

DMX4201 Advanced Engineering Design Graphics

Level	4
Course Code	DMX4201
Course Title	Advanced Engineering Design Graphics
Credit value	2
Core/Optional	Core
Course Aim/s	To combine theoretical approaches of engineering drawings with modern techniques of computer graphics and modeling for effective presentations in mechanical engineering.
Course Learning Outcomes (CLO):	<p>At the completion of this course student will be able to:</p> <p>CLO1: Recognize and describe the different standard of drawing practices of both manual drawings and Computer Aided Drafting</p> <p>CLO2: Produce technical drawings using international and national conventions and standards.</p> <p>CLO3: Draw orthographic projections of a given mechanical part or an assembly.</p> <p>CLO4: Prepare a comprehensive working drawing for a component or an assembly.</p> <p>CLO5: Use CAD packages to develop 3D models and orthographic views.</p>
Content	<p>Outline Syllabus:</p> <p>Unit 01: Session 01 : Introduction and Review of basics of engineering drawing Session 02 : Orthographic Projections Session 03 : Auxiliary views and Sections</p> <p>Unit 02: Session 04 : Interpenetration curves and developments Session 05 :Pictorial views</p> <p>Unit 03: Session 06 : Mechanical Engineering conventions Session 07 : Fastenings and Machine elements Session 08 : Machine assemblies</p> <p>Unit 04: Session 09 : Common features in drawings Session 10 :Preparation of working drawing</p> <p>Unit 05 Session 11 : Computer Aided Drafting Session 12 : Computer Aided Modeling Session 13 : Parametric Modeling Session 14 : Construction of Virtual realistic presentations</p>