

Printed Circuit Board Designing

The Workshop is dedicated in training the students on the design and manufacturing of a Printed Circuit Board. This workshop is an invaluable resource for those who are learning PCB design.

Session 1 : Introduction

- PCB & Analog Circuit Designing
- Basic of Hardware & Software
- New & Upcoming Technologies
- PCB Designing Software (PSpice & Eagle)

Session 2 : Introduction to all types of electronics components and testing/measuring instruments.

- Basic Electronics Components
 - Resistor (Ohms Law, Voltage & Current)
 - Capacitors
- Diode
- Integrated Circuit
- LEDs
- Transistor
- Breadboard
- Printed Circuit Board (PCB)
- Practical Use of Electronics Components like Resistor, Capacitor & Diode.

Session 3 : Practical verification of electronic components with Millimeter.

Session 4 : Training of Soldering & De-soldering Technique

- Soldering Techniques
- Different Methods of Soldering
- How to solder different components

Session 5 : PCB Designing

- Making circuit on PCB Design Software

- Deploying basic circuits from paper to schematic window
- Testing the schematic for errors
- Making Board Layout
- Checking for errors and finalizing layout
- Etching process
- Drilling and Soldering methods of PCB

Section 6 : Testing and Trouble shooting

- Testing and troubleshooting once your PCB is ready.
- Various trouble shooting techniques.

Section 7 : Competition and Certification distribution