

## Revit Architecture 2011 BIM Management

**Course Description:** Building Information Modeling (BIM) is an approach to the entire building life cycle. Revit Architecture is a powerful BIM program that supports the ability to coordinate, update, and share design data with team members throughout the design, construction, and management phases of a building's life. A key component in managing the BIM process is to establish a company foundation for different types of projects by creating standard templates and custom elements. Having this in place makes the process of any new project flow smoothly and efficiently.

**Course Objective:** To enable students who have worked with Revit to expand their knowledge in setting up office standards with templates that include annotation styles, preset views, sheets, and schedules, as well as creating custom element types and families

### Topics include:

- Create custom templates with annotation styles, title blocks, and custom element styles
- Create schedules, including material takeoff schedules with formulas
- Create custom wall, roof, and floor types
- Set up a family file
- Create family geometry
- Create family types
- Create standard and custom stairs
- Create specific families, including custom doors and windows, in-place families, profiles, railings, and shared parameters

**Prerequisites:** Students should be comfortable with the fundamentals of Revit as taught in the *Revit Architecture 2011 Fundamentals* course. Knowledge of basic techniques is assumed, such as creating walls, roofs, and other objects, copying and moving objects, and creating and working with views, etc.

### Course Contents:

#### Chapter 1 Creating Custom Templates

- 1.1 Preparing Templates
- 1.2 Presetting Annotation Styles
- 1.3 Creating Title Blocks
- 1.4 Creating Object Styles
- 1.5 Materials and Fill Patterns
- 1.6 View Templates

#### Chapter 2 Schedules

- 2.1 Creating Schedules
- 2.2 Creating Material Takeoff Schedules
- 2.3 Adding Parameters and Calculated Values

### **Chapter 3 Custom Walls, Roofs, & Sections**

- 3.1 Creating Wall, Roof, & Floor Types
- 3.2 Adding Sweeps to Walls, Roofs and Floors
- 3.3 Vertically Compound Walls
- 3.4 Vertically Stacked Walls

### **Chapter 4 Family Concepts & Techniques**

- 4.1 Introduction to Creating Families
- 4.2 Creating the Parametric Framework
- 4.3 Creating Family Elements
- 4.4 Additional Tools for Families
- 4.5 Creating Family Types
- 4.6 Visibility Display Settings
- 4.7 Overview of Family Creation

### **Chapter 5 Creating Specific Families**

- 5.1 Creating Custom Doors & Windows
- 5.2 Creating In-Place Families
- 5.3 Creating Profiles
- 5.4 Creating Angled Cornices and Copings
- 5.5 Creating Custom Railings
- 5.6 Families for Railings, Balusters, and Panels
- 5.7 Creating Annotation Families
- 5.8 Working with Shared Parameters