

19EC204 PRINTED CIRCUIT BOARD (PCB) LABORATORY

Hours Per Week :

L	T	P	C
-	-	2	1

SOURCE:

<https://i.pinimg.com/originals/cd/11/20/cd112080e56fe6645cf81c147248df48.jpg>

COURSE DESCRIPTION AND OBJECTIVES:

Printed Circuit Board (PCB) designing is an integral part of each electronic systems and this laboratory is designed to make students capable to design their own projects PCB.

COURSE OUTCOMES:

Upon completion of the course, the student will be able to achieve the following outcomes.

COs	Course Outcomes
1	Understand PCB designing concepts and materials used for making PCB.
2	Understand the Development Tools.
3	Design and develop PCB for various Electronic Circuits.

SKILLS:

- ✓ Identify suitable materials for PCB fabrication.
- ✓ Identify PCB type required for specific application.
- ✓ Choose appropriate tool for PCB design.

LABORATORY EXPERIMENTS

LIST OF EXPERIMENTS

TOTAL HOURS: 30

1. Understanding PCB Design Flow.
2. Understanding PCB Materials.
3. Working with CAD Tools.(2 Sessions).
4. Developing schematic diagram for a given circuit.

Single layer PCB Design

5. Power supplies circuits.
6. Amplifier circuits.
7. Op- Amp based inverting and Non- inverting amplifiers.
8. Op-Amp based Waveform generators.
9. Digital ICs based Circuits.
10. Double layer PCB Design for FM receiver Circuit.
11. Understanding the Multilayer PCB Design.