

Course Outline

Revit Structure Workflow and Documentation Training

Building Information Modeling

- * Building Information Modeling for Structural Design and Introduction to LODs for design.

Revit Basics

- * Exploring the User Interface
- * Introduction to Object Categories and Parameters
- * Object Visibilities
- * Basic Commands / Working with Building Elements

Project Model Setup (From Scratch)

- * Creating and Modifying Levels
- * Creating and Modifying Grids
- * Using / Managing CAD Backgrounds
- * Using Scope Boxes

Viewing the Building Model / View Management

- * Managing Views / Project Browser
- * Controlling Object Visibility / View Templates
- * Working with Section, Elevation and Call-outs
- * Creating and Modifying 3D Views

Creating and editing the Structural model (Concrete)

- System Families: Columns, Walls, Openings, Footings
- Sketch Driven Families: Slabs, Stairs and Roofs.
- Beams and Beam Systems / Sloping Members.
- Adding Reinforcement and Modifying Settings.

Creating Custom Elements (Families)

- * Intro to Custom Families 2D/3D
- * Adding Custom Object Parameters

Creating and editing the Structural model (Steel)

- * Review modeling concepts for Steel
- * Beam Coping and Openings
- * Modeling Trusses and Lateral Bracing and Trusses
- * Working with Groups and Group Detail elements

Using External Models / Linking and Setup (Collaboration)

- * Coordination setup / Coordination Review Best Practices.
- * Introduction to Worksharing
- * View Filters
- * Copy Monitor

Using Dimensions and Constraints

- * Working with Dimensions and understanding best practices
- * Applying and Removing Constraints and object relationships

Detailing and Drafting

- * Working with Text and Tags
- * Model driven details Versus Drafting Details Views
- * Importing CAD Details into the Model environment.

Construction Documentation

- * Extracting the "I" from BIM via Schedules
- * Graphical Column Schedules /Beam and Rebar Schedules
- * Configuring Concrete and Steel Material for documentation
- * Using Note blocks as Keynotes

Drawing Set Management

- * Understanding Sheets and how they relate to views
- * Drawing Set organization (via custom Parameters)
- * Managing Revisions
- * Printing

Model Interoperability workflows (Sharing the model)

- CAD Exports
- Navisworks Exports
- Autodesk A360
- DWF

Note: The suggested class duration is a guideline. Topics and duration may be modified by the instructor based upon the knowledge and skill level of the class participants.