Electrical Machines LAB

This is our core set of laboratories, in terms of curriculum. Its overall needs are versatility and generality, in view of the many basic course needs it serves. This lab is general enough to hold a number of experiments suitable for giving students enough exposure to enable them to easily adopt experiments in more advanced laboratories in the department. developing state-of-the-art machines and monitoring and diagnostics technologies to enable faster, greener ways to power, build and move the world.

Description:

This is the main lab where experiments like load test on various machines, speed control tests, open circuit tests, short circuit tests, etc. are carried out. And, wide variety of practical experiments are performed here with combination of different rotating machines. The laboratory is also used for research activities in machines and to carry out project works on energy conversion.

Lab In charge: K. Venkata Kishore

Electrical Circuits LAB

This lab is endowed with equipment like Cathode Ray Oscilloscopes (CRO), Digital and Analog meters of a wide range and static electric equipment. The lab enables practical observation of different characteristics of electrical/ electronic elements when connected differently thus furnishing a good foundation on these components to the students in the initial years.

Lab In charge: S. Ramyaka

Power Electronics Lab

The power electronics lab enhances the EEE students by providing them the better understanding of the concepts and working of advanced power semiconductor devices and power electronics circuits.

Lab In charge: B.Eedukondalu

Control systems LAB

This is one of the laboratories used by senior students of the program where the students work with open and closed loop control of electrical and mechanical systems. Process control, temperature control, programmable logic controllers and control of servomotors are some of the experiments conducted in this laboratory

Lab In charge: **I.Prasannakumar**

Electrical Measurements LAB

This lab comprises of phase shifting transformers, reactive load and various other equipment used for calibration and measurement of electrical quantities. The electrical bridge circuits like Kelvin's Double Bridge, Anderson's bridge, Schering Bridge facilitate the measurement of unknown values of elements like resistor, capacitor and inductor. Errors in electrical measuring instruments can also be found in this laboratory. One can also learn to measure real and reactive power of unbalanced loads.

Lab In charge: **R. Raghunadha Sastry**

Electrical Simulation Lab:

Electrical systems are generally very complex in nature and large in size and hence physical models are difficult to realize in laboratory. In the simulation laboratory dedicated computer software is used to analyse electrical systems. All the students use this laboratory in implementation of minor and major projects of their curriculum

Lab In charge: A. Hema Sundar

Power systems Lab:

he lab is equipped with electrical system simulation software like MATLAB 7.0 SIMULINK, PSPICE 9.2 version, MULTISIM, Power Trans, Power Net and Power GIS. One can learn to solve various problems of electrical systems and study the stability by converting them to mathematical models. A complex system can be analyzed for optimization in a cost-effective manner. Various tool boxes like Power System toolbox, Artificial Neural Networks tool box, Fuzzy Logic tool box, and Control Systems toolbox are also available for the students to train.

Lab In charge: K. Sravan sai kumar