

DETAILED SYLLABUS

Unit No	Topics
1.	Introduction: Introduction to Engineering Graphics, Drawing Instruments and accessories. Line, Lettering and Dimensioning, Sheet Lay Out and Sketching,
2.	Scales: Types of scales and Representative Fraction, Plane scale, Diagonal Scale, Vernier Scale, and Scale of Chords.
3.	Engineering Curves: Classification of Engineering Curves, Construction of Conics, Cycloid Curves, Involutives, Spirals and Helix.
4.	Locl of Points: Path of the points moving on simple arrangements and simple mechanisms, slider crank mechanism, four bar chain mechanism etc.
5.	Projections of Points & Lines: Introduction to principal planes of projections, Projections of the points located in same quadrant and different quadrants, Projections of line with its inclination to one reference plane and with two reference planes. True length of the line and its inclination with the reference planes.
6.	Projections of Planes: Concept of different planes, Projections of planes with its inclination to one reference plane and with two reference planes. Concept of auxiliary plane method for projections of the plane.
7.	Projections of Solids: Classification of solids. Projections of solids like Cylinder, Cone, Pyramid and Prism with its inclination to one reference plane and with two reference planes.
8.	Section of Solids: Section of Cylinder, Cone, Pyramid and Prism and the true shape of the section with its inclination to one reference plane and with two reference planes.
9.	Development of Lateral Surfaces: Concept of development of the different surfaces. Parallel Line Development and Radial Line Development.

10.	Orthographic Projections: Principle of projection, Principal planes of projection, Projections from the pictorial view of the object on the principal planes for View from Front, View from Top and View from Side using first angle projection method and third angle projection method, Full Sectional View.
11.	Isometric Projections and Isometric View or Drawing: Isometric Scale, Conversion of orthographic views into Isometric projection, Isometric view or drawing.
12.	Machine Drawing: Representation of Three Dimensional objects – Need for and Importance of multiple views and their placement – Developing visualization skills through free hand sketching of multiple views from pictorial views of objects.