

Basic Level Course

AUTODESK® **REVIT MEP ESSENTIALS**

DESIGN COMPLEX BUILDING SYSTEMS WITH CONFIDENCE

Revit helps engineers, designers, and contractors across the mechanical, electrical, and plumbing (MEP) disciplines model to a high level of detail and easily coordinate with building project contributors. 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 MEP, learn to use the 3D parametric design tools for creating and analysing a project, and finish with construction documentation and design visualisation.

Course Overview

Specialised for mechanical engineers, plumbing and HVAC professionals who wish to learn the basic features of Revit MEP. Learn about Building Information Modelling (BIM) and the tools for parametric MEP systems design and documentation using Autodesk Revit MEP. Begin the three-day guide by learning the fundamental features of Autodesk Revit MEP, then progressing through system design, system analysis and 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.

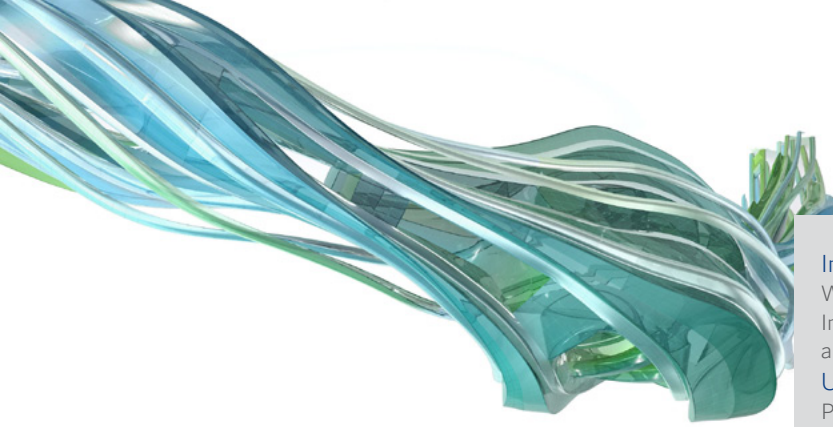
Material

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.





Revit MEP 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.



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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 - Common, HVAC, Electrical and Piping

MEP settings, symbols and schematic design

Linking CAD and Revit Architecture / Coordination review

Introduction to Building Elements

Basic wall definitions, floors, roofs and ceilings

Sketching rules and relating slabs to walls and supports

Slab slopes, roof design and ceiling definition

System family editing

Equipment, Fixtures and Fittings

Family terminology / Component placement / Element hosting

Introducing Systems

Main systems / Mechanical, Electrical and Piping

System browser, connectors and other air systems

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

Mechanical Systems

Duct types and fittings / Creating duct and piping systems

Insulating and lining ductwork / Plant and equipment

Mechanical pipework, flanges and fittings

Electrical Systems and Circuits

Equipment, devices and fixtures / Wiring, cable tray and conduit modelling / Circuits and switch systems

Plumbing Systems

Plumbing settings & fixtures / Creating plumbing systems

Creating sanitary systems / Domestic hot and cold water systems

Spaces, Zones, Areas and Volumes

Defining spaces, bounding elements, tags and schedules

Computation for areas and volumes

Using space data outside of Revit / 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