



# AUTODESK AUTOCAD TRAINING

**AutoCAD Courses**

# TABLE OF CONTENTS

<b>AutoCAD/AutoCAD LT Basics</b>	<b>03</b>
<b>AutoCAD Beyond the Basics</b>	<b>04</b>
<b>AutoCAD Advanced</b>	<b>05</b>
<b>AutoCAD 3D Drawing and Modelling</b>	<b>06</b>
<b>AutoCAD Electrical Fundamentals</b>	<b>07</b>
<b>AutoCAD Civil 3D Fundamentals</b>	<b>08</b>
<b>AutoCAD Piping and Instrumentation Design</b>	<b>09</b>

# AutoCAD/AutoCAD LT Basics 3 Days

## COURSE DESCRIPTION

The primary objective of this course is to teach the basic commands necessary for professional 2D drawing, design and drafting using AutoCAD/AutoCAD LT. It explores techniques that can be used to improve drawing efficiency so you are able to navigate the interface, use its fundamentals features, use precision drafting tools and present drawings that are visually impressive.

## COURSE MODULES

- Understanding the AutoCAD Workspace
- Understanding the AutoCAD Interface
- Basic Drawing Tools
- Basic Editing Tools
- Basic Viewing Tools
- Organising Objects in Layers
- Inserting Reusable Symbols (Blocks)
- Preparing a Layout to be Plotted
- Adding Text
- Adding Hatching
- Adding Dimensions

## OTHER INFORMATION

### Prerequisites

A working knowledge of basic design/drafting procedures and terminology.

### Course Duration

3 Days

### Next Steps

AutoCAD/AutoCAD LT Beyond the Basics



Man and Machine



@ManandMachine\_UK



Man and Machine UK Ltd



@ManandMachineUK



Man and Machine



# AutoCAD Beyond the Basics 2 Days

## COURSE DESCRIPTION

This course teaches more sophisticated techniques to extend your mastery of AutoCAD. You will learn how to create blocks, and the process of setting up a template.

## COURSE MODULES

- Using more Advanced Editing Techniques
- Using more Advanced Construction Techniques
- Adding Parametric Constraints to Objects
- Creating Local Blocks
- Creating Global Blocks
- Setting up Layers
- Setting up Styles
- Setting up Templates
- Using Advanced Plotting Options
- Using Advanced Publishing Options

## OTHER INFORMATION

### Prerequisites

Knowledge of AutoCAD basics and basic design/draughting procedures and terminology.

### Course Duration

2 Days

### Next Steps

AutoCAD Advanced



Man and Machine



@ManandMachine\_UK



Man and Machine UK Ltd



@ManandMachineUK



Man and Machine



# AutoCAD Advanced 3 Days

## COURSE DESCRIPTION

This course introduces more advanced techniques, teaching you how to be more proficient in your use of AutoCAD. It will also provide you with a thorough and complete understanding of the features and functions. It will enable you to recognise the best tool for the task, the best way to use that tool, as well as how to create new tools to accomplish tasks more efficiently.

## COURSE MODULES

- Advanced Text Objects
- Working with Tables
- Defining Dynamic Blocks and Attributes
- Outputting Files for Review
- Publishing Files for Review
- Collaboration Tools
- Automation Tools
- Creating Sheet Sets
- Managing Layers
- CAD Management and System Setup
- Enhancing Productivity by Customising the AutoCAD Interface
- Using Macros
- Using Custom Routines
- Publishing Sheet Sets
- Customising Sheet Sets

## OTHER INFORMATION

### Prerequisites

Completion of AutoCAD Basics is highly recommended.

### Course Duration

3 Days

### Next Steps

A bespoke course

-  Man and Machine
-  @ManandMachine\_UK
-  Man and Machine UK Ltd
-  @ManandMachineUK
-  Man and Machine



# AutoCAD 3D Drawing and Modelling **2 Days**

## COURSE DESCRIPTION

This AutoCAD 3D Drawing and Modelling course introduces those who are already proficient with the 2D commands in the AutoCAD software to the concepts and methods of 3D modelling. The 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.

