



## AutoCAD 3D

### COURSE OVERVIEW

A comprehensive training on 3D drawing productions. By the end of the course, participants will be able to proficiently produce 3D drawings using the AutoCAD software.

### WHO SHOULD ATTEND

Mechanical draughtsmen, designers and or engineers involved in designing 3D drawings using the AutoCAD software.

*SBL  
claimable*

*For Further Enquiries, please contact:*

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### COURSE OUTLINE

#### Specifying 3D Coordinates

- Working with 3D coordinates, the User Coordinate System
- Absolute and relative Cartesian coordinates in 3D
- Cylindrical and spherical coordinates using editing commands with 3D wireframes, point filters, object snaps and grips in 3D, the HIDE command, the UCS icon, UCS options, elevation and thickness
- Creating 3D polylines, surfaces with thickness
- Adding elevation to objects

#### Viewing 3D Drawings

- Working with the Standard Viewpoints, the Tripod and Compass
- Using the VPOINT command, DDVPOINT, the shading options, materials, 3D Orbit, DVIEW, Tiled Viewports
- Looking at a drawing from the standard viewpoints
- Getting a Quick Plan View
- Shading Your Drawing
- Starting 3D orbit
- Refining your 3D orbit view
- Defining a Perspective view
- Understanding the DVIEW options

#### Creating 3D Surfaces

- Drawing surfaces with 3DFACE, Surfaces with PFACE, Standard 3D Shapes, a Revolved Surface and Extruder Surface, Ruled Surfaces, Edge Surfaces
- Using the 3DFACE command, the REVSURF command
- Creating Polygon Meshes with 3DMESH
- Determining the angle of rotation
- Setting the number of segments

#### Creating Solids and Editing in 3D

- Drawing Standard Shapes, Revolved Solids
- Creating Extruded Solids, Complex Solids, a solid from the intersection of two solids, a new solid using INTERFERE
- Adding and Subtracting solids
- Sectioning and Slicing Solids
- Using the SECTION command, the SLICE command, Editing Commands in 3D
- Editing Solids, faces, edges, bodies

#### Laying Out 3D Drawings

- Using SOLVIEW to lay out paper space viewpoints, SOLDRAW to create hidden lines and hatching, SOLPROF to create profiles

#### Rendering in 3D

- Understanding Rendering
- Learning the steps
- Doing a default rendering, the Final Render
- Creating Lights, a point light, a spotlight, a distant light, shadows, Scenes
- Assignment color to a light
- Working with Materials
- Adding Materials
- Attaching materials
- Using background

### TRAINER

PESDC has a panel of professionally qualified, well-trained and industrially experienced technical trainers.

### COURSE FEE (IT-A01)

**RM750.00 per pax (member)**  
**RM800.00 per pax (non-member)**  
*(Inclusive of course material, lunch & refreshment)*

Certificate of Achievement will be awarded upon successful completion of the course.

### COURSE DETAILS

**Duration : 5 Days**

**Date : Refer to training calendar**

**Time : 9.00am to 5.00pm**

**Venue : PESDC Training Complex**