

<b>Course Title:</b> Manufacturing Processes	<b>Course Code:</b> ME-342	<b>Credit Hrs:</b> 3+1
---	-------------------------------	---------------------------

**Textbook:**

- Mikell P Groover, Fundamental of Modern Manufacturing: Materials, Processes and Systems, John Wiley

**Reference Books:**

- S. Kalpakjian & S. R. Schmid, Manufacturing Processes for Engineering Materials, Pearson
- Stanley A. Komacek, Ann E. Lawson & Andrew C. Horton, Manufacturing Technology, Glencoe/Mcgraw-Hill.

**Course Objective:**

Manufacturing Processes covers methods and techniques used in industrial production, including casting, machining, forming, welding, and additive manufacturing, to efficiently transform raw materials into finished products while ensuring quality, cost-effectiveness, and sustainability.

**Course Outline:**

- Introduction: Basic concepts of manufacturing processes
- Casting and Moulding: Metal casting processes and equipment, Powder metallurgy, Plastics
- Forming: Extrusion and drawing, sheet metal forming, forming and shaping plastics and composite materials
- Machining: Conventional and non-conventional machining processes
- Joining: Welding, brazing, soldering, sintering, adhesive bonding, fastening, Press fitting
- Additive Manufacturing: 3D Printing

Description	Percentage Weightage (%)
Assignments	05-10%
Quizzes	10-15%
Mid Semester Exams	30-40%
End Semester <b>ASSESSMENTS</b> Exam	40-50%