Basic Level Course

AUTODESK©
REVIT STRUCTURES ESSENTIALS

DELIVER MORE CONSISTENT, COORDINATED PROJECTS

Streamline projects, from design concept to fabrication, with Revit. Improve installation accuracy and constructability by connecting your structural design to the detailed model. The trainee is introduced to the concepts of Building Information Modelling (BIM) and the tools for parametric design, analysis, and documentation. The trainee will learn the fundamental features of Autodesk Revit Structure, learn to use the 3D parametric design tools for creating and analysing a project, and finish with construction documentation and design visualisation.

Course Overview

This course will provide the trainee with a solid foundation in Building Information Modelling and has been designed to teach the concepts and principles from building design through construction documentation using the Autodesk Revit Structure software. The course introduces the trainee to the user interface and the basic building components of the software that makes it a powerful and flexible structural modelling tool. The course will show you the tools necessary to create, modify, and document your parametric model.

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. This course was designed to meet your learning needs with professional instructors, relevant content, authorized courseware, and evaluation by Autodesk.

AUTODESK.
Authorized Training Center

Powered by: White Frog

Revit Structures Essentials
Modules
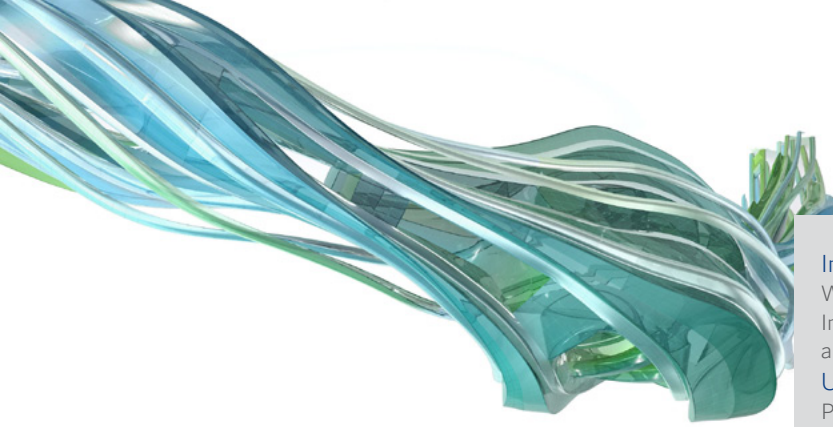
About Training in ArcDox

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.

Autodesk Authorised Academic Partner

Certificate of Authorisation

Autodesk, Inc., recognise this organisation as an Autodesk Authorised Academic Partner offering training, support, certification, and other services to support schools, colleges, and universities with the latest advancements in software from Autodesk.

Certificate No. 2017-EM302368

ArcDox
Autodesk Authorised Academic Partner

Dublin, Ireland
Town / City, Country

EM302368
AAP Member Number

AUTODESK.

Carl Bass
President, Chief Executive Officer

ARC**DOX**
Architecture & Training Centre

Unit 311 Q-House
76 Furze Road, Sandyford
Dublin D18 YV50
Ireland.

mail@arcdox.com

Tel: +353 (0)1 4371200
Fax: +353 (0)1 4371201

Introducing Revit as a BIM tool
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

Establishing a Project
Project units / Structural settings / Analytical settings
Linking CAD and Revit Architecture / Coordination review

Modelling Basics - Walls, Columns, Beams and Bracing
Basic definitions / Relating slabs to walls and supporting framework
Column and beam placement / Bracing characteristics

Foundations and Piling
Footings and foundations types / Slabs, walls, piers and pilasters

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

Slab and Roof Tools
Relating to slabs to walls and supports / Basic Roof Designs
Cantilevers, span direction and adding slopes / Slab foundation

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

Beam and Truss Systems
Beam systems creation / Sketching boundaries and rules / Modifying beam system properties / Concrete framing systems and pan joist slabs / Truss elements, placement and family creation

Construction sequencing (Phasing)
Phase filters and graphic overrides / Project phasing, properties
Combining phases, infill and the demolition of elements

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

Considering options and alternatives
Design option terminology and workflow / Use design option sets
Design sets and incorporating design options