COURSE TITLE : CADD LAB - I
COURSE CODE : 5027
COURSE CATEGORY : A
PERIODS/ WEEK : 3
PERIODS/ SEMESTER : 45
CREDIT : 2

TIME SCHEDULE

MODULE	TOPIC	PERIODS
1	Introduction to CAD. Advantages of CAD. Draw and modifying commands.	9
2	Working on CAD	9
3	Two dimensional drawing of simple objects with sectional views	15
4	Isometric drawing of machine parts. Understand shop floor drawing	12
TOTAL		45

COURSE OUTCOME :

sl.no.	sub	student will be able to
1	1	Understand the computer aided drafting
	2	Understand the various commands used in CAD.
	3	Draw two dimensional drawing with CAD
	4	Understand the two dimensional drawing with section using CAD
	5	Draw Isometric drawing of simple objects
	6	Understand the shop floor drawing

SPECIFIC OUTCOME

MODULE I

1.1 Introduction to Computer Aided Drafting: History – application – Advantages over manual drafting –Hard ware requirements – Soft ware requirements – Different software - Auto CAD – Pro E – IDEAS and Open Source drafting software etc.

1.2 CAD basics – main menu, starting a new drawing, open, save, save as, exit, drawing editor, entering commands using mouse, pull down menu, getting help, data entry, entity selection.

MODULE II

2.1 Draw and modifying commands: setting commands - limits of drawing, units, grid, snap, osnap, co-ordinates, ortho mode locating a point – absolute coordinate system-relative coordinate system-polar coordinate system-direct distance entry system.

2.2 Draw commands- line, circle, arc, ellipse, rectangle, polygon, spline, polyline, etc.

2.3 Editing commands-erase, copy, array, rotate, mirror, offset, scale move, trim, fillet, chamfer, extend, stretch, p-line edit, explode etc.

MODULE III

3.1 Working with CAD: Properties of lines – colour, line weight, line type, layer properties - Hatch and gradients, dimensions and text on drawings - Developing simple orthographic views and dimensions it with text - Developing detailed orthographic views with all features-, simple blocks - Knuckle joint, Foot step bearing, cylinder, connecting rod, eccentric etc.

MODULE IV

4.1 Isometric drawing: Isometric snap and grid , Pictorial drawing- Isometric views of simple objects such as cube, step block, cylinder - Shop floor drawing of various machine parts such as slip bush, swivel bracket, gear shaft, overhung crank etc

REFERENCE

1. AutoCAD 2014 for Engineers Vol.I - Sankarprasad Dey
2. Engineering Drawing - M.B.Shah, B.C.Rana