

<b>Semester:</b>	02				
<b>Course Code:</b>	ME1020				
<b>Course Name:</b>	Engineering drawing				
<b>Credit Value:</b>	2 (Notional hours: 100)				
<b>Pre-requisites:</b>	None				
<b>Core/Optional</b>	Core				
<b>Hourly Breakdown</b>	<b>Lecture hrs.</b>	<b>Tutorial hrs.</b>	<b>Practical class hrs.</b>	<b>Assignments hrs.</b>	<b>Independent Learning Assessment hrs.</b>
	9	-	-	42	49
<p><b>Course Aim:</b> To develop visualization skills of three dimensional objects by enabling the students to comprehend and produce engineering drawings, engineering graphics and freehand sketches.</p> <p><b>Intended Learning Outcomes:</b></p> <p>On successful completion of the course, the students should be able to</p> <ul style="list-style-type: none"> <li>➤ <b>Interpret</b> and produce a simple engineering drawing in both First and Third angle orthographic projections and translate it to a three-dimensional virtual image to produce freehand sketches of the object</li> <li>➤ <b>Solve</b> problems on Engineering Graphics</li> <li>➤ <b>Produce</b> an engineering drawing using computer aided drafting.</li> </ul>					
<p><b>Course Content:</b><i>(Only main topics &amp; subtopics)</i></p> <ul style="list-style-type: none"> <li>➤ <b>Introduction to Engineering Drawing</b></li> <li>➤ <b>Freehand sketching of isometric views:</b> Sketching of objects by direct observation and by interpreting the object from an orthographic projection. Ability to form a virtual image and produce a sketch from a given viewing direction.</li> <li>➤ <b>Geometrical Constructions</b></li> <li>➤ <b>Orthographic projection:</b> First Angle and Third Angle projection. Standards in Engineering Drawing Computer Aided Drafting</li> <li>➤ <b>Engineering Graphics:</b> Isometric projections, Conic Sections, Intersection of Surfaces and Developments, Computer Aided Drafting</li> </ul>					
<p><b>Teaching/Learning Methods:</b></p> <p>Lectures and in-class assignments</p>					

<b>Assessment Strategy:</b>			
Continuous Assessment 70 %		Final Assessment 30 %	
Details: quizzes%, % Mid Semester Examination%, 20% other% (specify)  Assignments 30%, In-class activities (coursework) .....20 %	Theory (%)  30	Practic al (%)  -	Other (%) (specify)
<b>Recommended Reading:</b>			
<ul style="list-style-type: none"> <li>➤ Abbott W., Practical Geometry and Engineering Graphics, 7th Edition, 1963.</li> <li>➤ L. P. Singh, Harwinder Singh, Engineering Drawing - Principles and Applications, Cambridge University Press, 2021.</li> </ul>			