

MAINTENANCE MECHANIC - ELECTRICIAN

BASIC FUNCTION

Performs skilled electrical work in the repair, maintenance, alteration, and construction of District buildings and facilities; and installs, repairs, services and maintains electrical systems and equipment.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from assigned area supervisor. May provide lead direction to temporary staff and/or student workers.

CLASS CHARACTERISTICS

This classification in the Maintenance series is responsible for independently performing skilled electrical work in District buildings and facilities. Employees at this level exercise judgment and initiative in their assigned tasks, receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the department.

EXAMPLES OF TYPICAL JOB FUNCTIONS

1. Installs or replaces necessary interior and exterior wiring for equipment, appliances, and lighting; wires new and remodeled buildings according to current codes and regulations; troubleshoots electrical systems to locate defects or malfunctions; replaces fuses, cords, and sockets; installs, tests, and maintains high voltage equipment, including switch gear; installs, tests, and maintains electrical communications systems.
2. Inspects, repairs, installs, services, and maintains electrical and lighting systems, equipment, and fixtures, including conduit and duct systems, primary and branch circuit feeders, motors, transformers, control equipment, switches, switchboards, plugs, lights, circuit breakers, fans, fire alarms, clocks, and heating and air conditioning controls; lubricates, adjusts, repairs and performs preventive maintenance on electrical equipment; repairs master clock and clock systems, scoreboards, athletic field lights, and a variety of other electrical devices; observes, interprets, and complies with federal, state, and local electrical codes.
3. Diagnoses and resolves difficult electrical problems; calls the city's utilities department as necessary; observes safety of others and recommends precautionary actions while repairs are in progress.
4. Assists in planning, implementing, and performing energy conservation measures to comply with state regulations.
5. Researches and evaluates products for best sources; recommends purchases of selected parts, materials, and equipment; assists in labor and material estimations for projects; prepares and maintains electrical work orders, records, and reports related to work performed.
6. Operates a variety of tools and power equipment including voltage testers, voltmeters, ohmmeters, multimeters, other scopes and meters, drill presses, conduit benders, and saws and other power and hand maintenance tools and equipment.
7. Communicates with management, skilled maintenance personnel, contractors and others concerning electrical construction, maintenance, and repair issues.
8. Works from sketches, plans, drawings, blueprints, specifications, and wire diagrams; inspects work in progress and completed by electrical contractors to assure compliance with plans, specifications, and timelines.
9. Participates in District-provided in-service training programs.

10. Performs other related duties as assigned; specific duties not listed does not exclude them for this classification if the work is similar or related.

QUALIFICATIONS

Knowledge of:

1. Electrical theory, principles, and practices.
2. Operational characteristics of tools and diagnostic equipment used in electrical systems, devices, and components.
3. Methods and techniques of troubleshooting and testing electrical systems.
4. Methods and techniques of installing, maintaining, and repairing a diverse range of electrical equipment and devices.
5. Mathematical principles.
6. Applicable federal, state, and local laws, rules, regulations, ordinances, and organizational policies and procedures relevant to assigned area of responsibility.
7. Principles and practices of record keeping.

Ability to:

1. Install, maintain, and repair a diverse range of electrical systems, devices, and components.
2. Read and interpret as-built blueprints and submittals.
3. Attend and participate in construction project meetings.
4. Estimate time and materials needed for project related maintenance and repair.
5. Maintain and update maintenance records and schedules.
6. Troubleshoot and closely inspect electrical devices and components for damage or malfunction.
7. Use a wide range of diagnostics and testing equipment.
8. Inspect the work of electrical contractors and advise supervisor of issues.
9. Interpret local and state building codes and procedures as they relate to electrical system design and installation.
10. Exercise independent judgment within general policy, and procedural guidelines.
11. Effectively use computer systems, software applications relevant to work performed, and business equipment to perform a variety of work tasks.
12. Communicate effectively in the course of performing work tasks.
13. Establish, maintain, and foster effective working relationships with those contacted in the course of work.
14. Demonstrate clear evidence of sensitivity and understanding of the diverse academic, socio-economic, disability, and ethnic backgrounds of students, staff, and the community.
15. Provide efficient, high-level customer service to the public, vendors, contractors, and District personnel.

Education and Experience:

Completion of the twelfth (12th) grade and three (3) years of skilled or journeyman experience in the electrical field; or an equivalent combination of education, training, and/or experience.

Licenses and Certifications:

A valid driver's license and proof of insurability may be required to drive a District or personal vehicle.

PHYSICAL DEMANDS

Must possess mobility to work in the field; strength, stamina, and mobility to perform medium to heavy physical work; ability to sit, stand, and walk on level, uneven, or slippery surfaces; vision to read printed materials and a computer screen, and to distinguish colors and inspect equipment; and hearing and speech to communicate in person and over the telephone. Frequently reach, twist, turn, kneel, bend, stoop, squat, crouch, grasp, and make repetitive hand movements in the performance of daily duties; work in confining spaces; to climb and descend ladders, to operate various hand and power tools, and to operate a motor vehicle and visit various District sites. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards, which includes working on live electrical wires. Finger dexterity is frequently needed to operate and repair tools and equipment. Must also possess mobility to work in a standard office setting and use standard office equipment, including a computer. Employees must possess the ability to lift, carry, push, and/or pull materials and objects averaging a weight of 50 pounds or heavier weights, with the use of proper equipment and/or assistance from other staff.

The essential functions of this classification must be performed by the incumbents with or without reasonable accommodations.

ENVIRONMENTAL CONDITIONS

Employees work in the field and are exposed to loud noise levels, extreme cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspaces, chemicals, mechanical and/or electrical hazards, hazardous physical substances, and fumes, dust, and air contaminants. Employees may interact with upset individuals in interpreting and enforcing departmental policies and procedures.