

Course Agenda



Module 01

Efficient Use of AutoCAD

- Create a custom workspace
- Effective use of the keyboard
- Working with objects
- Working in multiple drawings
- Advanced use of grips
- Efficient use of layer tools

The exercise looks at workspace creation, switching between multiple drawings, keyboard shortcuts, how objects are displayed in a drawing and using the layer tools

Module 02

Accurate Positioning

- Co-ordinate entry
- Cartesian and polar co-ordinates
- Enter co-ordinates using dynamic Input
- Display co-ordinates on the status bar
- How to draw using relative co-ordinates
- Locating points with tracking
- Temporary track point
- Construction lines and rays

The exercise uses typed co-ordinates, object snap tracking, temporary track point and construction lines to draw various shapes

Module 03

Practical Productivity Examples

This module comprises of several exercises in various disciplines, two for mechanical, a civil/landscape exercise to create a garden plan, and an architectural exercise to create a house extension. To reinforce the basics covered so far, these include:

Using various drafting tools and settings

Place components using tracking

Polar tracking, direct distance entry and dynamic input

Module 04

Working with Parameters

- Use constraints with blocks and Xrefs
- Remove or relax constraints
- Geometric constraints
- Dimensional constraints
- Dynamic blocks

This exercise explores the various constraint tools

Module 05

Blocks

- Creating blocks
- Blocks and layers
- Wblocks
- Editing block in place
- Editing blocks using the block editor
- Editing block names

This exercise explores block creation and modification, using the purge command to remove unused block definitions, empty layers from a drawing, add blocks to a custom tool palette and modify their properties



Course Agenda

- Module 06** **Practical Blocks Examples**
This module comprises of three discipline specific exercises that reinforce the basics covered so far.
Mechanical part
Architectural layout
Civil - Utility layout
- Module 07** **Template Creation**
Drawing standards
Drawing units
Drawing limits
Creating new layers
The Layer Properties Manager
Linetypes
Saving templates
The exercise creates a drawing, sets the units, and tests them, uses the layer property manager to create and modify layers, creates a page setup, and applies it to a layout, then saves the drawing as a template.
- Module 08** **Advanced Layouts**
Creating and using named view
Advanced viewport options
Viewport clipping
Viewport layer overrides
Modify layer properties in a viewport
Additional annotative scale options
Modifying annotative object scales
The exercise provides practical examples in the use of viewport manager and the viewports command to set up named views, create a viewport clip, freeze layers in a single viewport, apply layer overrides to the colour settings, create multiple viewports based on named views, clip a viewport using the polygonal tool, create viewports at different scales and add annotative objects to them
- Module 09** **Creating New Styles**
Creating new text styles
Creating new dimension styles
Creating dimension sub-styles
Creating new multileader styles
This exercise comprises of creating new dimension text multileader styles
- Module 10** **Practical Examples - Drawing Setup**
This module comprises of creating a various drawing template containing layers, limits, text, dimension, and multileader styles reinforce the basics covered so far.
Create a schematic drawing template
Create templates for an interior project and a civil/map project
Create dimension styles and dimension a part

Course Agenda



Module 11

Working with External References

Working with references
Change reference paths in multiple drawings
Manipulating references
Edit Xref in-place
Clip Xref

In the first part of the exercise, references are attached to a file and in the second part of the exercise they are edited to demonstrate the functionality and processes behind manipulating information

Module 12

Practical Examples-Drawings

This This module comprises of creating various drawings to gain more hands-on experience of the topics already covered.

*Create a drawing border and title block containing a company logo
Create a mechanical part using fillet, trim, offset, hatching and viewports
Create an architectural room layout
Create a schematic project*