



RAGATI ENGINEERING COLLEGE

(Autonomous)

1-378, ADB Road, Surampalem – 533 437, Near Peddapuram, E.G. Dist., (A.P.)

(Approved by AICTE, New Delhi & Permanently Affiliated to JNTUK & Accredited by NAAC with A)

Course Code:		Coordinator:	Nagarjuna G
Course Category:	Professional Core	Credits:	3
Course Type:	Theory and Practical	Lecture -Tutorial- Practical	1 - 0 - 3
Prerequisites:	Nil	Continuous Evaluation: Semester end	40 60 100
Instructors(): Nagarjuna G, Khaleel Sk, Udayabhaskar, Suresh, Sk Bee Bee			

I year - I semester
ENGINEERING DRAWING
(Common to ME, CE, IT, CSE & ECE)

Objective: Engineering drawing being the principle method of communication for engineers, the objective to introduce the students, the techniques of constructing the various types of polygons, curves and scales. The objective is also to visualize and represent the 3D objects in 2D planes with proper dimensioning, scaling etc.

COURSE CONTENT	
UNIT I	Introduction to Engineering Drawing Polygons: Constructing regular polygons by general method. Curves: Parabola, Ellipse and Hyperbola by general methods tangent & normal for the curves. Cycloid and Involutives Scales: Vernier and Diagonal scales.
UNIT II	Orthographic Projections: Introduction, importance of reference lines, projections of points in various quadrants. Projections of straight lines inclined to both the planes, determination of true lengths and angle of inclination.
UNIT III	Projections of planes: Regular planes perpendicular/parallel to one plane. Regular planes inclined to one plane and parallel to other, inclined to both the planes.
UNIT IV	Projections of Solids: Simple positions of Prisms, Pyramids, Cones and Cylinders. Solids Inclined to both the planes of above solids
UNIT V	Isometric Projections: Introduction, Conversion of isometric views to orthographic views Conversion of orthographic views to isometric views. Introduction to AutoCAD (Demo only)

TEXT BOOKS:

1. Engineering Drawing by N.D. Bhatt, Chariot Publications
2. Engineering Drawing + AutoCad – K Venugopal, V. Prabhu Raja, New Age INTERNATIONAL and REFERENCE BOOKS:

1. Engineering Drawing by K.L.Narayana & P. Kannaiah, Scitech Publishers
2. Engineering Graphics for Degree by K.C. John, PHI Publishers.