

Revit® Structure - Fundamentals

This hands-on class is designed to be a minimum of three days and is the introductory class for persons desiring to learn Revit® Structure. The student should have a working knowledge of computers and experience and knowledge in structural design and its terminology.

Learning Objective

Using the Revit® software, the participant will learn the basics of the software and the basic building components for use as a structural modeling tool.

Course Outline

- ✓ **Introduction to BIM and Autodesk Revit®**
 - BIM and Autodesk Revit
 - Overview of the Interface
 - Starting Projects
 - Viewing Commands
 - Modeling Structural Slabs
 - Creating Shaft Openings
- ✓ **Basic Sketching and Modify Tools**
 - Using General Sketching Tools
 - Editing Elements
 - Working with Basic Modify Tools
 - Working with Additional Modify Tools
- ✓ **Starting Structural Projects**
 - Linking and Importing CAD Files
 - Linking In Revit Models
 - Setting Up Levels
 - Copying and Monitoring Elements
 - Coordinating Linked Models
- ✓ **Working with Views**
 - Setting the View Display
 - Duplicating Views
 - Adding Callout Views
 - Creating Elevations and Sections
- ✓ **Structural Grids and Columns**
 - Adding Structural Grids
 - Placing Structural Columns
- ✓ **Foundations**
 - Modeling Walls
 - Adding Wall Footings
 - Creating Piers and Pilasters
 - Adding Isolated Footings
- ✓ **Structural Framing**
 - Modeling Structural Framing
 - Modifying Structural Framing
 - Adding Trusses
- ✓ **Adding Structural Slabs**
 - Structural Reinforcement
 - Adding Rebar
 - Modifying Rebar
 - Reinforcing Walls, Floors, and Slabs
- ✓ **Structural Analysis**
 - Preparing Projects for Structural Analysis
 - Viewing Analytical Models
 - Adjusting Analytical Models
 - Placing Loads
- ✓ **Project – Concrete Structure**
 - Start a Structural Project
 - Create Foundation Elements
 - Frame a Concrete Structure
- ✓ **Creating Construction Documents**
 - Setting Up Sheets
 - Placing and Modifying Views on Sheets
 - Printing Sheets
- ✓ **Annotating Construction Documents**
 - Working with Dimensions
 - Working with Text
 - Adding Tags
 - Adding Detail Lines and Symbols
 - Creating Legends
- ✓ **Creating Details**
 - Setting Up Detail Views
 - Adding Detail Components
 - Annotating Details
- ✓ **Scheduling**
 - Structural Schedules
 - Graphical Column Schedules
 - Working with Schedules

The instructor may vary the topics and outline depending on the students participating in the class or other situations.