

CLASS PRE-REQUISITE

- We expect all students to be comfortable with computer PC basics using Microsoft windows. The class assumes attendee will have familiarity with assembling architectural construction documents.
- Attendance in Intro Class or minimum 6 months Revit experience.

DAY ONE

MODELING TOPICS

- Customizing walls
 - Wall structure review
 - Materials review
 - Surface & Section Pattern Creation
- Structural Components
 - Steel Structure – Columns, Beams, Beam Systems
 - Foundation Walls and Footings
 - Brick shelf & other reveals - profiles
- Curtain Walls
 - As Window Systems
 - Custom Panel In-Place Editing
- Customizing Stairs and Railings
 - Custom profiles
- Roofs
 - Pitching “flat” roofs
 - Modify Sub Elements & Split lines
 - Sloped steel vs. variable thickness
 - Dormers
 - Dormer Openings
 - Roof by Extrusion
 - Named reference planes for work plane

DAY TWO

- Site Modeling Tools
 - Topography
 - Split surfaces
 - Linked civil CAD Files
- Creating 2D Details in Revit
 - Detail Callouts
 - Drafting Views
 - Model Based Details
- Groups
 - Model vs. Detail
 - Groups vs. Links (Housing Units)
- Design Options
 - Protected Content
 - Primary & VG Overrides
 - Presentation Views
- Renovation Projects \ Phasing
 - Phase Timeline
 - Phase Graphic overrides
- Project Origin points
 - Shared Coordinate Systems
- Linking Revit Models and CAD files
- Working with Consultants (views Settings)
 - Copy\Monitor Overview
- Massing

DAY THREE

COMPREHENSIVE FAMILIES

- Laying the Foundation
 - Classes of Families
 - System, Loadable, In-Place
 - Hosting Vs. Non-Hosted Vs. Face Based
- Family Categories and Family Templates
- Type vs. Instance Parameters
- Family Editor Overview
- Importance of Reference Planes
- Constraints
- Project Parameters, Shared Parameters

- Creating Geometry
- Solid Forms
- Void Forms
- Model and Symbol Lines
- Filled and Masking Regions

- Adding Intelligence
- Family Parameters
- Shared Parameters
- Labels
- Formulas
- Visibility

- Exercises
- Detail Component Family
- Titleblock Family
- Annotation\Tag Family
- Furniture or Casework Family (non-hosted)
- Wall Trim or Recess (hosted)
- In place “cloud ceiling” or sloped auditorium floor.

- Advanced Family Techniques
- Nested Families
- Arrayed Elements
- Rotating Parameters for Nested Families
- Void Cutting Elements

