

# **Electrician**

CLASS TITLE	CLASS CODE	SALARY GROUP	SALARY RANGE
ELECTRICIAN I	9802	A16	\$40,918 - \$61,130
ELECTRICIAN II	9804	A18	\$45,521 - \$71,055
ELECTRICIAN III	9806	A20	\$51,158 - \$81,351
ELECTRICIAN IV	9808	A22	\$57,614 - \$93,138

## **GENERAL DESCRIPTION**

Performs work in the maintenance and repair of electrical equipment and circuits, involving installing, replacing, and maintaining electrical systems, apparatus, components of machinery, and equipment.

## **EXAMPLES OF WORK PERFORMED**

Installs and repairs electrical systems, apparatus, circuits, and electrical components of machinery and equipment.

Inspects and tests electrical equipment, lighting, and power circuits.

Isolates defects in wiring, circuit breakers, fuses, switches, sockets, and other elements; and replaces faulty circuit breakers, fuses, switches, sockets, and other elements of electrical systems.

Interprets blueprints and sketches and interprets schematic drawings of electrical circuits.

Calculates electrical loads, wire sizes, and lengths.

Mounts motors, transformers, and lighting fixtures into position and completes circuits according to diagram specifications.

Repairs magnetic starters and remote start-stop stations; operates and maintains high- and low-voltage switches; and installs rigid, thin wall, and flexible conduit.

Wires circuits, and cleans and tightens low-voltage switch gears.

Performs related work as assigned.

## **DESCRIPTION OF LEVELS**

Examples of work and descriptions are meant to progress through the levels. For example, an employee at level IV may also perform work listed within the previous levels.

**Note**: Factors that may distinguish between levels include the degree of independence in performing the work; the complexity of the work; the scope of responsibility; and the employee's related work experience, education, and certifications. Employees at the journey levels (levels I-II) may independently perform the full range of work identified within the current or previous levels and may assist others in performing work of greater complexity.

**ELECTRICIAN I:** Performs moderately complex (journey-level) work in the maintenance and repair of electrical equipment and circuits. Works under moderate supervision, with limited latitude for the use of initiative and independent judgment.

**ELECTRICIAN II:** Performs complex (journey-level) work in the maintenance and repair of electrical equipment and circuits. Works under general supervision, with limited latitude for the use of initiative and independent judgment. Employees at this level may:

- Troubleshoot electrical equipment, lighting, and power circuits.
- Plan the layout of electrical wiring to ensure compliance with specifications and electrical codes.

**Note**: Senior-level employees (levels III-IV) may perform the full range of work identified within current and previous levels and may serve as a lead worker providing direction to others. Senior-level employees (levels III-IV) may perform the full range of work identified within current and previous levels and may serve as a lead worker providing direction to others.

**ELECTRICIAN III:** Performs advanced (senior-level) work in the maintenance and repair of electrical equipment and circuits. Works under limited supervision, with moderate latitude for the use of initiative and independent judgment. Employees at this level may:

- Coordinate the installation, replacement, and maintenance of electrical systems, apparatus, circuits, and electrical components of machinery and equipment.
- Coordinate the inspection, testing, and troubleshooting of electrical equipment, lighting, and power circuits.
- Develop plans and specifications of maintenance and renovation projects.
- Estimate time and material used on projects.
- Review the layout of electrical wiring to ensure compliance with specifications and electrical codes.
- Inspect electrical systems, equipment, and components to identify hazards, defects, and the need for adjustment or repair to ensure compliance with electrical codes.
- Maintain records and prepare reports on repairs and service to equipment.

**ELECTRICIAN IV:** Performs highly advanced (senior-level) work in the maintenance and repair of electrical equipment and circuits. Works under limited supervision, with considerable latitude for the use of initiative and independent judgment. Employees at this level may:

• Plan and coordinate the installation of electrical systems.

- Plan long-range electrical maintenance programs.
- Oversee the installation, replacement, and maintenance of electrical systems, apparatus, circuits, and electrical components of machinery and equipment.

### **GENERAL QUALIFICATION GUIDELINES**

#### **EXPERIENCE AND EDUCATION**

Experience in electrical work and/or in the operation, maintenance, and repair of electrical equipment. Graduation from a standard senior high school or equivalent, supplemented by vocational or special training in an electrical trade, is generally preferred. Experience and education may be substituted for one another.

#### **KNOWLEDGE, SKILLS, AND ABILITIES**

#### For all levels

- Knowledge of general principles and theory of electricity, and safety regulations.
- Skill in the use of tools.
- Ability to make maintenance or electrical repairs, to diagnose malfunctioning units, to maintain records, and to communicate effectively.

#### Additional for Electrician II level

Ability to provide guidance to others.

#### Additional for Electrician III-IV levels

Ability to serve as a lead worker providing direction to others.

# REGISTRATION, CERTIFICATION, OR LICENSURE

May require appropriate licensure from the Department of Licensing and Regulation.

May require appropriate hours of on-the-job training and passing an examination issued by the Department of Licensing and Regulation.