

# CREATE MORE ACCURATE AND OPTIMISED DESIGNS

Revit uses intelligent building components such as floors, walls, doors, windows, stairways, etc, rather than simple objects like lines, circles and arcs that represent building components, as in traditional CAD systems. Each component is linked through a high-performance change engine, allowing a single change in any model view to be propagated throughout all views, both parametrically and bi-directionally. Use Revit for every phase of your project, from concept to visualization. With BIM tools, capture and communicate concepts and precise design intent.

## Course Overview

This course will cover an overview of Revit concepts, user interface, project set-up, designing with digital building components, producing drawing sheets, and detailing and documenting the project. The main objective is to teach the concepts of Building Information Modelling (BIM) and introduce the tools for parametric building design and documentation using Revit. This course will provide the trainee with a solid foundation in Building Information Modelling (BIM) using Autodesk's Revit Architecture. Throughout the course, the trainee will be shown how to create 3D architectural models, from schematic design through to construction documentation.

# Recommended experience level

No previous experience required.

# Modality

3 Days course (18 hours), delivered in our training facilities in Sandyford, or can be delivered on site.

#### Material

Training Book and Revit files are provided by us.

#### Certificate

At the end of the course you will have the skills to start your first Revit project, in addition as Autodesk® Authorized Training Centre (ATC®) you will receive an official certificate from Autodesk at the end of the course. This course was designed to meet your learning needs with professional instructors, relevant content, authorized courseware, and evaluation by Autodesk.



Powered by: White Frog



# About Training in ArcDox

ArcDox are unique in Ireland as the only working practise that is also an AutoDesk Authorised Training Centre. Our AutoDesk Certified Trainers, are also professionally qualified users, working with BIM on a daily basis.

We can provide a range of training options, whether at our dedicated training facilities in Dublin, or On-Site training at your company or for your project teams. We are also developing a range of Online, and Blended Training courses which are underpinned by ArcDox's expertise and support services.



## **ARCDOX**

Architecture & Training Centre

Unit 309 Q-House 76 Furze Road, Sandyford Dublin D18 YV50 Ireland

mail@arcdox.com

Tel: +353 (0)1 4371200 Fax: +353 (0)1 4371201 What will BIM deliver? / Industry drivers/Introducing Levels of BIM Implications on team and workflow; fee and deliverables; contract and insurance issues

#### UI Tour, Project Navigation and View Creation

Plans, sections and elevations

Displaced views, callouts and drafting views

3D isometrics, perspectives and walkthrough movies

#### Element Selection and Manipulation

Element properties and manipulation

Instance and Type parameters / Modify tools, Nodes and Snaps

#### Visibility Control and Categorisation

Project-Wide Settings / View Specific Overrides

Element Specific Overrides / Individual Line Overrides

#### Model Development Methodology

Is BIM just about 3D? / Information timeline and overload

How a project develops from a base template

The complexity of components / Controlling graphical display

### Wall Creation and Manipulation

Wall types / Working with levels / Attaching walls

Editing wall shapes / Set-out information

## Floors, Roofs and Ceilings

Sketching rules / Relating slabs to walls and supporting framework Controlling slopes / Basic roof design and examples

## Window, Door and Component Use

Family terminology / Component placement / Element hosting

## System Family Editing

Understanding properties such as function, and wrapping of layers Creating and utilising a system family library

## Basic Schedules and Legends

Generation of tabular interrogations of the model

Style schedules / Legends

## Geometry Formation and In-Place Families

Interactive session on the creation and manipulation of basic solid and void forms; Extrusion, Blend, Revolve, Sweep, Swept Blend

## Massing Tools and the Building Maker

In-place massing and form manipulation

Using the building maker tools / Contextual modelling

Terrain modelling / Surrounding buildings and features

#### Stairs, Ramps and Railings

Basic stair creation / Non-standard and multi-storey stairs Characteristics of simple ramps/Hosted and stand-alone handrailing

#### Basic Curtain Walls

Fundamental principles and sub-element identification Logic-driven curtain walling / Advanced panel and mullion design Curtain system tools for more complex shapes

## Room Data and Colour-Fill

Tagging and scheduling of rooms / Area plans Colour schemes and legends

### 2D Draughting and Annotation

Detail component libraries / Repeating details Lines and arcs / Text, Tags and keynotes

### Basic Subdivision and Collaboration

Model management/ Project team collaboration techniques Transmittal and model issue protocols

Basics of large-model sub-division

## Sheet Compilation and Publication

Project browser organisation – WIP and Publish Creating and populating sheets / Publishing document management

## Introduction to the Principles of Family Editing

The basic process / 10 stages for trouble-free family creation