

III Year - II Semester	L	T	P	C
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COMPUTER AIDED ENGINEERING LABORATORY

Learning Objectives:

The objective of this course is:

1. To enhance the students knowledge and skills in engineering drawing.
2. To introduce computer aided drafting packages and commands for modeling and sketching.
3. To learn surface modeling techniques required designing and machining
4. To draw the geometric entities and create 2D and 3D wire frame models.
5. To learn various modelling techniques such as edit, zoom, cross hatching, pattern filling, rotation,etc.

outcomes:

Up on completion of the course, the student shall be able to :

1. Understand the paper –space environment thoroughly
2. Develop the components using 2D and 3D wire frame models through various editing commands.
3. Generate assembly of various components of compound solids.

PART-A: MANNUAL DRAFTING

UNIT-I

Objective: The knowledge of projections of solids is essential in 3D modelling and animation. The student will be able to draw projections of solids. The objective is to enhance the skills they already acquired in their earlier course in drawing of projection and sections of solids.

Projections Of Planes & Solids : Projections of Regular Solids inclined to both planes – Auxiliary Views. Sections and Sectional views of Right Regular Solids – Prism, Cylinder, Pyramid, Cone – Auxiliary views.

UNIT-II

Objective: The knowledge of development of surfaces of solids is required in designing and manufacturing of the objects. Whenever two or more solids combine, a definite curve is seen at their intersection. The intersection of solids also plays an important role in designing and manufacturing. Theobjective is to impart this knowledge through this topic.