



AUTODESK REVIT STRUCTURE ADVANCE TRAINING

Objectives

After completing this course, you will be able to:

- ✓ Create 2D detail components, work with detail groups, and manage a library of typical details.
- ✓ Add 3D rebar to beams and columns and add area and path reinforcements to walls and slabs.
- ✓ Create a slab on metal deck, create a precast hollow core slab for a project, create a tapered moment frame, create a 3D steel gusset plate, add steel stiffeners in a structural model, and create stepped footings.
- ✓ Work with bar joist and truss families.
- ✓ Work with and adjust the analytical model as well as be able to describe how to analyze the model With external analysis applications.
- ✓ Import and export data between AutoCAD® and AutoCAD® Architecture and Revit Structure projects.
- ✓ Link Revit models, coordinate and monitor changes in a current project and a linked project, and check and fix interference conditions in Revit Structure projects.
- ✓ Create, use, and manage worksets.
- ✓ Publish Revit Structure files to Design Web Format™ (DWF™) files and work with DWF markup files.

Pre-requisites

This course is designed for existing Revit Structure users and covers advanced topics. However, it is recommended that you:

- Complete the Revit Structure Essentials course prior to using this courseware.
- Have structural engineering and/or design, drafting, or engineering experience.
- Have a working knowledge of Microsoft Windows 7, Microsoft Windows 8 or Microsoft Windows 10.

Chapter 1: Working with Rebar

- Overview
- About 3D Rebars
- Process of Adding 3D Rebar to Beams and Columns
- Guidelines for Adding 3D Rebar to Beams And Columns
- Overview.
- About Area and Path Reinforcements
- Process of Adding Reinforcements
- Guidelines for Working with Reinforcements

Chapter 2: Working with Families

- Overview.
- About Floor System Families
- Process of Modifying a Floor System Family
- Guidelines for Creating a Slab on Metal Deck
- Overview.
- About Precast Hollow Core Slabs
- Process of Creating Precast Hollow Core Slabs
- Guidelines for Creating Precast Hollow Core Slabs
- Overview
- About Tapered Moment Frames
- Process of Creating a Frame. .
- Guidelines for Creating a Frame
- Exercise: Create a Tapered Moment Frame
- Overview.
- About 3D Steel Gusset Plates
- Process of Creating a 3D Steel Gusset Plate
- Guidelines for Creating 3D Steel Gusset Plates
- Overview.
- About Steel Stiffeners
- Process of Adding Steel Stiffeners
- Guidelines for Adding Steel Stiffeners
- Overview.
- About Stepped Footings
- Process of Creating Stepped Footings as Standard Component Families
- Guidelines for Creating Stepped Footings

Chapter 3: Creating Trusses

- Overview.
- About Bar Joist Families
- Process of Modifying Bar Joist Families
- Guidelines for Modifying Bar Joist Families
- Overview
- About Trusses
- Process of Creating Truss Families
- Process of Attaching Trusses to Roofs
- Guidelines for Working with Trusses

Chapter 4: Working with Clients and Consultants Using DWG files

- Overview.
- Import/Link CAD Formats Dialog Box.
- Linking an AutoCAD File to a Revit Structure Project
- Export Options and Layer Settings
- Managing Exported CAD Content
- Exporting Content to Other CAD Formats
- Guidelines for Importing and Exporting Data to AutoCAD.

Chapter 5: Working with Clients and Consultants Using Revit Architecture

- Overview.
- Linking Revit Architecture Projects
- RVT Link Display Settings Dialog Box
- Guidelines for Linking Revit Models
- Overview.
- Copy and Monitor Tools
- Coordinating and Monitoring Changes in a Current Project.
- Guidelines for Coordinating and Monitoring Changes
- Overview About Interference Checking.
- Guidelines for Checking and Fixing Interference Conditions.

Chapter 6: Multi-User Worksharing

- Overview.
- About Worksets .
- Process of Creating and Using Worksets
- About Central Files
- Moving Central Files
- Guidelines for Using Worksets and Central Files
- Overview.
- Methods of Opening Worksets.
- Methods of Setting Workset Visibility.
- Process of Managing Worksets
- Guidelines for Managing Worksets Remotely

Chapter 7: Sharing Your Design Using DWF

- Overview.
- About DWF Files
- Publishing to 3D DWF
- Guidelines for Publishing Revit Structure Files to DWF
- Exercise: Publish a Revit Structure Sheet to 2D DWF.
- Overview
- Process of Working with DWF Markup Files
- Guidelines for Working with DWF Markup Files