

THE

ENGINE

HOUSE

BEXLEY

THE

ENGINE

HOUSE

BEXLEY

 **AUTODESK**[®]
Authorised Training Centre
Certification Centre

AUTODESK CAD COURSES

Course Outline



AUTODESK[®]

2D & 3D Training



CHANGING THE WAY WE WORK

CAD DESIGN

chrome

ACCREDITED COURSES

WHAT IS THE RIGHT CAD FOR YOU?

- AUTOCAD
- REVIT
- MAYA
- FUSION 360



Industry experienced trainers

Modern training facility

Small classes of 8 delegates

Hands on training within a classroom

Flexible weekday, weekend & evening
courses



AUTODESK
AUTOCAD

BEGINNER COURSE

AUTOCAD



AUTODESK
AUTOCAD

AUTOCAD COURSES

AUTOCAD 2D ESSENTIALS

Our CAD courses involve a hands on approach using state of the art workstations and an intimate small classroom setup to insure each training course is a success, our instructors will train candidates with little or no working knowledge of AutoCAD, 2D & 3D design and teach them the skills needed to freely start producing designs, accurate drawings and working confidently with CAD.

Classroom based course at The Engine House Bexley, DA18 4AL, under 15 minutes from Abbeywood Crossrail.

Maximum of 8 people per class.

Course duration of 3 days Mon-Wed.

Free retake within 12 months.

Autodesk training manual included.

Autodesk attendance certificate.

Tailored course available upon request and subject to availability.

0% interest finance option available.

BEGINNER AUTOCAD COURSE DESCRIPTION:

The main objective of this AutoCAD training course is to teach candidates the essential skills needed for 2D drawing, drafting and design using AutoCAD. You will learn the features and techniques for creating, editing, and printing drawings with AutoCAD. Using hands-on exercises, students explore how to create 2D production drawings.

WHO IS THIS COURSE FOR?

Our beginner training course is designed for new users of AutoCAD.

WHAT DO I NEED TO KNOW BEFOREHAND?:

Any experience with AutoCAD before your course will help and a general understanding of drafting, design, or engineering principles is not essential but would always be an advantage.

WHAT YOU WILL LEARN:

You will be educated on how to navigate the AutoCAD user software, learning to use the fundamental tools of AutoCAD, using the precision drafting tools to develop accurate technical designs and present drawings in the correct detailed and impressive way.

AUTODESK
AUTOCAD

BEGINNER AUTOCAD SYLLABUS COVERED:

Touring The Interface

- Navigating AutoCAD
- Different file types
- Tools and panels

Creating Basic Drawings

- Data input
- Basic objects
- Using object snaps
- Polar Tracking
- Polar Snap
- Working with units

Manipulating Objects

- Selecting objects
- Editing objects
- Creating a mirror image
- Object patterns
- Trimming and extending objects to boundaries
- Working with parallel and offset geometry
- Joining objects
- Radius corner

Organisation

- Working with layers
- Matching object properties
- Using linetypes
- Using inquiry commands

Layout

- Using layouts
- Working with different viewports

Annotation

- Single/multi line text
- Using text styles
- Editing text
- Object hatching

Layout

- Using layouts
- Working with different viewports

Layout

- Using layouts
- Working with different viewports

Annotation

- Single/multi line text
- Using text styles
- Editing text
- Object hatching

Dimensioning

- Creating dimensions
- Using dimension styles
- Editing dimensions
- Using multileaders

Working with Re-usable Content

- Using blocks
- Design Centre
- Using tool palettes

Additional Drawing Objects

- Working with poly lines
- Splines
- Ellipses
- Using tables

Plotting and Templates

- Using page setups
- Plotting drawings
- Using drawing templates



AUTODESK®
REVIT®

BEGINNER COURSE

REVIT



AUTODESK®
REVIT®

AUTODESK REVIT COURSES

REVIT ARCHITECTURE ESSENTIALS

AutoDesk Revit is the most used software in architecture and allows you to create accurate architectural in a short period of time. Revit supports BIM (Building information modelling) and can take your 2d designs and transform them into a 3D visualisation with just a few simple clicks.

