



Semester: II

Branch: EEE/MECH/META/CSE/CIVIL

Subject: Workshop Practice Lab (EEE)

Code: WSP1201

Course Description:

The course deals with the study of workshop practice which includes safety precautions, identification of tools used in workshop and components. Further it includes identification of different parts of electrical machines, Semiconductor materials and P-N junction diode.

Course Objectives:

1. To develop practical workshop skills in the students.
2. To acquire knowledge about the single phase and three base electrical circuits
3. To learn about different components of electrical machines.
4. To learn the components of low voltage electrical installations.
5. To analyze semiconductor devices.

List of Experiments:

1. Study of Electrical Safety Precautions.
2. Identification of Electrical Tools (Screw Drive, Tester, Combination Plier, Wire Stripper etc.)
3. Identification and Testing of various Electrical and Electronics component (Resistor, Inductor, Capacitor, Diode, Transistor (PNP & NPN), Transformer, Bread board)
4. To calculate the value of resistance using color coding
5. To study & perform different types of wire joints.
6. To study & perform house/staircase wiring.
7. To study single phase and three phase power, types of earthings, neutral.
8. Designing of clipper/clamper circuit on bread board.
9. Study of PCB designing.
10. Designing of DC power supply.
11. To study the different part of Electrical machines.

Text Book & Reference Books:

1. Practical in Electrical Engineering, "Dr N. K. Jain Dhanpat Rai & Sons".
2. Electric Wiring, "Mr. S. Samaddar New Central Book Agency (P) Ltd., Calcutta."
3. Electrical Design Estimating and Costing, "Surjit Singh Dhanpat Rai & Sons."

Course Outcomes:

After completion of this course module, students will be able to:

1. Identify and understand importance of various electrical and electronics components.
2. Understand basic construction and operation of various laboratory equipments.
3. Understand and analyze basic electric and magnetic circuits.
4. Introduce the components of low voltage electrical installations.