

**VIKRAMA SIMHAPURI UNIVERSITY::NELLORE**  
**I YEAR OF FOUR YEAR B.TECH DEGREE COURSE**  
**(COMMON TO ALL BRANCHES)**

(With effect from the Academic Year 2010-2011)

**10 ME 101- ENGINEERING GRAPHICS**

Hours /week	: 4Hrs	Sessional Marks	: 40
Credits	: 6	End Examination Marks	: 60

**UNIT – I**

**Conics:** General Methods- Ellipse, Parabola and Hyperbola- Ellipse: Special methods- Concentric Circles method, Oblong method and Foci method-Parabola: Tangent method , Rectangle method- Hyperbola.

**Cycloidal Curves:** Cycloids, Epi and Hypo Cycloids- Involute.

**UNIT – II**

**Projections:** Principles of Projection- First angle Projection, Projection of points and Lines.

**Projections of Planes:** Projections of Planes, Projection on Auxiliary vertical and inclined planes.

**UNIT – III**

**Projections of Solids:** Projections of simple Solids such as Prisms, Pyramids, Cylinders and Cones with varying positions of their Axes.

**Sections of Solids:** Sections of Solids such as Cubes, Prisms, TetraHedron, Pyramids, Cylinders and Cones resting on their bases on H.P only- true shape of Sections.

**UNIT-IV**

**Development of Surfaces:** Development of Laternal Surfaces of Right regular Solids such as Prisms, Pyramids, Cylinders and Cones which are cut by a plane inclined to H.P only.

**Interpenetration of Solids:** Square Prism in a Square Prism and Cylinder in a Cylinder.

**UNIT-V**

**Isometric Projections:** Isometric Projections and views of objects. (treatment to only Isometric Lines).

**Orthographic Projections:** Conversion of Pictorial views into Orthographic views.

**Text Books:**

1. P Kannaiah and K L Narayana ” A text book on Engineering Drawing” Scitech Publications Pvt Ltd
2. N D Bhatt and V M Panchal “A text book on Engineering Drawing” , Charotar Publishing house Ltd.

**Reference Books:**

1. K Venu Gopal “A text book on Engineering Drawing and Graphics + Auto CAD” .