



<b>Job Title</b>	Tradesperson - Electrician
<b>Department/Institute</b>	Servicing & Maintenance
<b>Reporting to</b>	Manager Servicing & Maintenance
<b>Main Objective</b>	Perform skilled electrical maintenance duties in the inspection, repair, installation and alteration of electrical installations and related equipment and facilities, perform preventive maintenance and routine servicing of electrical installations and its components.

### DUTIES AND RESPONSIBILITIES:

1. Assemble, install, test and maintain electrical wiring, equipment, appliances, apparatus, and fixtures, using hand tools and power tools.
2. Diagnose malfunctioning systems, apparatus, and components, using test equipment and hand tools, to locate the cause of a breakdown and correct the problem.
3. Connect wires to circuit breakers, transformers, or other components.
4. Inspect electrical systems, equipment, and components to identify hazards, defects, and the need for adjustment or repair, and to ensure compliance with codes.
5. Advise management on whether continued operation of equipment could be hazardous.
6. Test electrical systems and continuity of circuits in electrical wiring, equipment, and fixtures, using testing devices such as ohmmeters and voltmeters to ensure compatibility and safety of system.
7. Maintain current electrician's license to meet governmental regulations.
8. Plan layout and installation of electrical wiring, equipment and fixtures, based on job specifications and local codes.
9. Direct and train workers to install, maintain, or repair electrical wiring, equipment, and fixtures.
10. Prepare sketches or follow building plans to determine the location of wiring and equipment and to ensure conformance to building and safety codes.

11. Use a variety of tools and equipment such as power construction equipment, measuring devices, power tools, and testing equipment including ammeters and test lamps.
12. Install ground leads and connect power cables to equipment, such as motors.
13. Perform business management duties such as maintaining records and files, preparing reports and ordering supplies and equipment.
14. Repair or replace wiring, equipment, and fixtures, using hand tools and power tools.
15. Work from ladders, scaffolds, and roofs to install, maintain or repair electrical wiring, equipment, and fixtures.
16. Place conduit (pipes or tubing) inside designated partitions, walls, or other concealed areas, and pull insulated wires or cables through the conduit to complete circuits between boxes.
17. Construct and fabricate parts, using hand tools and specifications.
18. Fasten small metal or plastic boxes to walls to house electrical switches or outlets.
19. Perform physically demanding tasks, such as digging trenches to lay conduit and moving and lifting heavy objects.
20. Provide preliminary sketches and cost estimates for materials and services.
21. Any other duties in general servicing and maintenance of the MCAST Campuses.

#### **KNOWLEDGE AND ABILITIES:**

##### **Knowledge of:**

1. Standard practices of the electrician's trade.
2. Theory electrical systems.
3. Materials, methods and tools used in the repair of electrical systems.
4. Applicable building codes, ordinances and regulations of State and local authorities pertaining electrical installations.
5. Manual electrical tools and equipment applicable to the electrician's trade.
6. Soldering techniques.
7. Health and safety regulations.
8. Basic record-keeping techniques.
9. Proper methods of storing equipment, materials and supplies.

**Ability to:**

1. Perform skilled electrical maintenance duties in the inspection, repair, installation and alteration of electrical installations and related equipment and facilities.
2. Perform preventive maintenance and routine servicing of equipment.
3. Diagnose defects, install, repair and maintain electrical installations and equipment.
4. Follow oral and written instructions.
5. Operate specialized machinery, equipment and tools utilized in the repair, installation and maintenance of electrical installations.
6. Communicate effectively both orally and in writing.
7. Work cooperatively with others.
8. Work independently with little direction.
9. Meet schedules and time lines.
10. Maintain routine records and prepare reports.

**Physical Demands:**

1. Work is performed while standing, sitting and/or walking.
2. Requires the ability to communicate effectively using speech, vision and hearing.
3. Requires the use of hands for simple grasping and fine manipulations.
4. Requires activities involving exposure to marked changes in temperature and humidity.

The list of duties can change according to the exigencies and demands of MCAST within the same grade of the post.