



**Classification Title: Electrician**

<b>Department:</b>	Building Services	<b>EEO6 Code:</b>	6
<b>Employee Group:</b>	Classified	<b>Salary Grade:</b>	28
<b>Supervision Received From:</b>	An Assigned Supervisor in Building Services	<b>Date of Origin:</b>	9/2016
<b>Supervision Given:</b>	General Supervision	<b>Last Revision:</b>	7/2018

*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 by individual positions.*

**JOB SUMMARY.**

Performs a variety of skilled electrical work in the installation, maintenance and repair of the District's electrical systems and equipment.

**DISTINGUISHING CHARACTERISTICS.**

Electrician is a journey-level trade classification responsible for performing a wide range of skilled electrical work for District buildings and facilities. Assignments encompass a variety of tasks, seldom require detailed instructions and require sound judgment and initiative.

**ESSENTIAL AND MARGINAL FUNCTION STATEMENTS.**

**Essential Functions:** Essential responsibilities and duties may include, but are not limited to, the following:

1. Installs, maintains and repairs transformers, panel boards and branch circuit wiring; bends and installs various types of conduit and duct systems; installs raceways and panels; installs lighting systems, receptacles, fixtures and switches; fabricates brackets, holders and supports; installs, maintains and repairs motor control circuits; replaces and repairs outdoor lighting systems including parking lot pole lights to a height of 100 feet; installs, programs, and maintains computer-controlled lighting systems, emergency power/battery backup systems, solar power, and networked fire alarm computer programming.
2. Installs interior and exterior wiring for equipment and appliances; wires new and remodeled buildings; adjusts transformer output voltages; replaces fuses and works with low and high-voltage alternating current (AC) and direct current (DC) ranging from 6 volts to 480 volts; works on live panels, wires, circuits and machinery.
3. Installs, programs, and maintains
4. Installs and repairs wiring, electrical fixtures, power equipment and components of machinery and equipment following electrical code, manuals, specifications, schematics and blueprints.
5. Installs and repairs control and distribution apparatus, including, but not limited, to motors, relays, switches, thermostats, and circuit breaker panels.
6. Inspects electrical systems and their components to evaluate their condition; identifies necessary repairs and recommends preventive maintenance; tests electrical systems and continuity of circuits in electrical wiring, equipment and fixtures, using testing devices such as ohmmeters, voltmeters and oscilloscopes to ensure compatibility and safety of

systems.

7. Measures, cuts, bends, threads, assembles and installs electrical conduit using rulers, measuring devices, hand tools, pipe threaders and conduit benders; places conduit pipes or tubing inside partitions, walls or other concealed areas and pulls insulated wires/cables through conduits to complete circuits.
8. Analyzes blueprints, wiring schematics and drawings of electrical systems to determine processes for efficient installation of new or upgraded systems.
9. Implements lockout/tagout procedures at all campus facilities.
10. Inspects work to ensure compliance with national and local electrical codes.
11. Complies with all applicable health and safety regulations, policies and established work practices.

**Marginal Functions:**

1. Orders and restocks electrical parts.
2. Repairs electrical appliances.
3. Performs related duties and responsibilities as required.

**QUALIFICATIONS.**

**Experience and Education/Training Guidelines:** Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

**Experience:** Three years of journey-level electrician experience.

**Education/Training:** Equivalent to completion of the twelfth grade.

**Licenses/Certificates:**

Possession of, or ability to obtain, an appropriate, valid California driver's license by time of appointment.

**Knowledge of:**

1. Methods, techniques, materials and tools used in the installation, troubleshooting, maintenance and repair of electrical systems/subsystems.
2. Electrical tools, materials and safe work practices.
3. Applicable electrical codes, standards and regulations.
4. Electrical applications for high and low voltage electrical systems.
5. Electrical blueprints, schematics and wiring diagrams.
6. Shop mathematics, including algebra.

**Skill in:**

1. Using appropriate tools and diagnostic equipment to repair, install, replace and test electrical circuits, equipment and appliances.
2. Using hand and power tools applicable to the trade.
3. Diagnosing and repairing electrical controls, industrial model control centers and programmable logic controllers for secondary systems.

4. Reading commercial electrical blueprints and applying the National Electrical Code (NEC) through the full range of maintenance and construction work.
5. Reading, understanding, following and enforcing safety procedures.
6. Complying with Occupational Safety and Health Administration (OSHA) regulations.
7. Installing and maintaining motors, welding equipment, lighting fixtures, generators, circuit breakers and transformers.
8. Isolating defects in wiring, switches, motors and other electrical equipment.
9. Installing, repairing and maintaining all types of electrical system equipment and components.
10. Understanding and following oral and written directions.
11. Communicating clearly and effectively, both orally and in writing.
12. Maintaining sensitivity to and understanding of the diverse academic, socioeconomic, cultural, disability, gender identity, sexual orientation, and ethnic backgrounds of community college students, faculty, and staff.
13. Establishing and maintaining effective working relationships with those encountered in the course of work.

#### **WORKING CONDITIONS.**

**Environmental Conditions:** The employee works in a field environment and may work in confined spaces; in high, precarious places on scaffolding and ladders; exposed to electrical energy and high voltage.

**Physical Conditions:** Essential and marginal functions may require physical fitness requirements necessary to perform the job functions with or without accommodation, such as the ability to use hands to repetitively finger, handle, feel or operate objects, tools or controls; climb, balance, stoop, crouch, kneel or crawl; and reach with hands and arms. Requires operation of District vehicles.

#### **TERMS OF EMPLOYMENT.**

The duration of any fully restricted funded position in this classification is dependent upon the continuation of funding.