

LEAD ELECTRICIAN

DEFINITION

Under general supervision, leads, trains, oversees, and participates in the work of electrical staff responsible for performing skilled work in installing, maintaining, and repairing of electrical fixtures to improve, maintain, and renovate College buildings and facilities.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the assigned managerial personnel. Exercises technical and functional supervision over and provides training to assigned electrical staff.

CLASS CHARACTERISTICS

This is the advanced journey-level in the Electrician class series responsible for performing skilled electrical maintenance and repair duties, as well as the most complex duties, to ensure that all College buildings and facilities are maintained in a safe and effective working condition and provide the highest level of safety for College and public use. Responsibilities include performing a wide variety of tasks in the inspection, maintenance, and repair of assigned facilities and systems in a timely manner.

EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative Only)

1. Provides lead direction, training, and work review and assessment to assigned electrical staff; organizes and assigns work, sets priorities, and follows up to ensure coordination and completion of assigned work; provides input into selection decisions.
2. Trains and gives guidance to assigned staff in the proper use of electrical equipment, systems, and supplies; observes safe work methods and makes appropriate use of related safety equipment as required; maintains equipment, supplies, and work areas in good working condition, including securing equipment at the close of the workday.
3. Plans, organizes, and lays out assigned tasks; interprets electrical plans, diagrams, blueprints, sketches, and specifications; works from verbal and written instructions and work orders to install and test electrical systems or equipment; secures price quotations for supplies and repairs, including multiple quotes as necessary per College guidelines.
4. Estimates labor, material, and equipment needed for assigned electrical projects; monitors inventory levels of electrical materials and equipment; orders, receives, and maintains inventory of materials and equipment as needed.
5. Oversees and utilizes open material and service accounts; monitors expenditures to ensure compliance within established budget guidelines; communicates discrepancies with the managerial personnel.
6. Oversees outside contractors performing electrical maintenance and repair services to ensure completeness and accuracy.

7. Repairs, installs, tests, services, and maintains electrical systems, including conduit, wiring, light and power circuits, motor appliances, generators, and switches; ensures compliance with building codes applicable to the electrical trade.
8. Operates a variety of specialized equipment, including meters, testers, soldering irons, wire pullers, conduit benders, lifts, drills, and various other hand and power tools; drives a vehicle to perform work.
9. Installs and tests interior and exterior wiring for equipment and appliances; assembles and repairs lighting fixtures, wiring, and controls; installs and repairs sockets, capacitors, bulbs and other lighting parts, wiring, and assemblies; repairs scoreboards and field lighting systems as needed; installs new electrical systems and equipment, including ballasts.
10. May lead, coordinate, and perform tasks on low to medium voltage systems.
11. Performs preventive maintenance on College-wide electrical panels; checks and services circuit breakers, distribution panels, and transformers; replaces parts as needed.
12. Wires new and altered buildings, replaces fuses, and assembles, and repairs lighting fixtures and field lighting systems; troubleshoots electrical problems and investigates and repairs electrical failures.
13. Responds to elevator service calls; inspects and verifies safe and proper operation of electrical systems; requests elevator service mechanics, when required.
14. Installs and maintains electrical systems and equipment, including fire alarms; inspects, tests, and repairs smoke and heat sensors, fire alarms, pulls, and panels to meet applicable standards; requires the ability to promptly respond to emergencies, including fire alarms and power outages.
15. Manages and implements connectivity software of the Electric Vehicle chargers, such as operating hours, fleet vehicles, approved driver, and pricing; installs, commissions, repairs, and maintains electric vehicle (EV) charging stations; obtains and maintains certifications required by manufacturers for operating and repairing charging stations; ensures charging stations are operations, safe, and accessible to users.
16. Troubleshoots and repairs major battery storage components such as inverters, UPS systems, and related emergency backup equipment.
17. Troubleshoots and repairs major commercial large-scale photovoltaic systems; monitors, tests, and maintains solar sensors, transformers, inverters, weather instrumentation, and fuel cell equipment; identifies and repairs issues with electrical and mechanical equipment and replaces parts as needed.
18. Configures and implements lighting control systems such as N-Light, Lutron, Wattstopper, DMX, etc.; ensures effective integration with Building Management Systems (BMS) and relevant control software; conducts assessments to ensure compliance with California Energy Codes and other relevant codes.
19. Supports and complies with federal and state laws, Board Policies, and Administrative Procedures.
20. Provides quality customer service when interacting with the public, vendors, students, and College staff, including individuals from minoritized groups.
21. Participates on committees, task forces, and special assignments, including, but not limited to Screening and Selection Committees and affiliated mandated trainings, as required. Prepares and delivers oral presentations related to assigned areas if needed.

