

ME4L2

**II YEAR-II Semester  
PRODUCTION TECHNOLOGY LAB**

Credits: 2

Lecture: -----

Internal assessment: 25 marks

Lab Practice: 3 period /week

Semester end examination: 50 marks

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**Course Objectives:**

- Preparation of wooden pattern using carpentry tools.
- Making sand mold using pattern.
- Various operations performed on press tools.
- Simple joints like T-joint, butt joint are prepared using arc, oxy-acetylene, MIG, TIG welding techniques.
- Preparation of gear wheel and hub nut cover using injection molding machine.

**Course Outcomes:**

Upon the completion of this course the student will be able to:

1. Make the wooden pattern using carpentry tools.
2. Use the pattern for creating mould cavity.
3. Perform blanking and piercing operations on press tools.
4. Fabricate welded structures for engineering applications.
5. Prepare components using blow and injection molding.

**Any 12 Experiments of the following**

**I) FOUNDRY**

- 1) Preparation of single piece pattern
- 2) Preparation of split pattern
- 3) Sand Molding
- 4) Testing Sand Properties

**II) WELDING**

- 1) Arc welding – Two exercises
- 2) Spot Welding
- 3) TIG welding
- 4) Gas Welding

**III) PRESS WORKING**

- 1) Piercing and Blanking

**IV) PLASTICS PROCESSING**

- 1) Injection Molding – Two exercises
- 2) Blow Molding