

AMID23 ADVANCED COMPUTER APPLICATIONS

UNIT-1 STARTING AUTOCAD

- 1.1 Introduction to the menu, starting drawings from scratch.
- 1.2 Creating and using templates- starting drawings with setup wizards.
- 1.3 Saving and closing a file.

UNIT-2 USING CO-ORDINATE SYSTEMS- THE UCS.

- 2.1 Working with Cartesian and polar coordinate systems.
- 2.2 Using displays with shortcuts.

UNIT-3 SETTING UP THE DRAWING ENVIRONMENT

- 3.1 Setting the paper size, setting units, grid limits, drawing limits, snap controls.
- 3.2 Use of paper space and model space.

UNIT-4 BASIC COMMANDS DEALING WITH DRAWING PROPERTIES

- 4.1 Layer control, change properties, line weight control, etc.

UNIT-5 INQUIRY METHODS

- 5.1 Using data base information for objects, calculating distance, angle, areas etc.

UNIT-6 DIMENSIONING COMMANDS AND BLOCKS

- 6.1 Dimensioning the objects in linear, angular fashions along with quick time dimensioning etc.
- 6.2 Creating and working with blocks, creating symbols, use of blocks in creating a layout, of a residential area- one exercise to be done as lab assignment.

UNIT-7 ORIENTATION TOWARDS 3D

- 7.1 2D to 3D conversion, perspective view, walk through the layout.

UNIT-8 3D-MAX

- 8.1 Understanding 3D, theory behind 3D modeling. Preparing for construction of 3D models.
- 8.2 Construction of 3D surface models- extrusion, wire frame, creation of a shell, elaborate surfaces.

UNIT-9 SOLID MODELING

- 5.1 concepts behind solid modeling, composite solids creation and modification, solids display and inquiry.

UNIT-10 RENDERING AND PRESENTATION. PRINTING AND PLOTTING

Reference Books:

1. Teyapoovan. T., Engineering Drawing with Auto CAD 2000.
2. Vikas Pub House Pvt Ltd, New Delhi, 2000.