

## 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.