

CLASS OBJECTIVE

The comprehensive Revit Architecture class provides a foundation for the day-to-day usage of Revit by introducing its key concepts and features. The focus of this course is on using Revit's "modeling" tools and how to produce models & construction documentation. After completing the class, even though there is still much to learn about Revit, attendees will be able join a project team and assist with the completion of the project.

CLASS PRE-REQUISITE

Students need access to a PC with Revit installed and an internet connection. Dual monitors are very helpful. The class assumes attendee will have familiarity with architectural construction documents. No Prior Revit or AutoCAD experience is necessary. To get the most out of the class we recommend reviewing Autodesk Free "getting started" tutorials prior to the session. <https://knowledge.autodesk.com/support/revit-products/getting-started?sort=score>

SESSION OUTLINES

The entire course is comprised of nine sessions of live, hands-on exercises. Each session is a half-day in duration and consists of two workshops. Sessions 1-6 are considered the "Introductory" topics and cover the Revit tools that you use every day on every project. We call Sessions 7-9 the "power user" topics. These are essential topics that you may not use every day but are absolutely essential to use Revit effectively.

SESSION 1

- **Workshop 1 – Getting Started – Overview and Key Concepts**
 - Using Zoom for the class
 - Opening Projects, File Versions & Types
 - Interface Review - Application Menu, Quick Access Toolbar, Ribbon, Options Bar, Project Browser, Properties, Status bar
 - Switching Views – Project Browser and View Mark Hyperlinks
 - Navigation: Zooming-Panning-Orbiting
 - Selecting Objects - Parameters & Relationships
 - Revit Organization - Categories\Families\Types, Modeling Vs Drafting

- **Workshop 2 -Getting Started – New Project and Walls**
 - Starting a New Project & Templates
 - Enabling Worksharing
 - Understanding Worksharing & Worksets
 - Adding Walls
 - Draw Tools, Location Line, Wall Height
 - Dimensioning to Position Walls
 - Wall Types & Wall Structure, Creating New Types
 - Foundation Walls & Footings
 - Modify Tools - Align, Move, Copy, Rotate, Trim\Extend, Mirror, Copy\Paste

SESSION 2

- **Workshop 1 – Levels, Column Grids & Columns**
 - Adding Levels
 - Adding Column Grids
 - Grid and Level Extents - 2D vs. 3D Grids
 - Structural / Architectural Columns
 - Interaction between columns and walls
- **Workshop 2 – Doors, Windows, Curtain Walls**
 - Adding Doors & Windows
 - Editing Parameters
 - Loading Families
 - Wall Openings & Edit Profile
 - Creating Curtain Walls
 - Adding Grids & Mullions
 - Mullion and Panel Options
 - Adding Operable Panels

SESSION 3

- **Workshop 1 – Working with Components**
 - Adding Components - plumbing fixtures, equipment, furniture, etc.
 - Placement options & hosting
 - Spacebar to rotate/align
 - Model Groups, Group Editor
- **Workshop 2 - Intro to Creating Component Families**
 - Categories & starting from templates, Hosting vs. Non-hosted
 - Reference Planes
 - Dimensional Parameters
 - Creating Geometry
 - Associating Geometry to Parameters

