

Course Title	Course Structure			Pre-Requisite
	L	T	P	
Engineering Graphics and Building Drawing (SEC -2)	1	0	2	-

Course Objectives:

1. To understand orthographic projections of point, line and solids.
2. To provide exposure to spatial visual aspects of technical drawing.
3. To familiarize the students with drafting and engineering drawing practices with CAD
4. To draw plan, elevation and sectional view of buildings

Course Out comes (CO)

Students would be able

1. To draw plan, elevation and sectional view of an object
2. To provide spatial visual aspects of technical drawing.
3. To draft and draw the objects with CAD.
4. To visualize the drawing details of various buildings.

S.No.	Contents	Contact hours
Unit 1	Projections of points and lines. Projection of polygonal surface Projection of solids like prisms, pyramids, cylinder and cone Sections of Solids: Right regular solids and Auxiliary views for the true shape of the sections.	4
Unit 2	Isometric Projection: Isometric scales, Isometric projections of simple and combination of solids.	2
Unit 3	Introduction to AutoCAD: Basic commands for 2D and 3D drawing: Line, Circle, Polyline, Rectangle, Hatch, Fillet, Chamfer, Trim, Extend, Offset, Dimension style, etc. Layout management, Plot setting, Create and manage dimension.	3
Unit 4	Transformation of Projections: Conversion of Isometric Views to Orthographic Views and Vice-Versa in AutoCAD. Creation of engineering models and their presentation in standard 2D blueprint form.	3

Unit 5	Conventional signs for civil engineering materials, Plan, elevation and section of public buildings such as school, hostel and hospital.	3
Text Books & Reference	<ol style="list-style-type: none"> 1. Warren J. Lucadder," Fundamentals of Engg. Drg., Pren. Hall, N. Delhi. 2. N.D. Bhatt, Elementary Engineering Drawing., Charotar Publication; 54th Edition 2023 3. S.C .Rangwala," Civil Engineering Drawing, 4. Jim Bethune and David Byrnes, Engineering Graphics with AUTOCAD 2023 5. D. M. Kulkarni, A. P. Rastogi, A. K. Sarkar, Engineering Graphics with AutoCAD, PHI Learning Pvt. Ltd., 2009 	