

Revit Structure 2009 Essentials

Courseware Description

Students use Revit® Structure 2009 to learn about building information modeling and the tools for parametric design, analysis, and documentation. Students learn the fundamental features of Revit Structure 2009, use the 3D parametric design tools to create and analyze a project, and finish by learning about construction documentation and design visualization.

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

Suggested Course Duration:	3 days
Pages:	406
Trial CD:	Yes
Onscreen Exercises Included?	Yes

Objectives

The primary objective of this courseware 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, students 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 courseware is designed to teach new users the essential elements of Revit Structure.

Prerequisites

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

- Structural engineering or architectural design.
- Microsoft® Windows® XP or Microsoft® Windows® 2000.

Course Outline

Day 1

Building Information Modeling

- Building Information Modeling

Revit Structure Basics

- Exploring the User Interface
- Working with Structural Elements and Families

Viewing the Structural Model

- Working with Views
- Controlling Object Visibility
- Working with Elevation and Section Views
- Working with 3D Views

Starting a New Project

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

Day 2

Creating Structural Columns and Walls

- Working with Structural Columns
- Working with Structural Walls

Creating Frames

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

Creating Slabs and Roofs

- Adding Slabs
- Creating Roofs

Creating Foundations

- Adding Foundations

Stairs and Ramps

- Creating Stairs
- Creating Ramps

Day 3

Creating Plan Annotations and Schedules

- Adding Tags
- Adding Dimensions, Symbols, and Text
- Creating Legends
- Working with 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 and Modifying Steel Details

Creating Construction Documentation

- Creating Sheets and Title Blocks
- 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.