



CERTIFICATE COURSE

Course Title: Instrumentation basics & Technical skill development

Total hours: 30

Trainers : PROMINENT, sales, servicer and manufacturer of scientific instruments.

Course Objectives:

- Understand the basic working principles of important electrical and electronic circuit components.
- Troubleshooting the laboratory equipments.
- Develop the skill of simple electronic circuit fabrication and instrumentation.

SYLLABUS

Module 1: Familiarisation of electronics circuit components - Resistor, Capacitor, Diodes, Transistor, Inductor, Integrated Circuits.

Module 2: Characteristics of AC and DC signals.

Module 3: Familiarisation of Galvanometer, Ammeter, Voltmeter, DC power supplies, AC signal generator, CRO.

Module 4: Electronics circuit fabrication basics- bred board, soldering techniques.

Module 5: Construction and working of simple electronic circuits- Rectifier, voltage regulator, amplifier, oscillator, multivibrator.