

CHABOT-LAS POSITAS COMMUNITY COLLEGE DISTRICT

ELECTRICIAN

*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 within the job.*

SUMMARY DESCRIPTION

Under direction, perform skilled and technical work on building and related electrical systems including fire alarm systems, power distribution systems, lighting systems, communications systems, motors, motor controls and signaling, and electronic parking lot ticket machines; troubleshoot, diagnose, and calibrate electrical equipment and systems; perform predictive, preventative, and corrective maintenance as assigned; and assist in performing other skilled maintenance duties as assigned.

REPRESENTATIVE DUTIES

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

1. Inspect, repair, install, service, and maintain electrical systems and devices including conduit systems, communications systems, lighting and power circuits, transformers, control equipment, switches, switchgears, fire alarms, and related electrical devices.
2. Install, adjust, repair, and maintain light fixtures including replacing lamps and ballasts; replace faulty switches and relays and related lighting equipment.
3. Install, troubleshoot, and/or replace interior and exterior wiring for equipment, appliances, and lighting.
4. Repair and replace defective or worn electrical parts including bearings, limit switches, and other related electrical parts.
5. Troubleshoot and repair motor control centers, starters, contactors, and circuit breakers.
6. Troubleshoot, with computer assistance, and repair parking lot ticket machines.
7. Maintain, troubleshoot, and repair fire alarm system.
8. Operate computerized energy management system.
9. Diagnose and resolve difficult electrical problems; observe safety of others and recommend precautionary action if necessary while repairs are in progress.
10. Observe and comply with federal, state, and local electrical codes
11. Perform predictive, preventative, and corrective maintenance on equipment.
12. Read and interpret electrical and mechanical drawings and specifications.
13. Operate and maintain a variety of hand tools, power tools, pneumatic tools, trucks, and other equipment in the performance of assigned duties.
14. Lead crew of maintenance workers when required; train new personnel in operation of installed equipment.
15. Prepare and maintain a variety of written records and reports.

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16. Assist other crafts as required to facilitate completion of their tasks.
17. Perform related duties as required.

MINIMUM QUALIFICATIONS

The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Knowledge of:

1. Operational characteristics of electrical systems and internal components.
2. Methods, practices, equipment, and tools used in the installation, repair, and maintenance of electrical systems including lighting circuitry, alarm systems, conduit systems, and electrical mechanisms.
3. Basic principles of electrical theory as applied to electrical circuits and wiring systems.
4. Operational characteristics of a variety of electrical systems and high voltage networks.
5. Principles of electrical and electronic repair.
6. Principles and practices used in the application and use of testing equipment used in checking, testing, and analyzing electrical systems including volt/ohm meters, ammeters, voltage testers, circuit tracers, and related test equipment.
7. Methods and techniques of maintaining, installing, and repairing electrical systems and equipment.
8. Principles and practices used in the fabrication and installation of materials and equipment used in electrical distribution systems.
9. Methods and techniques of troubleshooting and calibrating electric and electronic systems and components.
10. Use and maintenance of a variety of power and hand tools.
11. Instrumentation equipment and precision tools.
12. Preventive and corrective maintenance techniques.
13. Principles and practices used in reading blueprints and schematics.
14. Basic principles of mathematics.
15. Office procedures, methods, and equipment including computers.
16. Principles and procedures of record keeping.
17. Occupational hazards and standard safety practices; precautions necessary for working with high voltage.
18. Pertinent federal, state and local codes, laws and regulations including Cal/OSHA safety rules, regulations and other safe work practices.

Ability to:

1. Perform a variety of installation, repair, and maintenance duties on electrical equipment and systems.
2. Install, troubleshoot, maintain and repair various types of electrical equipment and motors including lighting circuitry, fire and alarm systems, conduit systems, and electrical control mechanisms.
3. Repair and service electric motors, controllers, starters, and control devices.
4. Operate a variety of electrical testing, maintenance, repair, and installation equipment in a safe and effective manner including voltmeter, ohm meter and hydraulic truck lifts.
5. Use electrical test equipment.
6. Operate hand and power tools competently and safely.
7. Maintain required work logs, records and related operational and maintenance data.

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8. Prepare clear and concise written reports.
9. Perform accurate mathematical calculations.
10. Read, interpret, and work from blueprints, electrical diagrams and schematics, manufacturer instructions and directions.
11. Perform assigned work in accordance with appropriate safety practices and regulations.
12. Lay out, estimate, and procure material for projects.
13. Fabricate and install new electrical equipment and circuits.
14. Operate office equipment including computers.
15. Understand and follow oral and written instructions.
16. Work independently with little direction.
17. Analyze situations accurately and adopt an effective course of action.
18. Read, interpret and follow rules, regulations, policies and procedures.
19. Perform other skilled maintenance work as assigned.
20. Prioritize and schedule work.
21. Communicate clearly and concisely, both orally and in writing.
22. Establish and maintain effective working relationships with those contacted in the course of work.
23. Work with and exhibit sensitivity to and understanding of the varied racial, ethnic, cultural, sexual orientation, academic, socio-economic, and disabled populations of community college students.

Minimum Education & Experience - Any combination of the following would provide a typical way to obtain the required knowledge and abilities.

Education/Training:

Equivalent to the completion of the twelfth grade supplemented by specialized training in the electrical trade.

Experience:

Four years of experience that demonstrates journey-level skill in the electrical trade.

License or Certificate:

Possession of an appropriate, valid driver's license.

Possession of a certificate of successful completion of an Electrician apprenticeship training program.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Environment: Work is performed in both indoor and outdoor field environment; travel from site to site; exposure to noise, dust, grease, smoke, fumes, electrical energy and high voltage and all types of weather and temperature conditions; work at heights on scaffolding and ladders; frequent exposure to hazardous activities including high voltage electricity.

Physical: Primary functions require sufficient physical ability and mobility to walk, stand, and sit for prolonged periods of time; frequently stoop, bend, kneel, crouch, crawl, climb, reach, and twist; push, pull, lift, and/or carry moderate to heavy amounts of weights; dexterity of hands and fingers to operate specialized hand and power tools and equipment; operate assigned equipment and vehicles; verbally communicate to exchange information.

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Adopted by Board of Trustees on October 20, 2015

Effective: October 21, 2015

Job Family: Maintenance and Operations