

## ELECTRONICS TECHNICIAN

### DEFINITION

Assembles, installs, maintains, repairs, modifies, and tests a wide variety of electronic equipment including radio, video, television, audio-visual equipment, public address systems, and electronic instructional aids.

### TYPICAL DUTIES

- Assembles, installs, maintains, repairs, modifies, and tests a wide variety of electronic equipment such as telephone and public address systems, television and radio receivers, electronic instructional aids and audio recorders, microphones, booms, speech input consoles, amplifier systems, dimmer boards, rear projection equipment, theater sound systems and sound-effects equipment, television cameras, monitors, video recorders, video special-effects equipment, and other related equipment.
- Operates test equipment such as oscilloscopes, signal generators, meters, audio measuring devices, and audio-video test sets needed to detect malfunctions of electronic equipment.
- Uses a variety of tools such as hand soldering tools, simple power tools, and assembly and installation tools needed for the repair of electronic equipment.
- Reads and interprets equipment schematics, logic diagrams and blueprints.
- Estimates material needed for installation and upgrading of electronic equipment such as cable connectors, small components and other related materials.
- Repairs electronic musical instruments.
- Orders supplies, parts and tools needed for repairs and maintains a parts inventory.
- Maintains repair and installation records.
- Makes recommendations on the replacement and purchase of equipment.
- May provide technical assistance to instructional staff regarding the use of electronic test instruments.
- May assist in the design of instructional equipment and aids for electronics courses.
- May repair computers and other electronic office or peripheral equipment.
- Performs related duties as assigned.

### DISTINGUISHING CHARACTERISTICS

An **Electronics Technician** installs, maintains, repairs, modifies, and tests a wide variety of electronics equipment such as radio, video, television, audio-visual equipment, public address systems, and electronic instructional aids.

An **Electrician** performs skilled journey-level electrical work in the installation, maintenance, alteration, and repair of a variety of electrical systems and equipment related to light, heat, communications, and power.

## SUPERVISION

General supervision is received from a classified manager or supervisor. Work direction may be provided to student employees.

## CLASS QUALIFICATIONS

### Knowledge of:

- Electronic and electronic test equipment
- Principles and theories of electronic circuitry, integrated circuits, and semi-conductors
- Principles and theories related to electronic equipment
- Current electronic technology
- Tools, materials, and parts involved in the repair and maintenance of electronic equipment
- Safety precautions, practices, and procedures related to electronic equipment
- Troubleshooting techniques used in detecting malfunctions of electronic equipment
- Principles of recordkeeping
- Basic operations of computer equipment
- Spelling, punctuation, and English usage

### Ability to:

- Read, interpret and use schematics, logic diagrams and blueprints for a variety of electronic equipment
- Install, maintain, repair, and safely operate a variety of electronic equipment
- Test a variety of electronic equipment and locate causes of malfunctions or failures
- Safely work from ladders and elevated staging
- Work effectively and cooperatively with District staff, instructional staff, and students
- Keep detailed and precise records
- Work independently
- Learn the characteristics of new types or models of electronic equipment
- Learn general and specialized software applications

## ENTRANCE QUALIFICATIONS

### Education and Experience:

- A. An associate degree or its equivalent, from a recognized college or university, with a major in electronics or a closely related field **AND** two years of recent full-time paid experience in maintaining a variety of complex electronic equipment. Experience in operating and maintaining audio, video, television equipment, and other related equipment is desirable.

**OR**

Education and Experience (Cont.):

B. Graduation from high school or its equivalent **AND** four years of recent full-time paid experience in maintaining a variety of complex electronic equipment. Experience in operating and maintaining audio, video, television equipment, and other related equipment is desirable.

**OR**

C. Any equivalent combination of A. and B. above.

Physical Requirements:

Ability to lift and move items weighing up to fifty pounds.