

Department of Electronics and Communication Engineering

Basic Electronics Lab- I

A practical approach is probably the best approach to mastering a subject and gaining a clear insight. The experiments covers those practical oriented electronic circuits that are very essential for the students to solidify their theoretical concepts. This provides a communication bridge between the theory and practical of the electronic circuits. This is a one of most challenging laboratories in terms of utilization because students of all departments use this lab. The Basic Electronics Lab-II is one of the most important labs for engineering students. This is the first level laboratory in which students are introduced with electronics for the first time and are trained with the preliminary of electronics. In this lab students are given introduction and identification of different active and passive electronics devices/components. They are familiarized with different signal sources and instruments used in electronics engineering, students learn the usage/handling of different measuring instruments like Digital multimeter, CRO, Function Generators, Regulated power supply etc. In this lab, students become familiar with device characteristics and their applications. Students learn to work with hand by making the circuit on bread board and analyzing it using laboratory instruments such as digital multimeters (DMMs), power supplies, function generators and oscilloscopes. By the end the students become familiar with basic components such as resistors, diodes, transistors, and operational amplifiers function and have the necessary skills of circuit designs.

Major Equipments:

Basic Electronics Lab-I contains various measuring equipments, power supplies and Instrument and controller experimental kits.

Measuring Equipments and Power Supplies :

Cathode Ray Oscilloscope -23,
Function Generators-20,
D C Regulated Power supply-27,
Digital Multimeter-44,
Project bread board-22,
Digital Storage Oscilloscope-01,

Various Experimental Kits :

PID Controller SCL-102 Siba -01,
Potentiometer Error Detector SCL-01,
DC Motor Position Controller-01,
DC Motor Speed Control System-01,
Control Transformer(Part of Seisym) -01,
Speed Torque Characteristics of AC Servo Motor -01,
ON-OFF Temperature Controller(RTD) CE-01 HEM Electroniques-01,
Relay Control System RCS-01,
Digital Control System(process Control Trainer-01,
PID Controller(Microprocessor) PID-01,
Temperature Demonstrator ET TEMP Excel Technology-02,
Strain Measurement Kit-01,
Pressure Cell Kit-01.