Revit Structure Essentials

Course Description

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

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

Suggested Course Duration:	3 days
Pages:	360
Trial CD:	Yes
Onscreen Exercises Included?	Yes

Objectives

The primary objective of this course is to teach students the concepts of Building Information Modeling and introduce the tools for parametric design, analysis, and documentation using Revit Structure.

After completing this course, the student will be able to:

- Describe the benefits of Building Information Modeling.
- Use the fundamental features of Revit Structure.
- Use the parametric 3D design tools for creating and analyzing projects.
- Use the automated tools for documenting projects.
- Develop a level of comfort and confidence with Revit Structure through hands-on experience.\

Who Should Attend

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

Prerequisites

No previous CAD experience is necessary. However, structural engineering or architectural design experience is highly recommended. It is also recommended that the student have a working knowledge of Microsoft® Windows® XP or Microsoft® Windows® 2000.

Course Outline

Day 1

Building Information Modeling
- Building Information Modeling

Revit Structure Basics
- The Revit User Interface
- Working with Revit Elements and Families

Viewing the Structural Model
- Managing Views
- Controlling Object Visibility
- Creating Elevations and Sections
- Working with 3D Views

Starting a New Project
- Starting a Project
- Working with Levels
- Adding Grids

Day 2

Creating Structural Columns and Walls
- Adding Structural Columns
- Adding Structural Walls

Creating Frames
- Adding Floor Framing
- Working with Beams and Beam Systems
- Creating Structural Steel Frames

Creating Slabs and Roofs
- Adding Floor Decks and Slabs
- Adding Roofs

Creating Foundations
- Adding Foundations

Additional Building Components
- Creating Stairs
- Creating Ramps
- Creating Elevator Pits

Day 3

Creating Plan Annotations and Schedules

- Adding Tags
- Adding Dimensions, Symbols, and Text
- Creating Legends
- Creating Schedules

Creating Sections and Details

- Adding Structural Wall Sections and Reinforcement
- Adding Detail Lines and Detail Groups
- Importing Typical DWG Details
- Adding Concrete Detail Components
- Creating Steel Details

Creating Construction Documentation

- Working with Sheets
- Printing Sheets
- Exporting Content to CAD Formats

Note: The suggested course duration is a guideline. Course topics and duration may be modified by the instructor based upon the knowledge and skill level of the course participants.

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