

ELECTRICIAN TITLE DEFINITION

I. DEFINITION

ELECTRICIAN

This is journey level electrician work. Employees install, maintain, and repair electrical wiring, equipment, and fixtures; ensuring work is in accordance with relevant codes. Employees may install street lights; maintain, troubleshoot and repair traffic signals, signal progression systems, street lighting, hi-mast lighting, and signal pre-emption systems; intercom systems, or electrical control systems. Employees in this title definition perform electrician work at the journey level of skill and under general supervision. Other related duties may also be assigned as necessary. In addition, positions in this title definition may also direct and instruct electrician apprentices, helpers and other assistants.

Positions are assigned any combination of the following duties:

- Assemble, install, test, and maintain electrical or electronic wiring, equipment, appliances, apparatus, and fixtures, using hand tools and power tools and aerial equipment.
- Install electrical circuitry including panel boards, circuit breakers, conduit, wire, switches, fuses, receptacles, lighting fixtures, motor starters, etc.
- Make electrical connections to heating, ventilating, air conditioning, laboratory, and other fixed and movable equipment.
- Install special electrical systems such as fire alarm, class bell, audio, audio-visual, digital control, clock, emergency alarm, and telephone systems.
- Conduct preventative maintenance on assigned electrical systems such as elevators, fire alarm, emergency power, and high voltage distribution.
- Diagnose malfunctioning systems, apparatus, and components, using test equipment and hand tools, to locate the cause of a breakdown and correct the problem.
- Connect wires to circuit breakers, transformers, or other components.
- Inspect electrical systems, equipment, and components to identify hazards, defects, and the need for adjustment or repair, and to ensure compliance with codes.
- Advise management on whether continued operation of equipment could be hazardous.
- Test electrical systems and continuity of circuits in electrical wiring, equipment, and fixtures, using testing devices to ensure compatibility and safety of system.
- Maintain current electrician's license or identification card to meet governmental regulations.
- Plan layout and installation of electrical wiring, equipment and fixtures, based on job specifications and local codes.
- Direct and train helpers to install, maintain, or repair electrical wiring, equipment, and fixtures.
- Prepare sketches or interpret blueprints to determine the location of wiring and equipment and to ensure conformance to building and safety codes.
- Inspect, maintain and repair electrical equipment such as wiring, motors, fans, exhausters, switchboards, switchgears, pumps, and all types of electrical power equipment including relay systems and other protective apparatus used in the production of electricity.
- Lay out, assemble, install and test electrical fixtures, apparatus, control equipment and wiring used in the alarm systems, communication, light and power systems of buildings or other construction projects.
- Plan proposed installation from blueprints, sketches or specifications, adapt and install conduit.

- Inspect and repair elevators.
- Install and repair overhead wires, high-voltage cables, transformers, and associated electrical line accessories.
- Install and maintain underground conduit, wires, cables, transformers, high voltage splices, associated switchgear and protective equipment.
- Install and maintain concrete, aluminum, steel and wood poles, and other equipment used in connection with lighting, traffic control and communication systems.
- Install and maintain traffic signals, controllers, detectors, various types of motors and auxiliary equipment.
- Inspect and test signal controllers including troubleshooting signal operation problems.
- Maintain and monitor signal pre-emption systems.
- Locate underground electrical facilities in the field.
- Keep records and make reports.
- Maintain electrical materials inventory.
- Direct and train apprentices, helpers and other assistants to install, maintain or repair electrical wiring, equipment, and fixtures. Direct and inspect work completed by electrical contractors.
- Direct and inspect work completed by electrical contractors.
- Respond to electrical emergencies during non standard business hours.

II. QUALIFICATIONS

The qualifications required for these positions will be determined at the time of recruitment.

Electrician: Graduation from high school or attainment of age 18 and completion of an apprenticeship approved by the Department of Commerce as an Electrician. Formal recognition of status by the appropriate international or local trade organization of journeyman status may also be accepted.

NOTE: In accordance with s. 101.87 (1), Wis. Stats., only persons who successfully complete an apprenticeship program lasting for at least 4 years and approved by the U.S. Department of Labor and by the Department of Commerce or pass an inside journeyman wireman examination and who have installed electrical wiring for at least 48 months and have maintained and repaired electrical wiring for at least one month shall be certified as journeymen electricians; and only persons who have some experience installing and repairing electrical wiring may be certified as beginning electricians.

Equivalent training and experience for this craft: Evidence of at least 8,000 hours, or 5 years for Department of Commerce certification, including residential, commercial and industrial wiring, maintenance, repair and at least 400 hours of related classroom instruction. A Department of Transportation electrical journey employee must complete 10,000 hours of training and must complete an indentured curriculum at an approved technical college. Such evidence may include letters or statements from past customers/clients and/or employers.

Current electrician's license or identification card to meet governmental regulations.

NOTE: Some positions may require obtaining and maintaining a commercial driver's license.