22. Works directly with people from various ages, disabilities, socio-economic levels and ethnic groups.
23. Maintains regular attendance.
24. Performs other related duties as assigned.

QUALIFICATIONS

Knowledge of:

1. Principles and practices of supporting a diverse, equitable, inclusive, and anti-racist academic and work environment.
2. Principles, practices, methods, equipment, materials, and tools used in electrical maintenance and repair of College electrical systems, including applicable electrical codes.
3. Safe application, operation, and maintenance of tools and equipment used in the electrical trade.
4. Connectivity software of the Electric Vehicle chargers; installation, commissioning, and maintenance procedures for EV charging stations.
5. Installation, commissioning, and maintenance procedures for fire alarm systems.
6. Installation, commissioning, and maintenance procedures for battery inverter systems and lighting control systems.
7. Maintenance and repair procedures for photovoltaic systems.
8. Medium to high voltage practices and safety.
9. Basic principles and practices of providing technical and functional direction and training to assigned staff.
10. Modern office practices, methods, and computer equipment and applications related to the work.
11. Occupational hazards and safety equipment and practices related to assigned area of responsibility.
12. Standard office practices and procedures, including the use of standard office equipment and basic record-keeping.
13. Safe work practices, including safe driving rules and practices.
14. Techniques for providing a high level of customer service by effectively interacting with the public, vendors, students, and College staff, including individuals of various ages, disabilities, socio-economic levels and ethnic groups.

Skills & Abilities to:

1. Inspect the work of assigned staff and maintain established quality control standards.
2. Perform a variety of complex technical tasks related to electrical installation, repair, and maintenance work.
3. Identify and mitigate safety hazards, code violations, and other electrical issues.
4. Perform basic preventative maintenance of equipment and tools.
5. Read, understand, apply, explain, and ensure compliance with applicable federal, state, and local policies, procedures, laws, and regulations.
6. Understand and follow instructions.
7. Maintain accurate logs, records, and basic written records of work performed.

8. Read and interpret construction drawings, specifications, plans, manuals, diagrams, blueprints, and technical regulations.
9. Use math applicable to the electrical trade, such as basic math, algebra, geometry, trigonometry, and physics.
10. Organize own work, set priorities, and meet critical time deadlines.
11. Communicate effectively through various methods.
12. Learn and apply emerging technologies and, as necessary, to perform duties in an efficient, organized, and timely manner.
13. Review situations accurately and determine appropriate course of action using judgment according to established policies and procedures.
14. Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Education and Experience:

1. Equivalent to the completion of the twelfth (12th) grade; and
2. Five (5) full-time equivalent years of experience in journeyman-level electrical maintenance and repair work.

Desirable Qualifications:

A certification as a qualified journey-level electrician from an approved institution.

Licenses and Certifications:

The incumbent is required to drive to a variety of locations. This will require the incumbent to possess and maintain a valid California driver's license and proof of automobile insurance and maintain insurability under the College's vehicle insurance policy.

PHYSICAL DEMANDS

Must possess mobility to work in and around College buildings and facilities, to operate a motor vehicle and drive on surface streets; strength, stamina, and mobility to perform light to medium physical work, to work in confined spaces and around machines, to climb and descend ladders, and to operate varied hand and power tools and equipment; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone or radio. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate above-mentioned tools and equipment. Positions in this classification bend, stoop, kneel, reach, and climb to perform work and inspect work sites. Incumbent must possess the ability to lift, carry, push, and pull materials and objects weighing up to 50 pounds, or heavier weights with the use of proper equipment.

ENVIRONMENTAL ELEMENTS

Incumbents work in and around buildings and facilities and are exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration,

confining workspace, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Incumbents may interact with staff and/or public and private representatives and contractors in interpreting and enforcing departmental policies and procedures.

Amended: 5/2022; 5/2023; 1/2024; 3/2026