

Revit Structure for Structural Engineers

Description

Duration: 2 Days

Attendees will use Revit® Structure to learn about building structural models and the tools involved for intelligent design & analysis. Students learn the fundamental modeling features of Revit Structure, use the 3D parametric design tools to create and analyse a project, with emphasis on the analytical abilities of Revit both in creating and exporting information to engineering packages available.

Course Objectives:

The primary objective of this courseware is to teach students the concepts of building structural models and focus on the tools for parametric design and analysis in Revit Structure.

After completing this course, students will be able to:

- Use the fundamental 3D modeling features of Revit Structure.
- Setting up projects for structural analysis in external packages.
- Creating Load Cases and using the Revit Extensions tools to explore static design situations.
- Develop a level of comfort and confidence with Revit Structure through hands-on experience.

Who Should Attend & Prerequisites:

This courseware is designed to teach new users the essential elements of Revit Structure.

No previous CAD experience is necessary. However, before using this courseware, the student should have a working knowledge of the following:

- Structural Engineer or Senior Designer.
- Microsoft® Windows® XP



Revit Structure for Structural Engineers Course Outline:

Day 1

Building Information Modeling

- Building Information Modeling
- Exploring the User Interface
- Working with Structural Elements and Families

Viewing the Structural Model

- Working with Views
- Working with 3D Views

Starting a New Project

- Setting Up a Project
- Adding and Modifying Levels
- Adding and Modifying Grids

Creating Modeling Elements

- Working with Structural Walls
- Working with Structural Columns
- Adding Slabs
- Adding Foundations
- Working with Structural Steel Frames
- Working with Structural Concrete Systems
- Creating Roofs
- Creating Stairs

Day 2

Analytical Tools

- Analytical Model Elements
- Adjusting Analytical Model
- Checking Analytical Consistencies
- Creating Boundary Conditions

Creating Loads

- Creating Loads
- Creating Load Cases & Combinations
- Creating Revit physical Material Properties
- Revit Extensions Overview
- Exporting Content Engineering Formats

External Analysis

- How Revit works with Analysis products

Coordinating with other Disciplines/Consultants

- Importing Architectural Models
- Creating Structural Model from other Disciplines
- Bi-directional Link to Revit Structure Model
- Checking for Clashes
- Managing Revisions & Changes

