

# Revit Structure Advanced training course

## Course Description

Teaches a wide range of advanced topics in Revit® Structure, building on the concepts introduced in the *Revit Structure Essentials* course. Hands-on exercises teach detailing and detail components, rebar, families, analytical analysis, and collaborating on a design with other professionals.

This course offers both imperial and metric hands-on exercises representing real-world design scenarios.

**Suggested course duration:** 2 days  
**Courseware provided:** Yes

## Objectives

To teach the use of powerful tools and advanced techniques for creating complex designs with Revit Structure, including:

- Working with detailing and detail components.
- Describing rebar and families.
- Performing analytical analysis.
- Collaborating on a design with other professionals or team members using Revit Structure.

## Who Should Attend

Experienced users of Revit Structure.

## Prerequisites

No previous CAD experience is necessary. However, delegates should have a working knowledge of:

- Structural engineering or architectural design.
- Microsoft® Windows®.

## Course Outline

### Day 1

#### Working with Detail Components and Managing Details

- Creating a 2D Detail Component
- Creating and Editing Detail Component Groups
- Managing a Library of Typical Details

#### Working with Rebar

- Adding 3D Rebar to Beams and Columns
- Adding Reinforcement to Walls and Slabs

#### Working with Families

- Creating a Slab on Metal Deck
- Creating a Precast Hollow Core Slab
- Creating a Tapered Moment Frame
- Creating a Tapered Moment Frame
- Creating a 3D Steel Gusset Plate
- Working with Steel Stiffeners
- Creating a Stepped Footing

#### Creating Trusses

- Modifying an Open Web Joist
- Creating a new Truss from the Library

### Day 2

#### Exploring Analytical Tools

- Working with the Analytical Model
- Adjusting the Analytical Model
- Checking for Analytical Consistencies
- Adding and Modifying Boundary Conditions
- Analyzing and Updating the Model with ROBOT Millennium
- Analyzing and Updating the Model with RISA
- Analyzing and Updating the Model with ADAPT
- Analyzing and Updating the Model with ETABS

#### Working with Clients and Consultants Using DWG files

- Importing and Exporting to AutoCAD
- Importing and Exporting to AutoCAD Architecture

#### Working with Clients and Consultants Using Revit Architecture

- Linking Revit Models
- Coordinating and Monitoring Changes
- Checking and Fixing Interference Conditions

#### Multiuser Worksharing

- Creating and Using Worksets
- Managing Worksets

#### Sharing your Design using DWF

- Importing and Publishing Using DWF Format
- Working with DWF Markup Files

#### Importing and Exporting Data with IFC Format

- Importing and Exporting with IFC Format

**Please note:** Course topics may be modified by the instructor based upon the knowledge and skill level of the course participants.

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