



Higher Technology You Need

# ARMbedded CADD CENTRE



A Unit Of ARMbedded Electronics Pvt. Ltd.



Opp. Indraprastha Colony G. N. 1, Sonipat Road, Rohtak (HR)



AN ISO 9001:2008  
CERTIFIED COMPANY

## Modules For Six Weeks Industrial Training On AutoCAD 2D/3D/Isometric

### 1<sup>st</sup> Week

#### Introduction to Computer Aided Design (CAD)

- What Can It Do And Why We Should Learn
- CAD For Electrical/ Civil/ Mechanical/ Automobiles
- Software Available For CAD (AutoCAD/PRO-E/Solid Works)
- Introduction To Autodesk AutoCAD

#### Getting Started with AutoCAD

- Starting AutoCAD
- AutoCAD's User Interface
- Working with Commands
- AutoCAD's Cartesian Workspace
- Opening an Existing Drawing File
- Viewing Your Work
- Saving Your Work PROJECT WORKSHOP

#### Basic Drawing & Editing Commands

- Drawing Lines
- Erasing Objects
- Drawing Lines with Polar Tracking
- Drawing Rectangles
- Drawing Circles
- Undo and Redo Actions

#### Making Changes in Your Drawing

- Selecting Objects for Editing



- b) Moving Objects
- c) Copying Objects
- d) Rotating Objects
- e) Scaling Objects
- f) Mirroring Objects
- g) Editing with Grips

## **2<sup>nd</sup> Week**

### **Organizing Your Drawing with Layers**

- a) Creating New Drawings With Templates
- b) What are Layers?
- c) Layer States
- d) Changing an Object's Layer

### **Advanced Object Types**

- a) Drawing Arcs
- b) Drawing Polylines
- c) Editing Polylines
- d) Drawing Polygons
- e) Drawing Ellipses

### **Getting Information from Your Drawing**

- a) Working with Object Properties
- b) Measuring Objects

### **Advanced Editing Commands**

- a) Trimming and Extending Objects
- b) Stretching Objects
- c) Creating Fillets and Chamfers
- d) Offsetting Objects
- e) Creating Arrays of Objects

### **Inserting Blocks**

- a) What are Blocks?
- b) Inserting Blocks
- c) Working with Dynamic Blocks

## 3<sup>rd</sup> Week

### Text

- a) Working with Annotations
- b) Adding Text in a Drawing
- c) Modifying Multiline Text
- d) Formatting Multiline Text
- e) Creating Tables
- f) Modifying Tables

### Hatching

- a) Hatching
- b) Editing Hatches

### Adding Dimensions

- a) Dimensioning Concepts
- b) Adding Linear Dimensions
- c) Adding Radial and Angular Dimensions
- d) Editing Dimensions

### Working with Constraints

- a) Geometric Constraints
- b) Dimensional Constraints

### Working with Blocks

- a) Creating Blocks
- b) Editing Blocks

### External References

- a) Attaching External References
- b) Modifying External References

## 4<sup>th</sup> Week

### 3D Foundations

- a. Why Use 3D
- b. Introduction to the 3D Modelling Workspace
- c. Basic 3D Viewing Tools

- d. 3D Navigation Tools
- e. Introduction to the User Coordinate System

## Simple Solids

- a) Working with Solid Primitives
- b) Solid Primitive Types
- c) Working with Composite Solids
- d) Working with Mesh Models

## Working with the User Coordinate System

- a) UCS Basics
- b) UCS X, Y, and Z Commands
- c) UCS Multifunctional Grips
- d) Saving a UCS by Name

## Creating Solids & Surfaces from 2D Objects

- a) Complex 3D Geometry
- b) Extruded Solids and Surfaces
- c) Swept Solids and Surfaces
- d) Revolved Solids and Surfaces
- e) Lofted Solids and Surfaces
- f) NURBS Surfaces

## Modifying in 3D Space

- a) 3D Gizmo Tools
- b) Aligning Objects in 3D Space
- c) 3D Modify Commands

## 5<sup>th</sup> Week

### Advanced Solid Editing

- a) Editing Components of Solids
- b) Editing Faces of Solids
- c) Fillets and Chamfers on Solids

### Additional Editing Tools

- a) Creating a Shell
- b) Imprinting Edges of Solids

- c) Slicing a Solid along a Plane
- d) Interference Checking
- e) Converting Objects to Surfaces
- f) Converting Objects to Solids

## Visualization

- a) Creating Visual Styles
- b) Working with Materials
- c) Specifying Light Sources
- d) Rendering Concepts

## Working Drawings from 3D Models

- a) Creating Multiple Viewports
- b) 2D Views from 3D Solids
- c) Creating Technical Drawings with Flatshot
- d) 3D Model Import

## 6<sup>th</sup> Week

### Isometric

- a) Concepts For Drawing An Isometric Image
- b) Why Isometric If 3D Drawing Is Here
- c) Object Snap Mode
- d) Drawing Any 3D Image On A 2D Surfaces
- e) Commands Associated With Isometric Drawings