



AutoCAD 3D Drawing & Modelling 3 Day** Training Course

Overview

AutoCAD® 3D Drawing and Modelling introduces students who are proficient with the 2D commands in the AutoCAD® software to the concepts and methods of 3D modelling. The training course provides a thorough grounding in the fundamentals of 3D and explores the main features of the advanced 3D Modelling workspace in the AutoCAD software.

Prerequisites

- Computer Literate and working knowledge of Microsoft Windows proficiency.
- Creating, opening, and saving drawing files, changing the display of a drawing by zooming and panning, displaying and docking toolbars, saving and restoring named views, using object snaps, and managing layers and controlling layer visibility.

Software

- Autodesk AutoCAD

What's Included?

- Course Notes & Stationery*
- Computer and software for the duration of course*
- Coffee, Tea & Delicious Lunch*
- WiFi Access*
- Autodesk Certified Instructor
- Internationally recognized Autodesk Authorized Training Certificate

* Pertains to in-class training only

** In-class training typically occurs over a 3 day period, customised training may differ

Course Content

SESSION - INTRODUCTION TO 3D

- XYZ-Plane
- Types of 3d Models
- Changing the Model Display – Visual Styles
 - FacetRes – 3D view styles
 - IsoLines – Wireframe view styles
- View Cube (Parallel and Perspective modes)
- Setting Model Viewports
 - New Named Setup
- Spaceware and 3d Printing

Course Content

SESSION - SOLID MODELLING

- Creating Solid Primitives
- Creating Models from 2D Profiles
- Creating Composite Solids

SESSION - Working in 3D Space

- Modes : Dynamic UCS, Polar, 3D Snap
- UCS direct manipulation
- UCS ribbon tools

SESSION - Changing the Model Position

- 3D Gizmo (for 3D Move, 3D Rotate, Scale3D)
- Align, 3D Mirror, Array
- Tutorial

SESSION - Editing Solid Models

- CNTR+ Select
- Adding Detail to Solid Models
- Editing Solid Model
- Duplicating Faces and Edges
- Solid History
- Live Section
- Tutorial

SESSION - Extracting Geometry from Solid Models

- Setting Styles
- Base View
- Elevations
- Sections
- Details
- Can create 2D views of Solids and Surfaces. (not Mesh)

SESSION - Previous Methods

- Flatshot + Generating 2D Sections

SESSION - Reporting Information from 3D Solid

- Volume on the 2D Drafting Workspace
- MassProp

SESSION - Importing 3D Models

SESSION - SKP Import Addin

SESSION - Exporting to STL and AutoCAD Print Studio

SESSION - Hybrid Modelling Concept

SESSION - Mesh Modelling

- Converting to Mesh Model
- Creating Mesh Model Primitives
 - Surftab1, Surftab2
- Creating a Smooth model
- Editing a Mesh Model
 - Crease
 - Gizmo
 - Refine Mesh

Course Content

SESSION - Surfacing

- Converting to Surface
 - Thicken
 - Sculpt
 - Convert to Solid
- Creating Surface.
 - Using Properties to change Isolines.
- Editing surfaces.
- Surface Analysis
- Creating Associative and NURBS surfaces
- Point Cloud

SESSION – Visualization

- Split Model Viewport – Working (Parallel + shaded) Presentation (Perspective + Realistic)
- Cameras
- Using Materials + Mapping
- Using the Sun
- Using Lights
- Rendering
 - Adding Environment Background using View Manager ->New (Perspective View only)
- Navigating the Model using Navigation Wheel.
- Animation Path Recording (anipath)
- Walk/Fly Recording

SESSION - Autodesk 123D/FormIt

SESSION - Lumion

Course Registration Form

Please complete, sign and return together with proof of payment to mgfxsales@mgfx.co.za or fax 086 694 9404

Student Details			
Name	Cell No	Email address	Dietary requirements

Course Attending		Mark Course Type & Venue with X							
Course Name	AutoCAD 3D Drawing and Modeling								
Course Type	AutoCad Essentials		3D Drawing & Modeling			X			
Course Venue	Cape Town		Port Elizabeth		Durban		Midrand	X	Centurion
Course Date					Course Duration	3 Days			

Invoicing Details			
Invoice Date		Vat no.	
Company Name		Telephone	
Physical Address		Fax	
		Account Contact	
		E-mail	
Micrographics SA (Pty) Ltd Bank Details	ABSA Newton Park Branch: 632005 Account: 4093 847 926 Reference: invoice number		

Terms & Conditions:

- Above Pricing Excludes VAT.
- Students are to be at the training venue by 08h00 in preparation for a 08h30 start time.
- Bookings can only be considered confirmation on receipt of payment.
- Bookings may be changed up to three weeks in advance of the course. A fee of 20% will be levied to cover charges.
- For full day courses, we will supply you with the relevant training material. A desktop computer to use for the training (where applicable) tea/coffee and a full lunch for full day InClass training hosted at the training center only. Catering is not included for OnSite training and laptop is available for hire at an additional cost if required.
- Cancellation or rescheduling requests must be in writing and reach us at least 5 (five) working days prior to the course commencement date. Full course fees may be retained for no shows or requests within 5 working days prior to commencement.
- Although we go to great lengths to ensure that all training proceeds as scheduled, we reserve the right to cancel or postpone\ dates if we require to do so and undertake to inform clients in writing and telephonically of these changes.
- We suggest clients wait until a week prior to course commencement that a course has been confirmed to go ahead as scheduled before booking flight and accommodation. We are NOT responsible for cost associated with cancellation of classes such as flight and accommodation for clients.
- Full training fees will apply if the above condition is not complied with.

Signed & Accepted _____ Name _____ Location _____