

DMX3206 Introduction to Manufacturing Processes

Level	Level 3
Course Code	DMX3206
Course Title	Introduction to Manufacturing Processes
Credit value	2
Core/Optional	Core
Course Aim/s	To provide foundation of theoretical and practical knowledge of manufacturing processes and their applications
Course Learning Outcomes (CLO):	<p>At the completion of this course student will be able to:</p> <p>CLO1: Identify the fundamentals of manufacturing methods of iron and steel.</p> <p>CLO2: Describe the principles of Measurement systems and Metal Inspection techniques.</p> <p>CLO3: Recognize the methods for improving quality of steels and surface enhancing methods of metals</p> <p>CLO4: Discuss the various Joining methods, their limitations and their industrial applications</p> <p>CLO5: Describe the concepts of metal machining and types of metal machining methods</p> <p>CLO6: Describe the operations of various types of primary shaping processes</p> <p>CLO7: Illustrate the fundamentals of Metal Forming and Sheet Metal Working methods</p>
Content	<p>Outline Syllabus:</p> <p>Unit 01: Fundamental of Manufacturing</p> <p>Unit 02: Property Enhancing and Surface Processing Operations</p> <p>Unit 03: Joining Processes</p> <p>Unit 04: Metal Removal Processes</p> <p>Unit 05: Primary Shaping Processes</p> <p>Unit 06: Metal shaping processes</p> <p>Laboratory work:</p> <ol style="list-style-type: none"> 1. Production of tapered and flat surfaces 2. Identification of metals 3. Study the operation of Oxy-Acetylene welding and Oxy-Acetylene cutting process 4. Study the operation of arc welding methods (MMAW, MIG/MAG, TIG) 5. Production of non-ferrous casting components