

ELECTRICAL CIRCUITS LABORATORY

This lab is specially designed and developed for the students to observe the true nature and characteristics of various power consuming and storing devices in basic level. This lab is well provided with different equipment like Cathode Ray Oscilloscopes (CRO), Digital Oscilloscopes, Digital and Analog meters of a wide range of static electric equipment. This lab gives practical observation of the different characteristics of electrical elements when connected differently. This gives a good foundation on electrical components to the students in the initial years. At the end of the semester the student will get equipped to handle any power circuit. We also encourage students to take up projects and mini projects by providing them with the required components.

Area in sq.m : 150

Established in the year : 2001

Total investment made (Rs) : 5,47,344/-

LIST OF EXPERIMENTS :

1. Verification of thevenins and nortorns equivalent circuits
2. Verification of superposition and maximum power transfer theorem
3. Two port net work parameters
4. Series and parallel resonance
5. Self & mutual inductance of a coupled coil

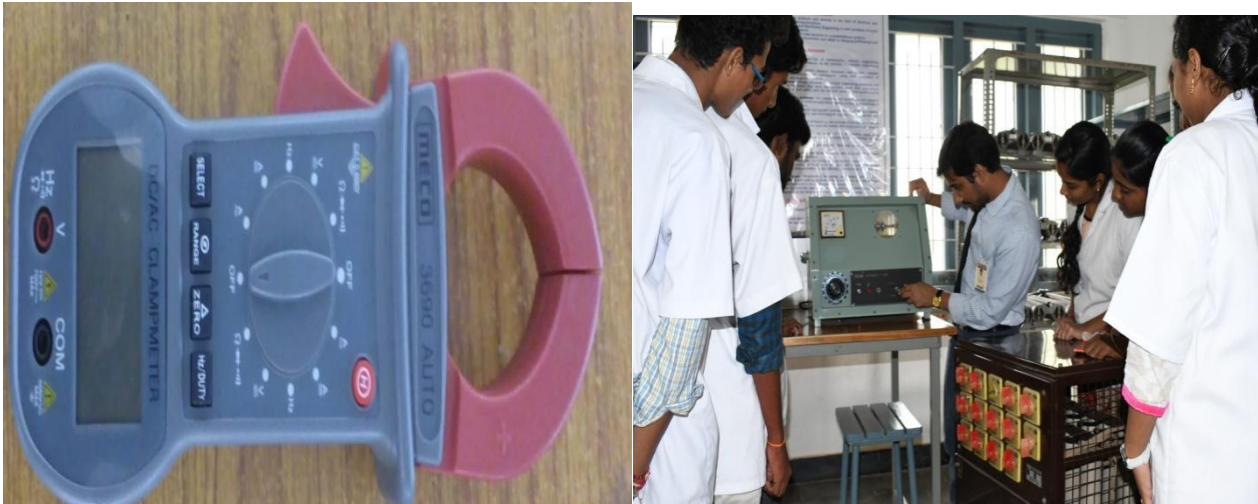


Major equipment:

Regulated power supplies
Digital oscilloscopes
1 ϕ -auto transformers
Function generators

MEASUREMENTS LABORATORY

Electrical measurement laboratory is setup to supplement the theory course on electrical measurements and instrumentation. This lab deals with different types of electrical bridges, determining the displacement-voltage characteristics of Linear Voltage Differential transformer(LVDT), measurement of three phase active and reactive powers, calibration of single phase energy meter etc. Through hands on experiments with real measuring equipment ,students gain practical experience on LVDT and various types of measuring devices. This laboratory can also be used for carrying out project works for both EEE and EIE disciplines.



Major equipment : CT testing by Silsbee's method
5 A to 1200 A / 5A precision Current transformer
Dielectric oil testing using H.T testing kit
Transformer turns ratio measurement using A.C bridge trainer kit
Kelvin's Bridge, Anderson's Bridge, Schering Bridge

LIST OF EXPERIMENTS :

1. Measurements of unknown resistance, inductance, and capacitance using bridges
2. Measurement of power by using two wattmeter method and reactive power measurement using single wattmeter method
3. Linear variable differential transformer
4. Measurement of power and power factor of single phase rl and rlc load
5. Calibration of $1 - \phi$ energy meter

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