



Measurement Laboratory

Electrical Engineering Dept. | EEN 2nd Year | 4th Semester | EENUGPC06

Name of the Program: **B. Tech (EE)**. Year: **II Semester: IV**

Course/Subject: **Measurement Lab** Course code: **EENUGPCo6**

Electrical Measurement Laboratory is one of the few labs which are critical for both 'Electrical Engineering' & 'Electronics & Communication Engineering' under graduate students. In this lab hardware-based experiments are conducted. Here students study how to measure resistance, inductance, capacitance, voltage, current, power, energy practically with help of various measuring techniques also learn to demonstrate various bridges using hardware set ups and compare them with the theoretical results.

On completion of this Subject, the student shall be able:

1. How to visualize and work on laboratory and multidisciplinary tasks.
2. To demonstrate various Bridges using hardware set ups.
3. To Measure Voltage, Current, Power, Energy.

The expected outcomes of the Subject are:

- 1 Have knowledge, to demonstrate the designing and conducting experiments, to analyze and interpret data.
- 2 Provides the ability to visualize and work on laboratory and multidisciplinary tasks.
- 3 Measurement of R, L, C, Voltage, Current, Power, Energy.
- 4 Measurement uses PMMC and Moving Iron type Instruments
- 6 Measurement of power using LPF and UPF methods.
- 7 Ability to balance AC Bridges to find unknown values.

Assessment Criteria:

1. Instrumental operation skill and familiarization of hardware.
2. Experimental procedure, simulation results, internal observation, lab record.
3. End semester final examinations.