

#### TRAINING COURSE OUTLINE

# AUTOCAD ESSENTIAL



#### **COURSE DESCRIPTION**

To provide new AutoCAD users an understanding of the software's core functionality and features so that they can create, edit, and organize their first drawing. Users will have a solid grounding in the software so that they can immediately be productive using AutoCAD.



# TARGET GROUP

This course is for anyone who plans to become a regular AutoCAD user and needs the fundamental skills to create, edit and dimension Auto-CAD drawings. This course is ideal for those new to AutoCAD® or those who have not used the software for a few years. No previous CAD experience is necessary.



# COURSE DURATION

Full Time: 2 Days (10.30am-5.30pm)



### LEARNING OUTCOME

By the end of the course, participants should be able to:

- Drawing a 2Dlayout with Basic Drawing Tool
- Manage User Coordinate System
- Managing a drawing with Layers
- Annotate drawings and plotting
- Create more complex surfaces and modifying solids
- Organize drawing for Modeling & Rendering

#### **CAREER PATH**

• 2D Visualizer, Space Planner, Draught person, & Layout Designer.

#### **COURSE PRE-REQUISITES**

- Architectural design, drafting, or engineering experience is recommended. No previous CAD experience is necessary.
- A working knowledge of Microsoft® Windows® 7, Microsoft® Windows® Vista, Microsoft® Windows® XP. or Microsoft® Windows® 2000.

#### **CERTIFICATE**

MTTC Certificate of Completion will be issued to participants with full attendance record upon completion of training.



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COURSE CONTENT



#### DAY 1

#### **Getting Started**

- Exploring the AutoCAD 2023 for windows User Interface
- Exploring AutoCAD's Graphical use interface
- Predrawn Symbol with the Tool Palettes
- Exploring AutoCAD's Workspaces
- The AutoCAD ribbon

#### **Creating Your First Drawing**

- Home Tabl's Draw and Modify Panels drawing lines and rectangles
- · Canceling, Erasing & Undoing
- Using Coordinate Systems
- Using Polar Coordinates
- Drawing Circles, Arcs and Polygons
- Filleting & Chamfering Lines

#### **Setting Up and Using the Drafting Tools**

- · Fine-Tuning the Measurement System
- Setting Up the Drawing Limits
- Understanding Scale Factors
- Using Polar Tracking & Modifying an Object
- · Making a Preliminary Sketch
- Aligning Objects by Using Object Snap Tracking

### Organizing Objects with Blocks and Groups

- Block Definition Dialog Box
- · Scaling and Rotating Blocks
- Replacing Existing Files with Blocks
- Understanding the Annotation Scale
- Ungrouping, Adding & Subtracting

#### **Keeping Track of Layers and Blocks**

- Working on Layers
- Controlling Layer Visibility
- Finding the Layers You Want
- Taming an Unwieldy List of Layers

## Editing and Reusing Data to Work Efficiently

- Creating and Using Templates
- Making Changes to an Associative Array
- Using Osnap Tracking to Place Objects
- Eliminating Unused Blocks, Layers, Linetypes,
- · Shapes, Styles, and More

#### **Mastering Viewing Tools, Hatches**

- Understanding Regeneration and Redrawing
- Using Hatch Patterns in Your Drawings
- Controlling Hatch with the options Panel
- Controlling Hatch Behavior, default Layer, Layout Scale, and ISO Line Weight
- Managing Xrefs

#### DAY 2

#### **Understanding Plot Styles**

 Choosing Between Color-Dependent and Named Plot St

#### Adding Text to Drawings

- Exploring Text Formatting in AutoCAD
- Using the Check Spelling Feature

#### **Using Dimensions**

- Styling, Adding, Editing & Understand dimensions
- Placing Horizontal and Vertical dimensions

#### **Drawing Curves**

- Marking Divisions on Curves
- Dividing Objects into Segments of equal length
- Dividing Objects into Specified Lengths

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## Getting and Exchanging Data from Drawings

- Finding the Area of Closed Boundaries & an Object
- Adding and Subtracting Areas with the area Command
- Determining the Drawing's Status
- Getting Information from System variables

#### **Managing and Sharing Your Drawings**

- Sharing Drawings over the Internet
- Protecting AutoCAD Drawing Files
- ePublishing Your Drawings

### **Laying Out Your Printer Output**

- Configuring Output Devices
- Plotting in Model space
- The essential and beyond

#### Storing, Presenting and Extracting data

- · Editing table styles & creating tables
- · Using fields in table cells
- · Editing table data