

III B.Tech I Semester

15AME28 - MANUFACTURING TECHNOLOGY LAB

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Course objectives:

- To study and practice the various operations that can be performed in metal casting, mechanical process, welding, processing of plastics and to equip with the practical knowledge required in the core industries.

Minimum of 10 Exercises need to be performed.

I. METAL CASTING LAB:

- Pattern Design and making - for one casting drawing.
- Sand properties testing - Exercise -for strengths, and permeability – 1.
- Moulding Melting and Casting - 1 Exercise.

II. WELDING LAB :

- ARC Welding Lap & Butt Joint - 2 Exercises.
- Spot Welding - 1 Exercise.
- TIG Welding - 1 Exercise.
- Plasma welding and Brazing - 2 Exercises (Water Plasma Device).

III. MECHANICAL PRESS WORKING:

- Blanking & Piercing operation and study of simple, compound and progressive press tool.
- Hydraulic Press: Deep drawing and extrusion operation.

IV. PROCESSING OF PLASTICS

- Injection Moulding.
- Blow Moulding.

Course outcomes

- Upon completion of this course, the students can able to demonstrate and fabricate different types of components using the various manufacturing techniques.


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