

Autodesk Revit Structure

Duration: Theory: 30 hrs | Lab: 30 hrs

Revit® software is a Building Information Modeling (BIM) solution for structural engineering firms, providing tools specific to structural design. BIM improves multidisciplinary coordination of structural design documentation, minimizes errors, and enhances collaboration among building project teams.



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

■ 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 Footings and Grade Beams
- Creating Foundation Slabs and Slabs on Grade

■ Additional Building Components

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

■ Project Initiations

- Project and view settings and standards
- Massing
- Project team collaboration
- Support for Plants & Entourage in rendering images

■ Project Relationships

- Groups
- Design Options
- Phasing
- Interference checking

■ Family Editor

- Introduction to the Family Editor

■ Import / Export

- Import CAD files
- Linking CAD files
- Linking REVIT models
- Export as DWG, DWF, jpeg, excel formats
- Import / Export to Robobat, StaadPro, Risa-3D & E-Tabs
- Export to AutoCAD Structural detailing

■ Reinforcement Details & Structural Analysis

- Structural reinforcement tools
- Host Rebar Details & Fabric Reinforcements.
- Analytical model