## COURSE MODULES

- 3D Viewing Techniques
- Working with Simple and Composite Solids
- Creating Complex Solids and Surfaces
- Modifying Objects in the 3D Space
- Editing Solids
- Creating Sections
- Creating Camera Perspective and Animations
- Working with Point Clouds
- Converting 3D Objects
- Setting up Rendering with Materials and Lights
- Creating 2D Drawings with 3D Models
- Working with the User Coordinate System
- Set up a Drawing for 3D Prints

## OTHER INFORMATION

### Prerequisites

Prior knowledge of 3D modelling and other 3D CAD software.

### Course Duration

2 Days

### Next Steps

A bespoke course



Man and Machine



@ManandMachine\_UK



Man and Machine UK Ltd



@ManandMachineUK



Man and Machine



# AutoCAD Electrical Fundamentals **3 Days**

## COURSE DESCRIPTION

AutoCAD Electrical is AutoCAD optimised for electrical controls design. This course teaches features and commands specifically developed for the creation and modification of electrical control symbols. The optimised operations and comprehensive symbol libraries help to increase productivity, reduce errors and provide accurate information to manufacturing.

## COURSE MODULES

- Understanding Project Files
- Creating Schematic Drawings
- Editing Schematic Drawings
- Creating Panel Drawings
- Editing Panel Drawings
- Working with PLC Symbols
- Creating Custom Symbols
- Generating Reports

## OTHER INFORMATION

### Prerequisites

Basic knowledge of AutoCAD and electrical terminology is recommended.

### Course Duration

3 Days

### Next Steps

A bespoke course



Man and Machine



@ManandMachine\_UK



Man and Machine UK Ltd



@ManandMachineUK



Man and Machine





# AutoCAD Civil 3D Fundamentals 3 Days

## COURSE DESCRIPTION

This Civil 3D training course is designed for Civil Engineers and Surveyors who want to take advantage of the interactive, dynamic design functionality of AutoCAD Civil 3D.

AutoCAD Civil 3D software enables the rapid development of alternatives through its model-based design tools. The course will teach you how to organise project data, work with points, create and analyse surfaces, model road corridors, perform grading and volume calculation tasks and layout pipe networks.

## COURSE MODULES

- AutoCAD Civil 3D User Interface
- Create Points and Point Groups
- Work with Survey Figures
- Create, Edit, View and Analyse Surfaces
- Create and Edit Alignments
- Create Data Shortcuts
- Create Sites, Profiles and Cross-Sections
- Create Assemblies and Corridors
- Create Simple Grading Solutions
- Create Gravity Fed Pipe Networks
- Perform Quantity Take-Off and Volume Calculations
- Utilise Plan Productions to Create Plans and Profile Sheets

## OTHER INFORMATION

### Prerequisites

Experience with AutoCAD and a good understanding of civil engineering terminology.

### Course Duration

3 Days

### Next Steps

A bespoke course



Man and Machine



@ManandMachine\_UK



Man and Machine UK Ltd



@ManandMachineUK



Man and Machine





# AutoCAD Piping and Instrumentation Design (P&ID) 2 Days

## COURSE DESCRIPTION

This course teaches you how to use the AutoCAD P&ID software to complete a P&ID design project using common workflows. During this course you will explore the use interface and gain a thorough understanding of editing techniques, annotation concepts, data management, data reports and how to solve validation issues with AutoCAD P&ID.

## COURSE MODULES

- Creating and Adding Existing Drawings
- Equipment and Nozzles
- Piping
- Instruments and Instrument Lines
- Tagging Concepts
- Annotation Concepts
- Editing Techniques
- Data Manager and Reports
- Custom One-Off Symbols
- Off-Page Connections
- Advanced Topics and Troubleshooting
- P&ID Admin for Users
- Generating Reports
- Working in a Project
- Opening a Drawing
- Exploring the User Interface
- Managing Layers and Colours

## OTHER INFORMATION

### Prerequisites

Prior experience with AutoCAD is recommended.

### Course Duration

2 Days

### Next Steps

Autodesk Introduction to Plant Design



Man and Machine



@ManandMachine\_UK



Man and Machine UK Ltd



@ManandMachineUK



Man and Machine





# CONTACT US



[www.manandmachine.co.uk](http://www.manandmachine.co.uk)



01844 263700



[sales@manandmachine.co.uk](mailto:sales@manandmachine.co.uk)