

Revit Structure Course

Revit Structure is a BIM software that help you in a parametric modeling environment to design steel and concrete structures. Revit offer an integral system to design in association with architecture and engineering teams.

Specific Objectives:

The goal is to teach the student to create, modify, analyze and document their structural parametric model. The student will learn how to create levels, work with walls, sections, elevations and create floor framing, roofs, steel frames, foundation slabs, footings, grade beams and stairs. The students will learn to prepare and use analytical models that content information of Structural Columns, Structural Framing elements (such as beams and braces), Structural Floors, Structural Walls, and Structural Foundation elements.

Revit Structure Course Outline - Concrete and Steel

Chapter 1: Introduction to BIM and Autodesk Revit

BIM and Autodesk Revit
Overview of the Interface
Starting Project
Viewing Commands

Chapter 2: Basic Sketching and Modify Tools

Using General Sketching Tools
Editing Elements
Working with Basic Modify Tools
Working with Additional Modify Tools

Chapter 3: Starting Structural Projects

Linking and Importing CAD Files
Linking in Revit Models
Setting Up Levels

Chapter 4: Structural Grids and Columns

Adding Structural Grids
Placing Structural Columns

Chapter 5: Foundations

Modeling Walls
Adding Wall Footings
Creating Piers and Pilasters
Adding Isolated Footings

Chapter 6: Structural Framing

Modeling Structural Framing
Modifying Structural Framing
Adding Trusses

Chapter 7: Working with Views

Setting the View Display
Duplicating Views
Adding Callout Views
Elevations and Sections

Chapter 8: Adding Structural Slabs

Modeling Structural Slabs
Creating Shaft Openings

Chapter 9: Structural Reinforcement

Structural Reinforcement
Adding Rebar
Modifying Rebar
Reinforcing Walls, Floors, and Slabs

Chapter 10: Structural Analysis

Preparing Projects for Structural Analysis
Viewing Analytical Models
Adjusting Analytical Models
Placing Loads

Chapter 11: Creating Construction Documents

Setting Up Sheets
Placing and Modifying Views on Sheets
Printing Sheets

Chapter 12: Annotating Construction Documents

Working with Dimensions
Working with Text
Adding Tags
Adding Detail Lines and Symbols
Creating Legends

Chapter 13: Creating Details

Setting Up Detail Views
Adding Detail Components
Annotating Details

Chapter 14: Scheduling

Structural Schedules
Graphical Column Schedules
Working with Schedules