

- I. JOB TITLE : ELECTRICAL FITTER
- II. JOB LEVEL : SKILLED WORKER
- III. JOB DESCRIPTION : Installs, tests, maintains and repairs electrical installations and wiring in accordance with regulations and specifications, and fits, assembles, installs, tests, commissions, maintains and repairs electrical systems and equipment.
- IV. TRADE SKILLS : Ability to:
1. Correctly use and maintain the tools of the trade including power tools, test equipment and measuring instruments.
  2. Install all types of commonly used wiring and wiring accessories.
  3. Install electrical equipment such as motor starters, controllers, switchgears, switchboards, busbars, transformers and control panels.
  4. Locate and repair faults in electrical installations and equipment.
  5. Identify different types of cables and wires.
  6. Carry out mechanical fitting and assembling works relevant to heavy current equipment, and machine or fabricate parts for such equipment.
  7. Install meters, instruments, relays and protection equipment.
  8. Read and interpret simple electrical specifications, wiring and circuit diagrams, and building plans.
  9. Inspect, test, commission and maintain electrical installation and equipment.
  10. Use safety equipment, and protective devices and equipment.
  11. Correctly instruct, supervise and transfer skill to any apprentice and semi-skilled worker assigned to him to ensure safety and quality of work.

V. TRADE THEORY : Knowledge of:

1. Engineering calculations associated with current carrying capacity of cables, wires, fuses and other circuit protective devices.
2. Single and three-phase circuits, earth circuits, insulating and conducting materials, switchfuses and isolators.
3. Electrical wiring diagrams, symbols, engineering drawings and layout drawings for electrical systems.
4. Use of test equipment and measuring instruments.
5. Basic workshop practice, engineering materials, conduit and wiring.
6. Electric motors, starting methods and control equipment.
7. Procedures for inspection, testing and certification of electrical fixed installations.
8. Industrial hazards, safety and health precautions, and environmental concerns.
9. Installation practice and regulations, and relevant codes of practice.
10. Relevant ordinances and regulations.

VI. ENTRY ROUTE : Preferred Minimum Entry Qualification:

Completion of Secondary 3.

Training:

4-year organized apprenticeship or 3-year organized apprenticeship if preceded by a relevant one-year full-time basic craft course, with attendance at a relevant part-time day-release or block-release craft course in an institute of vocational education or equivalent.

VII. STATUTORY REQUIREMENT : A qualified electrical fitter should be a registered electrical worker (REW) for grade 'A' or above electrical work under the 'Electricity' Ordinance.