



## AUTODESK AUTOCAD ESSENTIAL TRAINING

### Objectives

The main objective of this course to teach trainee the basic commands and tools necessary for professional 2D drafting and drawing using AutoCAD. After completing this course trainee will be able to:

- ✓ Use AutoCAD for daily working process.
- ✓ Navigate throughout AutoCAD using major navigating tools.
- ✓ Understand the concept and techniques to draw.
- ✓ Create multiple designs using several of tools.
- ✓ Create layers to control the objects' visibility.
- ✓ Explain drawing using annotations.
- ✓ Plot or print the drawing by scale.
- ✓ Extracting data from drawings.

### Training Programme Day 1

| Chapter   | Topic   | Duration | Time               |
|-----------|---|----------|--------------------|
| Chapter 1 | <b>Getting Started</b> <ul style="list-style-type: none"> <li>• Exploring AutoCAD User Interface</li> <li>• Exploring AutoCAD Workspaces</li> <li>• The AutoCAD Ribbon</li> <li>• Setting Drawing Unit</li> </ul>   | 1 -Hour  | 9.00 AM - 10.00 AM |
| Chapter 2 | <b>Basic Drawing Skills</b> <ul style="list-style-type: none"> <li>• Navigating 2D Drawings</li> <li>• Drawing Lines and Rectangles</li> <li>• Cancelling, erasing, Undoing</li> <li>• Drawing Circles, Arcs, Polygons</li> <li>• Filleting and Chamfering Lines</li> </ul> | 3-Hour   | 10.00 AM- 1.00 PM  |
| Chapter 3 | <b>Using Drawing Aids</b> <ul style="list-style-type: none"> <li>• Grid and Snap</li> <li>• Ortho and Polar Snapping</li> <li>• Polar Snap</li> <li>• Running Object Snaps</li> <li>• Object Snap Tracking</li> </ul>   | 1-Hour   | 2.00PM – 3.00 PM   |

|                  |   |               |                             |
|------------------|---|---------------|-----------------------------|
| <b>Chapter 4</b> | <b>Editing Entities</b> <ul style="list-style-type: none"> <li>• Move and Copy</li> <li>• Rotate and Scale</li> <li>• Arrays, Grip Editing</li> <li>• Trim and Extend</li> <li>• Lengthen and Stretch</li> <li>• Offset and Mirror</li> </ul> | <b>2-Hour</b> | <b>3.00 PM-<br/>5.00 PM</b> |
|------------------|---|---------------|-----------------------------|

Training Programme Day 2

| <b>Chapter</b>   | <b>Topic</b>  | <b>Duration</b> | <b>Time</b>                   |
|------------------|---|-----------------|-------------------------------|
| <b>Chapter 5</b> | <b>Shaping Curves</b> <ul style="list-style-type: none"> <li>• Drawing and Editing Curved Polylines</li> <li>• Drawing Ellipses</li> <li>• Drawing and Editing Splines</li> <li>• Blending between Objects and Splines</li> </ul>   | <b>1-Hour</b>   | <b>9.00 AM -<br/>10.00 AM</b> |
| <b>Chapter 6</b> | <b>Controlling Object Visibility</b> <ul style="list-style-type: none"> <li>• Changing Object Properties</li> <li>• Setting the Current Layer</li> <li>• Altering Objects' Layer Assignments</li> <li>• Controlling Layer Visibility</li> <li>• Applying Linetype</li> <li>• Assigning Properties by Object or by Layer</li> <li>• Managing Layer Properties</li> </ul> | <b>1-Hour</b>   | <b>10.00 AM-<br/>11.00 PM</b> |
| <b>Chapter 7</b> | <b>Organizing Objects</b> <ul style="list-style-type: none"> <li>• Defining Blocks, Inserting Blocks</li> <li>• Redefining Blocks, Editing Blocks</li> <li>• Working with Groups</li> </ul>   | <b>2-Hour</b>   | <b>11.00 PM -<br/>1.00 PM</b> |
| <b>Chapter 8</b> | <b>Hatching and Gradients</b> <ul style="list-style-type: none"> <li>• Specifying Hatch Areas</li> <li>• Associating Hatches with Boundaries</li> <li>• Hatching the Patterns</li> <li>• Hatching the Gradients</li> </ul>  | <b>1-Hour</b>   | <b>2.00 PM –<br/>3.00 PM</b>  |
| <b>Chapter 9</b> | <b>Working with Blocks and Xrefs</b> <ul style="list-style-type: none"> <li>• Working with Global Blocks</li> <li>• Searching for Content Across Multiple Drawings</li> <li>• Storing Content on Tool Pallets</li> <li>• Referencing External Drawings and Images</li> </ul>  | <b>2-Hour</b>   | <b>3.00 PM-<br/>5.00 PM</b>   |

Training Programme Day 3

| Chapter    | Topic   | Duration | Time                |
|------------|---|----------|---------------------|
| Chapter 10 | <b>Creating and Editing Text</b> <ul style="list-style-type: none"> <li>• Creating Text Styles</li> <li>• Writing Lines of Text</li> <li>• Writing and Formatting Paragraphs (MTEXT)</li> <li>• Editing Text</li> </ul>   | 1-Hour   | 9.00 AM – 10.00 AM  |
| Chapter 11 | <b>Dimensioning</b> <ul style="list-style-type: none"> <li>• Styling Dimensions</li> <li>• Adding Dimensions</li> <li>• Editing Dimensions</li> </ul>   | 2-Hour   | 10.00 AM – 12.00 PM |
| Chapter 12 | <b>Keeping In Control with Constraints</b> <ul style="list-style-type: none"> <li>• Working with Geometric Constraints</li> <li>• Applying Dimensional Constraints and Creating User Parameters</li> <li>• Making Parametric Changes to Constrained Objects</li> </ul>                          | 1-Hour   | 12.00 PM – 1.00 PM  |
| Chapter 13 | <b>Working with Layouts and Annotative</b> <ul style="list-style-type: none"> <li>• Creating Annotative Styles and Objects</li> <li>• Creating Layouts</li> <li>• Adjust Floating Viewports</li> <li>• Overriding layer Properties in Layout Viewports</li> <li>• Drawing on Layouts</li> </ul> | 2-Hour   | 2.00PM – 4.00 PM    |
| Chapter 14 | <b>Printing and Plotting</b> <ul style="list-style-type: none"> <li>• Configuring Output Devices</li> <li>• Creating &amp; Using Plot Styles Tables</li> <li>• Plotting in Modelspaces &amp; Paperspace</li> <li>• Exporting to an Electronic Format</li> </ul>                                 | 1-Hour   | 4.00PM – 5.00 PM    |