

11-ES104 Engineering Graphics with CAD

SYLLABUS

Introduction to Computer Aided Drafting, AutoCAD Commands, Types of lines, Dimensioning, Theory of Projection – Elements of projection, planes of projection, methods of projection.

Projection of Points and Straight Lines – Projection of points, projections of straight lines, various positions of straight lines w.r.t. reference planes, traces of lines.

Projection of Planes – Types of planes, projection of planes, various positions of planes w.r.t reference planes (Use First angle method of projection)

Projection of Solids – Types of solids, projection of solids in simple position, projection of solids with axis inclined to one reference plane and parallel to other. (Use First angle method of projection)

Orthographic Projection –Introduction to Orthographic projections, types of surfaces, invisible lines, precedence of lines, steps to draw orthographic views, orthographic projection of different objects. (Use First angle method of projection)

Isometric projection – Theory of isometric projection, isometric view, isometric views from orthographic views for simple objects. (Use First angle method of projection)

BOOKS:

Notes will be made available

REFERENCE BOOKS

- 1.Engineering Drawing by N.D.Bhatt
- 2.Engineering Drawing with an introduction to AutoCAD by Dhananjay A Jolhe,Tata McGraw-Hill Publishing company limited
- 3.Engineering Graphics with AutoCAD by D. M. Kulkarni, A. P. Rastogi and A.K.Sarkar; PHI Learning Private Limited, New Delhi, 2009.