

## **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, EE1L3, CE2L2,EC2L3

Credits: 2

Lecture: --

Internal assessment: 25 marks

Lab Practice: 3 periods/week

Semester end examination: 50 marks

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### **COURSE OBJECTIVES:**

1. Illustrate about basic hand tools used in various trades such as Carpentry, Tin-Smithy, Fitting House wiring, Black smithy.
2. Imparting skills to prepare basic joints in Carpentry.
3. Imparting skills to fabricate various objects by using sheet metal.
4. Know various basic house wiring connections.
5. 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