

Engineering Drawing & Computer Graphics

Code: ME191

Contacts: 1L+3P

Credits: 3

A. THEORETICAL PART

1. Introduction to Lines, Lettering, Dimensioning, Scales. - 1L
2. Geometrical Construction and Curves - 1L
3. Projection of Points, Lines and Surfaces - 2L
4. Projection of Solids - 2L
5. Isometric Views - 1L
6. Sectional Views - 1L
7. Development of Surfaces - 1L
8. Introduction to Computer Aided Drafting - 3L

B. PRACTICAL PART

1. LINES, LETTERING, DIMENSIONING, SCALES; Plain scale, Diagonal scale. - 6hrs
2. GEOMETRICAL CONSTRUCTION AND CURVES; Construction of polygons, Parabola, Hyperbola, Ellipse. - 6hrs
3. PROJECTION OF POINTS, LINES, SURFACES; Orthographic projection- 1st and 3rd angle projection, Projection of lines and surfaces– Hexagon. - 3hrs
4. PROJECTION OF SOLIDS; Cube, Pyramid, Prism, Cylinder, Cone. - 6hrs
5. DRAWING ISOMETRIC VIEW FROM ORTHOGONAL/ SECTIONAL VIEWS OF SIMPLE SOLID OBJECTS. - 3hrs
6. FULL AND HALF SECTIONAL VIEWS OF SOLIDS. - 3hrs
7. DEVELOPMENT OF SURFACES; Prism, Cylinder, Cone. - 3hrs
8. COMPUTER AIDED DRAFTING (Using AutoCAD and/or similar softwares); Introduction: Cartesian and Polar coordinate system, Absolute and Relative coordinates; Basic editing commands: Line, Point, Trace, Rectangle, Polygon, Circle, Arc, Ellipse, Polyline; Editing methods; Basic object selection methods, Window and crossing window, Erase, Move, Copy, Offset, Fillet, Chamfer, Trim, Extend, Mirror; Display commands: Zoom, Pan, Redraw, Regenerate; Simple dimensioning and text, Simple exercises. - 6hrs