

**1/4 B.Tech. FIRST SEMESTER
ENGINEERING WORKSHOP**
(Common to ME, EEE, AE during I B.Tech., I Semester)
(Common to CE, ECE during I B.Tech., II Semester)
Course Code(s): ME1L3, AE1L3, EE1L2, CE2L2, EC2L3

Lab: 3 periods/week

Credits: 2

Internal assessment: 25 marks

Semester end examination: 50 marks

Course Objectives:

- Illustrate about basic hand tools used in various trades such as Carpentry, Tin-Smithy, Fitting House wiring, Black smithy.
- Imparting skills to prepare basic joints in Carpentry.
- Imparting skills to fabricate various objects by using sheet metal.
- Know various basic house wiring connections.
- Imparting skills to fabricate various shapes by using black smithy.

Course Outcomes:

At the end of course the student will be able to:

1. Prepare basic joints used in carpentry
2. Prepare edges for better joint for fitting
3. Perform basic house wiring connections
4. Prepare various shapes and objects by using Tin smithy and Black smithy.

ANY TWO EXPERIMENTS FROM EACH TRADE

TRADE:

CARPENTRY

1. T-Lap Joint
2. Cross Lap Joint
3. Dovetail Joint
4. Mortise and Tennon Joint

FITTING

1. Vee Fit
2. Square Fit
3. Half Round Fit
4. Dovetail Fit

BLACK SMITHY

1. Round rod to Square
2. S-Hook
3. Round Rod to Flat Ring
4. Round Rod to Square headed bolt

HOUSE WIRING

1. Parallel / Series Connection of three bulbs
2. Stair Case wiring
3. Florescent Lamp Fitting
4. Measurement of Earth Resistance

TIN SMITHY

1. Taper Tray
2. Square Box without lid
3. Open Scoop
4. Funnel

Learning Resources**Text Books:**

1. Work shop Manual - P.Kannaiah/ K.L.Narayana/ Scitech Publishers.
2. Workshop Manual / Venkat Reddy/ BS Publications/Sixth Edition.