

Revit 2018: Introduction – 3 days**Course Overview**

When you complete this 3-day course you will have the skills and knowledge to take a project from start to finish using the tools and library provided by Autodesk. As well as learning how to create your model from scratch and set it up for print, you will also learn how to create real-time solar studies, 2D renders (CGI) and video walkthroughs.

Course Objectives

- Becoming familiar with the Interface
- Learning the basic tools and editing techniques
- Understanding the formation of walls
- Creating the building's levels and grid system
- Placing Components such as doors & windows
- Creating the structure, floors, ceiling, roof, stairs, 2D details and curtain walls
- Being fully capable of using the supplied library of components and materials
- Applying tags, creating schedules & legends and annotation
- Generating visualisations such as solar studies, rendered images and video walk-throughs
- Finally setting up for print

Prerequisites

Students should have a good working knowledge of how to use a PC.

Previous experience on a CAD program, as well as construction industry knowledge is not essential but will benefit the student.

Exercises

This course is instructor led, involving the utilisation of examples and exercises in a workshop environment.

Topics**Touring the Interface**

- Navigating Revit
- Understanding the terminology
- Becoming familiar with the view types
- Creating a Project
- Working with Templates

Introduction to Walls

- Using the Wall tool
- Modifying Walls
- Applying Constraints
- Using Temporary Dimensions
- Manipulating Walls

Basic tools for Drawing and Editing

- Editing an Element and Component
- How to apply the Modifying Tools

Datum Elements

- Defining a Buildings Levels
- Creating Reference Levels
- Creating a Grid System
- Applying structural elements to the grid

Major Components

- Placing Doors and Windows
- Loading Doors and Windows from the Library
- Creating Additional Door and Window Types

Structural Components

- Placing Architectural Columns
- Placing Structural Columns
- Creating Additional Column Types

Introduction to Floors

- Creating Floors
- Modifying its boundaries
- Creating Shaft Openings
- Creating Sloped Floors

Introduction to Roofs

- Creating Roofs
- Creating Roofs by Footprint
- Reference Planes and Work Planes
- Creating Roofs by Extrusion
- Attaching Walls to Roofs

Reflected Ceiling Plans

- Creating Ceilings
- Applying a grid system
- Adding Ceiling Fixtures

Minor Components

- Adding Components
- Modifying Components

Vertical Circulation

- Creating Stair by Component
- Modifying Component Stairs
- Creating Stair by Sketch
- Creating Ramps
- Creating and placing Railings

Curtain Walls

- Creating and editing Curtain Walls
- Embedding Curtain Walls
- Creating a Grid by segments
- Changing Panels
- Applying Mullions

Creating Views

- Duplicating Views
- Setting the View Display
- Elevations and Sections
- Cropping Views

Tags, Schedules & Legends

- Applying Tags to doors, windows, etc.
- Creating Rooms and Room Tags
- Creating Schedules
- Creating Legends
- Adding Components to Legends

Defining and Displaying Areas and Area Plans

- GIA, Gross Building and rent-able areas
- Creating Area Plans
- Defining Area boundaries
- Area Schemes
- Area Schedules
- Creating colour legends

Annotating the Model

- Placing Dimensions
- Placing Text
- Placing Leaders

Creating a 2D Detail

- Setting Up Callout Views
- Drawing Detail Lines & Insulation
- Creating a Line Style
- Creating Regions
- Placing Detail Components

Sun Path

- Setting the sun to your geographical location
- Applying a specific date and time in history
- Creating Still, Single-Day and Multi-Day Solar studies
- Showing Analemma path
- Create an animation of the Solar Study

Rendering

- Placing camera views
- Create an Interior and Exterior render
- Setting lighting scheme and sun settings
- Adding an image to the background
- Adjusting the exposure

Walkthroughs

- Creation of video walkthroughs
- Export as an animation

Printing

- Arranging Sheets to print
- Placing and Modifying Views on Sheets
- Editing the Print Setup