#### **ELECTRONICS TECHNICIAN I**

## **DESCRIPTION OF WORK**

This is skilled work in the maintenance and repair of standard electronics devices.

Employees in this class may either function as agency or department-wide technicians responsible for the maintenance and repair of electronics devices; or involved in the same type of repair independently under a higher-level electronics technician. Employees calibrate, perform preventive maintenance, troubleshoot, and repair a wide variety of electronics devices using standard test equipment. Equipment repaired is generally well documented with wiring and schematic diagrams and factory maintenance manuals. Work is evaluated through analysis of equipment reliability and overall effectiveness of repair.

### **EXAMPLES OF DUTIES PERFORMED**

Reads and interprets schematic and wiring diagrams and factory maintenance manuals.

Troubleshoots and repairs electronics devices such as televisions, radios, pagers, amplifiers, projectors, and recorders.

Operates standard test equipment such as oscilloscopes, VOM's, VTVM'S, signal generators, transistor testers, and tube testers in troubleshooting and calibrating electronics devices.

Constructs electronics devices following detailed schematic diagrams and instructions.

Evaluates and installs electronics devices.

May maintain an inventory of the more commonly used electronics components.

May recommend additional shop equipment or replacement of equipment to supervisor.

May supervise helpers.

Performs related duties as required.

# **RECRUITMENT STANDARDS**

# Knowledges, Skills, and Abilities

A basic knowledge of electronic principles.

A basic knowledge of the fundamentals of physics as applied to electronics.

A basic knowledge of mathematical principles as applied to electronic circuit analysis.

Familiarity with the operation and uses of the more standard test equipment.

Ability to read and understand schematic and wiring diagrams and maintenance manuals.

Ability to systematically troubleshoot standard electronic devices.

### Minimum Education and Experience

Associate's degree in electronics from an appropriately accredited institution; or an equivalent combination of training and experience.