SESSION 4

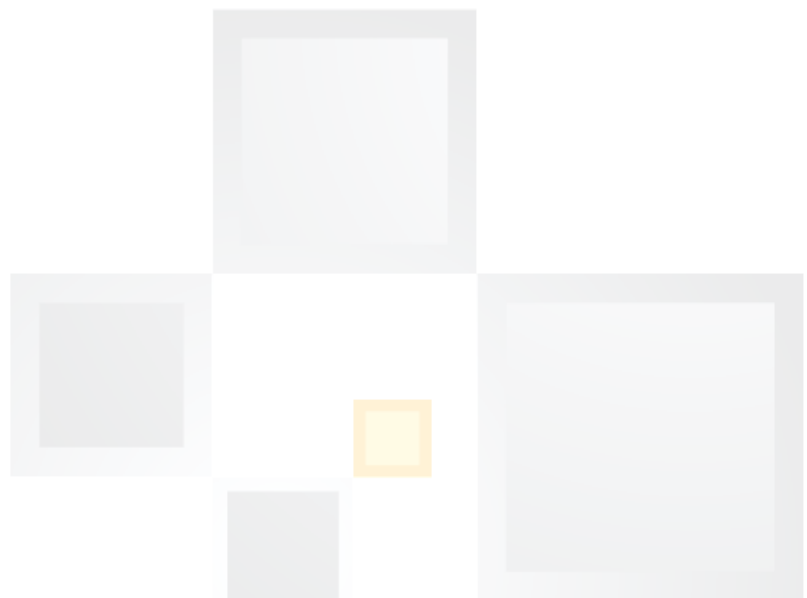
- **Workshop 1 – Rooms, Tags, & Schedules**
 - Placing Rooms
 - Room Tags and Tag options
 - Room Separation Lines
 - Colorized Plans
 - Intro to Schedules
 - Room Finish Schedule
 - Door Schedule
- **Workshop 2 – Floors & Ceilings**
 - Placing & Modifying Floors
 - Modifying Floor Types
 - Ceiling Plan Views
 - Creating Ceilings, Soffits, Lights Fixtures, Diffusers

SESSION 5

- **Workshop 1 – Roofs & Creating New Views**
 - Roofs by Footprint – Flat and Pitched
 - Seeing Inside your Model
 - Building Sections, Section Box
 - Creating Various View Types - Duplicate Views & New View
 - Overall Plan, Partial Floor Plans,
 - View Properties - Scale, Detail Level, VG Overrides, Underlay, Cropping, View Range
- **Workshop 2 – Stairs, Ramps & Railings**
 - Intro to Stairs and Railings (Egress Stairs)
 - Placing Stairs and Railings
 - Ramps

SESSION 6

- **Workshop 1 – Detailing & Annotation**
 - Adding Annotation - Notes, Dimensions, and other Symbols.
 - Intro to 2D Detailing
 - Model Based Details Vs. Drafted Views
 - Linework, Detail Components, Filled Regions, Linking Drafted views to callouts
 - Detail Groups
- **Workshop 2 – Sheets, Controlling Graphics, & Printing**
 - Creating Sheets, Titleblock Parameters
 - Adding Views to sheets
 - Viewport Types and Options
 - Revit Default Line Weights, Object Styles, Materials
 - View Templates
 - Printing



POWER USER SESSIONS

SESSION 7

- **Workshop 1 – Site & Topography**
 - Linking a CAD File
 - Toposurface Tools
 - Site Components
 - Site Annotation

- **Workshop 2 – Links, Coordinate Systems, Exporting**
 - Linking Revit Models
 - Establishing Shared Coordinates
 - Controlling Link Visibility – Worksets
 - Collaboration Tools Review
 - Exporting to CAD

SESSION 8

- **Workshop 1 – Areas & Area Plans**
 - Creating Area Plans
 - Area Boundaries
 - Adding Areas & Area Tags
 - Area Schemes
 - Area Schedules

- **Workshop 2 – Phasing & Design Options**
 - Overview of the Phasing System
 - Creating Existing, Demolition, and New Work Views
 - Enabling Design Options
 - Creating Option Views

SESSION 9

- **Workshop 1 – Advanced Family Editor Topics**
 - Parameter Review, Tagging & Scheduling
 - Family, Project, Shared Parameters
 - Nested Families
 - Formulas
 - Arrays in Families

- **Workshop 2 – Advanced Modeling Topics, Model Maintenance**
 - Roof & Wall Treatments, Sweeps & Reveals
 - Working with Profiles
 - Nested detail components
 - When to Use In-Place Families
 - Model Maintenance
 - Purge, Audit, Compact
 - Warning Review
 - Creating New Central Files
 - Backups, History, Restoring
 - Model Organization
 - View Templates
 - Browser Organization, Views, Sheets