Our Revit training courses are held in small classes by industry professionals with years of experience that will enable you with the skills to be a competent and efficient technician of the Revit Architecture software.

Classroom based course at The Engine House Bexley, DA18 4AL, under 15 minutes from Abbeywood Crossrail.

Maximum of 8 people per class.

Course duration of 3 days Mon-Wed.

Free retake within 12 months.

Autodesk training manual included.

Autodesk attendance certificate.

Tailored course available upon request and subject to availability.

0% interest finance option available.

ESSENTIALS AUTODESK REVIT COURSE DESCRIPTION:

The main objective of our AutoDesk Revit training course is to teach candidates the essential skills of architectural design with the software, previous use or an understanding of AutoCAD is recommended but not essential

WHO IS THIS COURSE FOR?

Our essentials Revit training course is designed for new users of Revit & AutoCAD.

WHAT DO I NEED TO KNOW BEFOREHAND?:

Any experience with Revit or AutoCAD before your course will help and a general understanding of drafting, design, or engineering principles is not essential but would always be an advantage.

WHAT YOU WILL LEARN:

You will be educated on how to navigate the Revit user software, learning to use the fundamental tools of Revit, using the precision drafting tools to develop accurate architectural designs and present plans & 3d visuals in the correct detailed and impressive way.



AUTODESK®
REVIT®

AUTOCAD REVIT ESSENTIALS SYLLABUS COVERED:

Autodesk Revit Architecture

- Autodesk Revit Architecture Interface
- Interface, Properties Palette, Project Browser
- Status Bar, View Control Bar
- ViewCube, Options Bar
- Interface Workflow, Simple Layout
- Filter, Mirror, and Trim/Extend
- Adjusting Datums, Changing Element Types
- Modifying Tools, Using Dimensions for Modifying

Designs

- Aligning Elements, Rotating, Grouping, and Arraying
- Copying and Group Editing

Walls and Curtain Walls

- Understanding Wall Types and Parameters
- Basic, Stacked, Curtain Walls
- Wall Configurations, Sketching Walls, Picking Walls
- Hosting Elements in Walls
- Instance Parameters, Editing Profiles
- Attaching and Detaching the Top and Base
- Modifying Curtain Walls
- Editing the Elevation Profile
- Adding and Modifying Grids and Mullions
- Unpinning and Toggling Mullions

Floors, Roofs, and Ceilings

- Creating Floors, Sketching, Boundary
- Creating Sloped Arrows and Floors
- Creating Sloped Floors via Shape Editing
- Creating Openings by Sketching
- Creating Openings with Shafts
- Picking Walls, Laying Out Roofs
- Creating Extruded Roofs
- Adding Ceilings, Creating Automatic Ceilings
- Sketching Ceilings
- Adding Lights and Rotating the Grid
- Changing the Ceiling

Stairs, Ramps, and Railings

- Creating Stair Configurations, Generic Railing
- Creating Design Stair, a Straight-Run Stair with

Landing

- Setting the Host Function for Railings
- Designing Ramps, Creating a Straight-Run Ramp
- Editing Boundary Conditions
- Building Railings for Level and Sloped Conditions
- Using the Set Host Function, Editing the Top Rail

Adding Families

- Assigning Families to Categories
- Working with System Families and Component

Families

- Using Hosted Families, Using Face-Based Families

Modifying Families

- Editing View Display and Detail Level
- View Scale and Detail Level
- Editing the Family Category
- Editing the Insertion Point
- Modifying Family Geometry
- Editing Profiles, Title Blocks

Schematic Design

- Working from a Sketch
- Importing Background Images
- Accurately Scaling Images
- Using Reference Planes and Levels
- Creating and Placing Groups
- Modelling In-Place Masses Base Mass, Upper Mass
- Working in 3D, Creating Mass Floors

