

SKILLS & INNOVATION LAB
PCC-ECE305-P

Course Credits : 1 Contact Hours : 2 per week per group (L T P : 0 0 2) Mode : Lab Work	Course Assessment (Internal: 30; External: 70)
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Pre-requisites: Network Analysis and Synthesis lab, Analog Electronics- I Lab, Analog Electronics -II Lab

Sr. No.	Course Outcomes At the end of the semester, students will be able to :	RBT Level
CO 1	Describe Circuit schematic design, PCB layout design and fabrication process.	L1
CO 2	To understand and explain PCB design and fabrication process.	L2
CO 3	To apply, implement, execute the knowledge of Electronic circuit design, layout design and fabrication process.	L3
CO 4	To investigate Circuit schematic design, PCB design and fabrication process.	H2
CO 5	To design and construct PCB for electronic circuits.	H3

List of Experiments

1. Introduction of circuit schematic and layout tool.
2. Design schematic of regulated DC power supply.
3. Design layout (Silk layer and copper layer) of regulated DC power supply.
4. Introduction of Design rule check (DRC) and Netlist.
5. To fabricate a PCB for regulated DC power supply circuit including image transfer, etching, drilling and soldering.
6. To test electronic circuit implemented on PCB.
7. Design schematic of electronic circuit of practical importance.
8. Design layout (Silk layer and copper layer) of electronic circuit of practical importance.
9. To fabricate PCB and test electronic circuit of practical importance.
10. To study data sheets of diode.
11. To study data sheets of transistor.

NOTE: At least eight experiments are to be performed in the semester, out of which at least six experiments should be performed from above list. Remaining experiments may either be performed from the above list or designed & set by the concerned institution as per the scope of the syllabus.