

## Autodesk Revit Structure Essentials

Duration : 3 Days

### Overview

This course covers the basics of Revit Structure, from schematic design through construction documentation. Students are introduced to the concepts of Building Information Modelling and the tools for parametric building design and documentation.

### Target Audience

This course is aimed at Those who want to get to grips with the primary features of Revit Structure and wish to learn the fundamentals of Building Information Modelling.

### Prerequisites

It is recommended that you have a working knowledge of Microsoft supporting systems. Additionally, it is assumed that the student has past experience working with AutoCAD.

### Objectives

The primary objective of this course is to teach students the concepts of Building Information Modelling and introduce the tools for parametric building design and documentation using Revit Structure. After completing this course, students will be able to:

- Describe the benefits of Building Information Modelling
- Use the fundamental features of Revit Structure
- Use the parametric 3D design tools to design projects
- Create detailing and draughting views
- Create construction documentation
- Use the presentation tools for presenting models

### Course Content

#### DAY 1

##### INTRODUCTION TO BIM AND AUTODESK REVIT

Building Information Modelling  
Exploring the User Interface  
Starting a New Project  
Working with Revit Elements and Families  
Viewing the Model  
Exploring Views – Sections, Elevations & 3D  
Controlling Object Visibility

##### BASIC DRAWING AND MODIFY TOOLS

Using General Drawing Tools  
Editing Elements  
Working with Basic Modify Tools  
Working with Additional Modify tools

##### STARTING AUTODESK REVIT STRUCTURE PROJECTS

Defining Structural Settings  
Linking AutoCAD Drawings  
Linking in Autodesk Revit Models  
Copying and Monitoring Elements  
Coordination Review

Setting Up Levels  
Creating Gridlines

##### WORKING WITH VIEWS

Duplicating Views  
Adding Callout Views  
Setting the View Display  
Elevations and Sections

##### ADDING COLUMNS

Placing Structural Columns  
Loading Column Types from Library  
ADDING STRUCTURAL FRAMING (BEAMS)  
Placing Structural Framing (Beams)  
Loading Framing Types from Library  
Adding Beam Systems  
Adding Cross Bracing

##### MODELLING WALLS

Creating Wall Types  
Modelling Walls  
Modifying Walls



## DAY 2

### ADDING FOUNDATIONS

Creating Wall Footings  
Loading Foundations from Library  
Adding Isolated Footings  
Creating Structural Foundation Slabs

### MODELLING FLOORS

Creating Floors Types  
Modelling Floors  
Creating Shaft Openings  
Creating Sloped Floors

### MODELLING ROOFS

Creating Roofs Types  
Modelling Roofs  
Creating Roofs by Footprint  
Reference Planes & Work Planes

### VERTICAL CIRCULATION

Creating Component Stairs  
Modifying Component Stairs  
Sketching Customer Stairs  
Creating Ramps

### STRUCTURAL ANALYSIS

Preparing Projects for Structural Analysis  
Viewing Analysis Models  
Adjusting Analysis Models  
Placing Loads

## DAY 3

### ANNOTATING CONSTRUCTION DOCUMENTS

Working with Dimensions  
Working with Text  
Adding Details Lines and Symbols  
Creating Legends

### ADDING TAGS AND SCHEDULES

Adding Tags  
Working With Schedules

### CREATING DETAILS

Setting Up Detail Views  
Adding Details Components  
Annotating Details  
Importing Typical DWG Details.

### CREATING CONSTRUCTION DOCUMENTS

Setting Up Sheets  
Placing and Modifying View on Sheets  
Printing Sheets  
Exporting sheets to DWG format.

## Training Options

- Public scheduled courses at one of our training venues
- Private courses delivered at client's premises throughout the UK, at our training venues or a convenient third-party location
- Bespoke customised courses written to your specific needs, delivered at client's premises throughout the UK, at our training venues or a convenient third-party location
- For further information please contact us on 0191 377 8377

## What's Included

- 1 delegate per computer
- Relaxed refreshment area at our training venues
- Lunch and refreshments when training is delivered at our training venue
- Comprehensive course manual and exercises
- Laptops are available for training delivered at client's premises