SECTION HEADING

ELUT 2100: Electrical Metering

Description

Electrical Metering covers single-phase metering principles, meter construction, component parts and installation and testing of single-phase electric watt-hour meters. This course also includes the use of a meter test bench, test standards and an electric counter.

Credits

3

Topics to be Covered

1. Simple rules of safety and hazards involved with testing and installing electrical meters

2. Single-phase watt-hour meters, both self-contained and instrument rated meters

3. Instrument transformer hazards

Learning Outcomes

1. List the advantages and limitations of using an electro magnet moving coil meter ac voltage, current, and watts.

2. Describe the construction and operation of single-phase watt-hour meters (both self-contained and instrument transformer rated).

3. Define the connection and formulas to be used to test the accuracy of a single-phase watt-hour meter.

4. Test, calibrate, and describe the test used in testing single-phase meters.

5. Describe the construction and use the meter test equipment.

6. Calculate the metered power of a load connected to a watt-hour meter by the use of the formulas.

7. Describe and identify the equipment used in metering with instrument transformers.

8. Wiring single phase and 3 phase meters

Credit Details

Lecture: 2

Lab: 1

OJT: 0