

# Autodesk Revit Structure Essentials

## Courseware Description

This guide covers the basics of Autodesk Revit® Structure. Users are introduced to the concepts of Building Information Modeling and the tools for parametric design, analysis, and documentation. They learn the fundamental features of Autodesk Revit Structure, learn to use the 3D parametric design tools for creating and analyzing a project, and finish with construction documentation and design visualization.

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

<b>Suggested Course Duration:</b>	3 days
<b>Pages:</b>	434
<b>Trial CD:</b>	Yes
<b>Onscreen Exercises Included?</b>	Yes

## Objectives

To teach users the concepts of Building Information Modeling and introduce the tools for parametric design, analysis, and documentation using Autodesk Revit Structure. Users will be able to complete their first Autodesk Revit Structure project after completing this class.

## Who Should Attend

New Autodesk Revit Structure users or other Autodesk software users who want to learn essential elements of Autodesk 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 design, drafting, or engineering principles.
- Microsoft® Windows® XP or Microsoft® Windows® 2000.



## Course Outline

### Day 1

#### Building Information Modeling

- Building Information Modeling for Structural Engineering

#### 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

- Starting a Project
- Adding and Modifying Levels
- Creating and Modifying Grids

#### Creating Structural Columns and Walls

- Working with Structural Columns
- Working with Structural Walls

### Day 2

#### Creating Frames

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

#### Creating Floors and Roofs

- Adding Floors
- Creating Roofs and Adding Structural Framing

#### Creating Foundations

- Adding Foundations

#### Stairs and Ramps

- Creating Stairs
- Creating Ramps

#### Creating Plan Annotations and Schedules

- Adding Dimensions
- Working with Text and Tags
- Creating Legends
- Working with Schedules

### Day 3

#### Creating Detailing

- Working with Detail Views
- Adding Concrete Reinforcement
- Working with Drafting Views
- Working with CAD Details

#### Creating Construction Documentation

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

