

Information of every subject	
1	Unit name: Machine Drawing
2	Code: ME-21011
3	Classification: Engineering subject
4	Credit value: 2
5	Semester/ Year Offered: 2/2
6	Pre-requisite: Unde/rstand Basic Trigonometry and Geometry, Basic Engineering Drawing
7	Mode of delivery: Lecture, Tutorial and Classwork
8	Practical 10%
	Classwork 30%
	Mid-term/ final Examination 60%
9	Academic staff teaching unit:
10	<p>Course outcome of unit:</p> <p>Semester I In this course, students will be able :</p> <ul style="list-style-type: none"> (a) To draw various screw thread forms and the principle of various gears terms. (b) To draw a cam profile, given a displacement profile drawing. (c) To illustrate the characteristics of a spur gear, worm gear, and bevel gear. <p>Semester II In this course, students will be able</p> <ul style="list-style-type: none"> (d) To describe the different of details and assembly drawing. (e) To contrast the elements of a detail drawing and the parts of an assembly drawing. (f) To be able this drawing even in CAD/CAM software by applying the basic knowledge of machine drawing.
11	<p>Synopsis of unit:</p> <p>This unit provides to create, record, analyze, and communicate their design concepts or ideas so that the students can be realized or made into real products or structures.</p> <p>Later, detailed layouts, analysis, and part drawings are created using by hand drawing and 2D CAD. And assembly drawings also can be created by hand drawing and 3D CAD.</p>

12	<p>Topic:</p> <p>Semester (I)</p> <p>Chapter 8 Manufacturing Processes 8.1 Computer-Aided Design and Product Development 8.2 Rapid Prototyping 8.3 Types of Rapid Prototyping Systems 8.5 Material Selection 8.6 Properties of Materials</p> <p>Chapter 10 Tolerancing Understanding tolerance</p> <p>Chapter 11 Threads, Fasteners and Springs Understanding threads and fasteners 11.1 Thread Notes 11.2 External Thread Symbols 11.3 Internal Thread Symbols 11.4 Detailed Representation 11.8 Bolts, Studs and Screws 11.10 Standard Bolts and Nuts 11.11 Drawing Standard Bolts</p> <p>Chapter 17 Gears and Cams Understanding Gears 17.1 Construction A Base Circle 17.2 The Involute Tooth Shape</p> <p>Semester (II)</p> <p>Chapter 7 Working Drawing 12.1 Subassemblies 12.2 Identification 12.3 Parts Lists 12.4 Assembly Sections 12.5 Working Drawing Assembly 12.6 Installation Assemblies 12.7 Check Assemblies 12.8 Working Drawing Formats 12.9 Drawing Numbers 12.10 Zoning 12.11 Checking Drawings 12.12 Drawing Revisions 12.13 Simplifying Drawings 12.14 Patent Drawings</p>
14	Main references: Technical Drawing, 13 th Edition, F.E. Giesecke,A.Mitchell, H.C. Spencer, I.L. Hill, J.T. Dygdon, J.E. Novak, and S. Lockhart, 2009 (Part II) -Engineering Graphics with Auto CAD 2009, James D.Bethune -Introduction to Auto CAD ,Engineering Drawing, Basant Agrawal, C.M.Agrawal
15	Additional references: Technical Drawing, 13 th Edition, F.E. Giesecke,A.Mitchell, H.C. Spencer, I.L. Hill, J.T. Dygdon, J.E. Novak, and S. Lockhart, 2009 (Part I)

