



**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA**  
**KAKINADA – 533 003, Andhra Pradesh, India**

**DEPARTMENT OF MECHANICAL ENGINEERING**

<b>II Year - I Semester</b>		<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>0</b>	<b>0</b>	<b>3</b>	<b>1.5</b>
<b>PRODUCTION TECHNOLOGY LAB</b>					

**Course Objective: To impart hands-on practical exposure on manufacturing processes and equipment.**

1. Design and making of pattern
  - i. Single piece pattern
  - ii. Split pattern
2. Sand properties testing
  - i. Sieve analysis (dry sand)
  - ii. Clay content test
  - iii. Moisture content test
  - iv. Strength test (Compression test & Shear test)
  - v. Permeability test
3. Mould preparation
  - i. Straight pipe
  - ii. Bent pipe
  - iii. Dumble
  - iv. Gear blank
4. Gas cutting and welding
5. Manual metal arc welding
  - i. Lap joint
  - ii. Butt joint
6. Injection Molding
7. Blow Molding
8. Simple models using sheet metal operations
9. Study of deep drawing and extrusion operations
10. Study of Basic powder compaction and sintering
11. Study of TIG/MIG Welding
12. Study of Resistance Spot Welding
13. Study of Brazing and soldering
14. Study of Plastic Moulding Process.