IT086:

AutoCad Essentials

Training Description:

The AutoCAD®/AutoCAD LT® 2018 Fundamentals training is designed for those using AutoCAD® or AutoCAD LT® 2018 with a Windows operating system. This course is not designed for the AutoCAD for Mac software.

Learn the features, commands, and techniques for creating, editing, and printing drawings with AutoCAD® and AutoCAD LT®. Using hands-on exercises, users explore how to create 2D production drawings.

Training Objectives:

By the end of the training, participants will be able to:
- ✓ Enable participants to create a basic 2D drawing in the AutoCAD software
- ✓ Navigate the AutoCAD and AutoCAD LT user interfaces
- ✓ Use the fundamental features of AutoCAD and AutoCAD LT
- ✓ Use the precision drafting tools in AutoCAD and AutoCAD LT to develop accurate technical drawings
- ✓ Present drawings in a detailed and visually impressive way

Training Designed for:

This course is intended for new users of Auto Cad.

Pre-requisite:
Familiar with Windows operating system.

Training Requirement:

"<u>Hand's on practical sessions, equipment</u> and <u>software will be applied during the course</u> if required and as per the client's request."

This training course is available upon request in English or Arabic, virtual online live or face to face public/inhouse. Content, location and duration can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

DAY ONE:
- ❖ PRE-TEST
- ❖ Chapter 1: Getting Started with AutoCAD
  - Starting the Software
  - User Interface
  - Working with Commands
  - Cartesian Workspace
  - Opening an Existing Drawing File
  - Viewing Your Drawing
  - Saving Your Work
- ❖ Chapter 2: Basic Drawing and Editing Commands

- Drawing Lines
- Erasing Objects

- Drawing Vertical and Horizontal Lines
- Drawing Rectangles
- Drawing Circles
- Undo and Redo Actions

❖ **Chapter 3: Projects: Creating a Simple Drawing**
- Create a Simple Drawing
- Create Simple Shapes

❖ **Chapter 4: Drawing Precision in AutoCAD**
- Using Running Object Snaps
- Using Object Snap Overrides
- Polar Tracking at Angles
- Object Snap Tracking
- (Optional) Drawing with Snap and Grid

❖ **Chapter 5: Making Changes in Your Drawing**
- Selecting Objects for Editing
- Moving Objects
- Copying
- Rotating Objects
- Scaling Objects
- Mirroring Objects
- Editing with Grips

❖ **Chapter 6: Projects: Making Your Drawings More Precise**
- Schematic Project: Electronics Diagram
- Architectural Project: Landscape
- Mechanical Project: Using Polar and Tracking
- Mechanical Project: Surge Protector
- Mechanical Project: Satellite

DAY TWO:
❖ **Chapter 7: Organizing Your Drawing with Layers**
- Creating New Drawings with Templates
- What are Layers?
- Layer States
- Changing an Object's Layer

❖ **Chapter 8: Advanced Object Types**
- Drawing Arcs
- Drawing Polylines
- Editing Polylines
- Drawing Polygons
- Drawing Ellipses

❖ **Chapter 9: Analyzing Model and Object Properties**

- Working with Object Properties
- Measuring Objects

❖ **Chapter 10: Projects: Drawing Organization and Information**
- Architectural Project

- Mechanical Project
- Civil Project

❖ **Chapter 11: Advanced Editing Commands**
- Trimming and Extending Objects
- Stretching Objects
- Creating Fillets and Chamfers
- Offsetting Objects
- Creating Arrays of Objects

❖ **Chapter 12: Inserting Blocks**
- What are Blocks?
- Working with Dynamic Blocks
- Inserting Blocks
- Inserting Blocks using the Tool Palettes
- Inserting Blocks using the Design Center

❖ **Chapter 13: Projects: Creating More Complex Objects**
- Mechanical Project 1: Plate
- Mechanical Project 2: Gasket
- Mechanical Project 3: Plate
- Mechanical Project 4: Rocker Arm
- Architectural Project 1: Floor Plan
- Architectural Project 2: Floor Plan
- Civil Project: Parking Lot

DAY THREE:
❖ **Chapter 14: Setting Up a Layout**
- Working in Layouts
- Creating Layouts
- Creating Layout Viewports
- Guidelines for Layouts

❖ **Chapter 15: Printing Your Drawing**
- Printing Concepts
- Printing Layouts
- Print and Plot Settings

❖ **Chapter 16: Projects: Preparing to Print**
- Mechanical Project
- Architectural Project

❖ **Chapter 17:**
- Working with Annotations
- Adding Text in a Drawing

- Modifying Multiline Text
- Formatting Multiline Text
- Adding Notes with Leaders to Your Drawing
- Creating Tables
- Modifying Tables

❖ Chapter 18: Hatching

- Hatching
- Editing Hatches

❖ Chapter 19: Adding Dimensions
- Dimensioning Concepts
- Adding Linear Dimensions
- Adding Radial and Angular Dimensions
- Editing Dimensions

❖ Chapter 20: Projects: Annotating Your Drawing
- Mechanical Project
- Architectural Project 1
- Architectural Project 2
- Civil Project

DAY FOUR:

❖ Chapter 21: Working Effectively with AutoCAD
- Creating a Custom Workspace
- Using the Keyboard Effectively
- Object Creation, Selection, and Visibility
- Working in Multiple
- Copying and Pasting Between Drawings
- Using Grips Effectively
- Additional Layer Tools

❖ Chapter 22: Accurate Positioning
- Coordinate Entry
- Locating Points with Tracking
- Construction Lines
- Placing Reference Points

❖ Chapter 23: Projects: Productivity Tools
- Schematic Project: Purifier Unit
- Mechanical Project: 2 Views
- Architectural/Civil Project: Formal Garden
- Mechanical Project: Cover Plate
- Architectural Project: Addition
- Mechanical Project: Block
- Mechanical Project: Plate

❖ Chapter 24: Parametric Drawing
- Working with Constraints

- Geometric Constraints
- Dimensional Constraints

❖ **Chapter 25: Working with Blocks**
- Creating Blocks
- Editing Blocks
- Removing Unused Elements
- Adding Blocks to Tool Palettes
- Modifying Tool Properties in Tool Palettes

❖ **Chapter 26: Projects: Creating and Organizing Blocks**
- Mechanical Project: Control Panel
- Architectural Project: Furniture Layout
- Civil Project: Utility Layout

DAY FIVE:
❖ **Chapter 27: Creating Templates**
- Why Use Templates?
- Controlling Units Display
- Creating New Layers
- Adding Standard Layouts to Templates
- Saving Templates

❖ **Chapter 28: Advanced Layouts**
- Creating and Using Named Views
- Advanced Viewport Options
- Layer Overrides in Viewports
- Additional Annotative Scale

❖ **Chapter 29: Annotation Styles**
- Creating Text Styles
- Creating Dimension Styles
- Creating Multileader Styles

❖ **Chapter 30: Projects: Drawing Setup and Utilities**
- Interiors Project
- Mechanical/Schematic
- Civil/Map Project
- Mechanical Project: Dimension Styles

❖ **Chapter 31: External References**
- Attaching External References
- Modifying External
- Xref Specific Information

❖ **Chapter 32: Projects: Drawing**
- D-sized Title Block (36x24)
- Mechanical Project: Drill Press Base
- Architectural Project: Office Tower
- P&ID Project: Oil Lubrication System
- Civil Project: Warehouse Site

❖ Course Conclusion
❖ POST-ASSESSMENT and EVALUATION

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30%   Lectures, Concepts, Role Play
- 70%   Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Fees:

As per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:
07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:30 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:
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