Rooms and Color-Fill Plans

- Defining Rooms in Spaces
- Room Tags, Room Boundaries
- Room Separation Lines, Deleting Rooms
- Generating Color-Fill Room Plans
- Color Legend, Modifying Color Schemes

Materials, Rendering, and Visualisation

- Using Materials
- Editing Material Properties of Walls
- Using Graphic Display Options
- Presentation Elevation Drawing
- Presentation 3D Isometric Drawing
- 3D Exploded View, Rendering Graphics

Worksharing

- Enabling Worksharing
- Preparing the Central File
- Creating Central and Local Files
- Worksets, Assigning Elements to Worksets
- Saving to the Central File, Creating New Elements
- Opening and Closing Worksets, Worksharing Display Modes
- Editing Requests, Worksharing

Details and Annotations

- Creating Details, Detail Line
- Region, Component
- Creating a Detail, Insulation, Detail Groups
- Linework, Annotating Your Details
- Dimensions, Tags, Text

Creating Drawing Sets

- Creating Schedules, Making Schedules
- Creating a Window Schedule
- Creating a Room Schedule
- Creating a Sheet List, Placing Views on Sheets
- Adding Floor Plans to the Sheet
- Adding the Schedules; Printing Documents
- Exploring the Print Dialog Box, Setting, Range

Workflow and Site Modelling

- Understanding a BIM Workflow
- Staffing a BIM Project
- Project Roles Using Revit Architecture
- Adding Team Members to Fight Fires
- Modeling a Site
- Using a Toposurface
- Creating a Building Pad
- Performing Quality Control on Your Model
- Keeping an Eye on File Size
- Dealing with Warnings



**AUTODESK[®]
INVENTOR[®]**



**AUTODESK[®]
FUSION 360[™]**

3D MODELING

**FUSION360 &
INVENTOR**



**AUTODESK[®]
INVENTOR[®]**



**AUTODESK[®]
FUSION 360[™]**

AUTODESK 3D MODELLING COURSES

INTRO TO 3D MODELING FUSION 360 & INVENTOR

Our intro course to 3D modeling classes are a tailored 2 day course based on the industry of your choice, our trainers and technicians specialise in helping you to optimise your designs and ideas for 3D printing in SLA or SLS prints.

over the 2 sessions with us you'll learn the basics and start working on your own design with the help for our trainers and even get a finished 3d prototype.

Classroom based course at The Engine House Bexley, DA18 4AL, under 15 minutes from Abbeywood Crossrail.

Maximum of 2 people per class.

Course duration of 2 days Mon - Sat.

3D printed prototype of your work.

Tailored course available upon request and subject to availability.

0% interest finance option available.

INTRO TO 3D MODELING COURSE DESCRIPTION:

this intro to 3D is the perfect class to take after the intro to AutoCAD for those who wish to bring their ideas to life and learn to start creating prototypes and realistic renders of their own.

WHO IS THIS COURSE FOR?

Jewellery, model makers and tech start ups can all benefit for this course and there is no need for previous experience in product design or AutoCAD.

WHAT DO I NEED TO KNOW BEFOREHAND?:

Any experience with AutoCAD or 3D design before your course will help and a general understanding of problem solving and use of software such as Photoshop or Coral draw is helpful.

WHAT YOU WILL LEARN:

You will be educated on how to create 3D objects and how to manipulate shapes and also learn render for realistic illustrations of your work.

3D MODELING COURSE OUTLINE

FUSION360 & INVENTOR

Autodesk Fusion 360 provides a single cloud-based platform that you can use to carry out all aspects of product development, from design and testing, through to simulation and fabrication.

Fusion 360 Essentials training provides a thorough grounding, teaching key techniques including:

- Sketching
- 3D modelling
- Assemblies
- Visualisations, rendered images and animations
- Simulation
- CAM and CNC
- Drawings
- Importing CAD data into Fusion 360.
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GET IN TOUCH

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