

## MANUFACTURING PROCESSES LAB (ME-313L)

Pre-requisite: None

Credit Hours: 01

Contact Hours: 48

### RECOMMENDED BOOK(S)

Workshop Technology, Latest Edition by W. A. J. Chapman.

### REFERENCE BOOK(S)

Mechanical Workshop Practice, By K. C. John, PHI Learning.

Reference and Instruction Sheets Given by Course Instructor during the course.

### COURSE OBJECTIVES

To get familiar with basic operations of spot welding, oxyacetylene welding, foundry, power press, bending machine, roller machine and rivet gun.

S. No.	CLO/PLOS MAPPING	DOMAIN	PLO
1	<b>Explain</b> foundry, Spot, oxy-acetylene welding operations, basic operations of power press, bending machine, roller machine and rivet gun.	C2	01
2	<b>Copy</b> basic foundry, Spot, oxy-acetylene welding operations, basic operations of power press, bending machine, roller machine and rivet gun.	P3	04

### COURSE CONTENTS

To make wood pattern for sand mold casting

To prepare sand mold

To perform Aluminium casting

To perform Drilling, boring operations using lathe machine

To perform threading operation using lathe machine

To perform Contour and form turning using lathe machine

To perform sheet rolling operation using rolling machine

To perform spot welding on bended part

Cutting of sheet metal using oxy-acetylene

Welding of sheet metal by oxy-acetylene

To perform V-bending of sheet metal using bending machine

To make a cone of thin sheet metal by riveting operation

To perform blanking operation on thin sheet metal using power press machine

To perform punching operation on thin sheet metal using power press machine