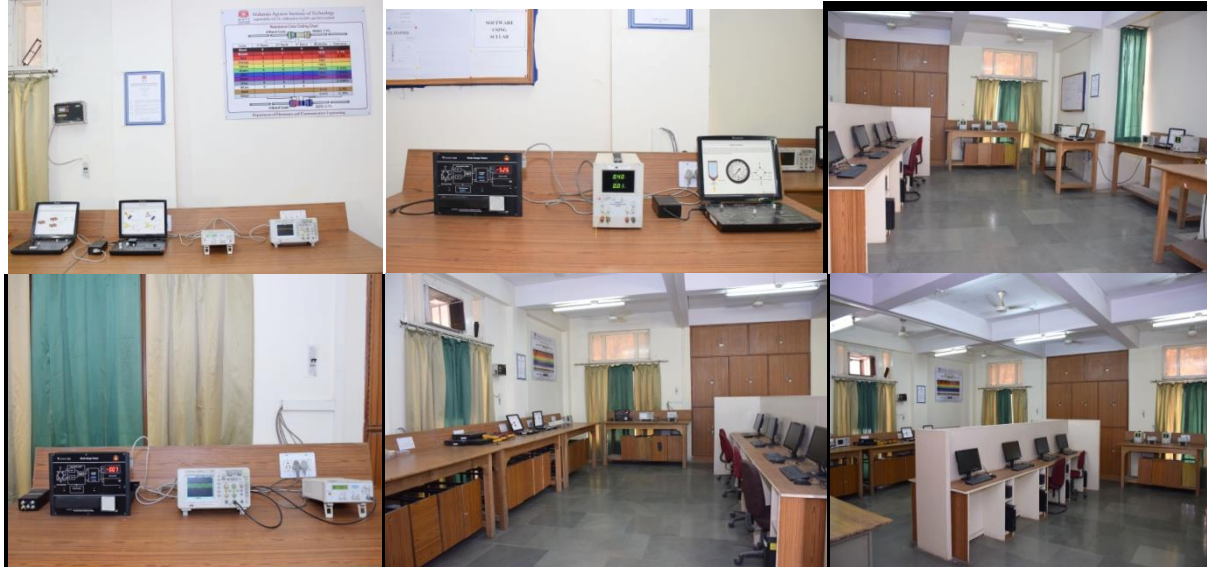


ELECTRONIC INSTRUMENTS AND MEASUREMENTS LAB

Block No. 4, Room No. 433, ECE Dept., MAIT



The main aim of the Electronic Instruments and Measurements Lab is to provide the practical information regarding the various principles involved in electrical measurements and testing. This lab is conducted for the undergraduate students in their third semester. The students are familiarized with the operation of basic laboratory instrumentation such as multimeter, frequency counter, voltmeter, ammeter, RLC meter and also with different types of transducers. Also, the students are introduced with the fundamentals of Electronic Instruments and Measurements providing an in-depth understanding of Measurement errors, Bridge measurements, Digital Storage Oscilloscope, Function Generator and Analyzer, Display devices, Data acquisition systems and Transducers. This is accompanied by building, testing and taking measurements on simple circuits. The goal is to instil a degree of comfort and familiarity with electronics that will be useful in designing experiments, building simple circuits and understanding the behaviour of complex circuits.

Major equipments: Function Generator, Computers, C.R.O, D.S.O, Dual Power Supply, Transducer Trainer Kits (Temperature, Pressure, LVDT, Optical, Ultrasonic, Strain, Water Level), Multi meters, Triple Power Supply, Digital Multimeter, Analog Multimeter, Analog DC Voltmeter, Galvanometer, Wattmeter, BCD Adder and Subtractor Trainer, Multiplexer/Demultiplexer-Coder/Decoder Trainer, Transmission Line Trainer, Universal IC Tester, Breadboards, Clamp Meter, Arithmetic Logic Unit Demonstrator(74181), LCR Meter.