

		L	T	P	C
15ME104L	WORKSHOP PRACTICE	0	0	3	2
	Total contact hours - 45				
	Prerequisite				
	Nil				

PURPOSE

To provide the students with hands on experience on different trades of engineering like fitting, carpentry, smithy, welding and sheet metal.

INSTRUCTIONAL OBJECTIVES

1. To familiarize with the basics of tools and equipments used in fitting, carpentry, sheet metal, welding and smithy
2. To familiarize with the production of simple models in the above trades.

UNIT I FITTING

9

Tools & Equipments – Practice in filing.
 Making Vee Joints, Square, Dovetail joints and Key making - plumbing.
 Mini project – Assembly of simple I.C. engines.

UNIT II CARPENTRY

9

Tools and Equipments- Planning practice.
 Making Half Lap, Dovetail, Mortise & Tenon joints.
 Mini project - model of a single door window frame.

UNIT III SHEET METAL

9

Tools and equipments– practice.
 Making rectangular tray, hopper, scoop, etc.
 Mini project - Fabrication of a small cabinet, dust bin, etc.

UNIT IV WELDING

9

Tools and equipments -
 Arc welding of butt joint, Lap joint, Tee fillet.
 Demonstration of gas welding, TIG & MIG welding.

UNIT V SMITHY

9

Tools and Equipments –
 Making simple parts like hexagonal headed bolt, chisel.

TOTAL 45

REFERENCES

1. Gopal, T.V., Kumar, T., and Murali, G., *A first course on workshop practice – Theory, Practice and Work Book*, Suma Publications, Chennai, 2005.
2. Kanniah, P., and Narayanan, K. C., *Manual on Workshop Practice*, Scitech Publications, Chennai, 1999.
3. Venkatachalapathy, V. S., *First year Engineering Workshop Practice*, Ramalinga Publications, Madurai, 1999.
4. Laboratory Manual.

15ME104L - WORKSHOP PRACTICE												
Course designed by		Department of Mechanical Engineering										
1	Student Outcome	a	b	c	d	e	f	g	h	i	j	k
			×	×				×				
2	Mapping of instructional objectives with student outcome		1, 2	1, 2				1, 2				
3	Category	GENERAL (G)			BASIC SCIENCES (B)			ENGINEERING SCIENCES AND TECHNICAL ART (E)			PROFESSIONAL SUBJECTS (P)	
								X				
4	Approval	23 rd meeting of the Academic Council , May 2013										