and related test equipment.
7. Designs graphics for a variety of sources including television productions, newspaper ads, magazine ads, flyers billboards, bus ads, and theatre ads.
8. Maintains a variety of records and reports.
9. Provides temporary and vacation relief in similar occupational fields as necessary; may be required to assist in installation and maintenance of radio equipment.
10. Performs related duties as required.

### **MINIMUM QUALIFICATIONS**

---

*The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.*

#### **Knowledge of:**

- Advanced electronic communication system design.
- The uses, operations, and capabilities of telecommunications equipment.
- Telecommunications and audio-video equipment repair methods.
- Principles of electricity and electronics.
- Installation, operation, repair and maintenance of equipment used in television studios.



## Telecommunications Engineer

Classified Range: 44

Board Approved: 08/29/1985 P. 2|3

- Troubleshooting techniques used in detecting malfunctions of television studio equipment.
- Operational characteristics of a variety of telecommunications test equipment including oscilloscopes, digital meters, vectorscopes, and related test equipment.
- Occupational hazards and standard safety practices including work involving high electrical voltage.
- Pertinent federal, state and local codes, laws and regulations and rules and regulations of the federal Communications commission as applied to broadcast operations.

### **Ability to:**

- Design, install, set up, operate and maintain a variety of telecommunications equipment including televisions and computers.
- Troubleshoot malfunctions of television studio equipment.
- Operate and repair District's television equipment and remote pick-up transmitters.
- Operates and maintains a variety of telecommunications test equipment.
- Maintain a variety of required reports and records.
- Understand and follow oral and written communication.
- Communicate clearly and concisely both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.

### **Education and Experience Guidelines**

#### **Education:**

- Equivalent to the completion of 60 units of college level coursework in telecommunication electronics or a closely related field; additional experience may substitute for the educational guideline on a year-for-year basis.

#### **Experience:**

- Five years of experience involving the repair, maintenance, installation, use and design of telecommunications equipment.

#### **License or Certificates:**

- Possession of an appropriate, valid driver's license.

### **PHYSICAL DEMANDS AND WORKING ENVIRONMENT**

*The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.*

**Environment:** Work is performed primarily in a standard office setting; occasionally travel from site to site; exposure to high voltage and electrical energy.

**Physical:** Primary functions require sufficient physical ability and mobility to work in an office setting; to stand or sit for prolonged periods of time; to occasionally stoop, bend, kneel, crouch, reach, and twist; to lift, carry, push, and/or pull light to moderate amounts of weight; to operate office equipment requiring repetitive hand movement and fine coordination including use of a computer keyboard; and to verbally communicate to exchange information.



## Telecommunications Engineer

Classified Range: 44

Board Approved: 08/29/1985 P. 3|3

**Vision:** See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment.

**Hearing:** Hear in the normal audio range with or without correction.