

- I. JOB TITLE : OVERHEAD LINESMAN
- II. JOB LEVEL : SKILLED WORKER
- III. JOB DESCRIPTION : Constructs, maintains and repairs overhead line systems of all voltages on tabular steel, concrete, lattice girder or wood supports.
- IV. TRADE SKILLS : Ability to:
1. Correctly use and maintain the general and special tools of the trade including power tools, test equipment and measuring instruments.
 2. Set out support positions in accordance with predetermined routes and profiles.
 3. Prepare and complete foundations for supports and stays and erect supports.
 4. Run out, tension, sag, bind in, joint, bond and terminate all commonly used conductors and service cables.
 5. Install insulators, fastening components and accessories.
 6. Maintain and service overhead line systems and emergency restoration systems.
 7. Climb supports using ladders, climbing corns or other aids.
 8. Use safety equipment and protective devices and work in compliance with requirements of safety codes of practice, safety procedures, etc..
 9. Use knots and hitches and apply them in the construction, maintenance and repair of overhead lines.
 10. Correctly instruct, supervise and transfer skills to any apprentice or semi-skilled worker and contractor assigned to him to ensure safety and quality of work.

V. TRADE THEORY : Knowledge of:

1. Basic mechanics including slings, stays, guys, derricks, winches and shearlegs, variation of load with angle, factors of safety, centre of gravity and equilibrium.
2. Statutory requirements on lifting gears.
3. Fundamentals of power transmission and distribution.
4. Single and three-phase circuits, resistance, inductance, capacitance and earth circuit.
5. Electromagnetic induction and proper earthing.
6. Sag charts, variations of sag with temperature, conductor materials and types.
7. Overhead line materials and components.
8. Deviation, bisection and triangulation, vectorial representation of forces acting on lines, bending moment, supports and stays.
9. Use of voltage indicating equipment and measuring instruments.
10. Basic first aid.
11. Industrial hazards, safety and health precautions, energy saving and environmental concerns.
12. Installation practice and regulations, and relevant codes of practice.
13. 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.