

## Technical Education Services

### Autodesk Revit BIM Management: Template and Family Creation

**Course Length: 2 days**

Building Information Modeling (BIM) is an approach to the entire building life cycle. Autodesk® Revit® for Architecture, MEP, and Structure 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 family elements. Having this in place makes the process of any new project flow smoothly and efficiently.

The objective of the Autodesk® Revit® BIM Management: Template and Family Creation training course is to enable users who have worked with the software 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 system, in-place, and component families.

This training course contains practices that are specific to each discipline.

#### Topics Covered

- Create custom templates with annotation styles, title blocks, and custom element types.
- Create schedules, including material takeoff schedules with formulas.
- Create custom wall, roof, and floor types as well as MEP system families.
- Set up a component family file with a parametric framework.
- Create family geometry.
- Create family types.
- Modify the visibility of components and incorporate additional family items such as controls, MEP connectors, and nested components.
- Create specific families, including in-place families, profiles, annotations, and parameters.
- This learning guide also contains discipline-specific practices for families, including: doors, windows, railings, pipe fittings, light fixtures, gusset plates, and built-up columns.

#### Prerequisites

Students should be comfortable with the fundamentals of the Autodesk Revit software, as found in the Autodesk Revit Fundamentals training courses. Knowledge of basic techniques is assumed, such as creating standard element, copying and moving elements, and creating and working with views, etc. Information on Collaboration Tools, Conceptual Design, and Site and Structural Design are covered in additional training courses.

*Course description shown for Autodesk Revit 2019. Topics, curriculum, and/or prerequisites may change depending on software version.*



## Training Guide Contents

### Chapter 1: Creating Custom Templates

- 1.1 Preparing Project Templates
- 1.2 Customizing Annotation Types
- 1.3 Creating Title Blocks
- 1.4 Setting Up View Filters
- 1.5 Adding View Templates

### Chapter 2: Creating Schedules

- 2.1 Introduction to Schedules
- 2.2 Creating Building Component Schedules
- 2.3 Modifying Schedule Appearance
- 2.4 Additional Schedule Types
- 2.5 Advanced Schedule Options
- 2.6 Working with Project Parameters

### Introduction to Revit Families

#### Chapter 3: Custom System Families

- 3.1 Creating Wall, Roof, Floor, and Ceiling Types
- 3.2 Vertically Compound Walls
- 3.3 Stacked and Embedded Walls
- 3.4 Creating MEP System Families

#### Chapter 4: Component Family Concepts

- 4.1 Creating Component Families
- 4.2 Creating the Parametric Framework
- 4.3 Creating Family Elements
- 4.4 Creating Family Types

#### Chapter 5: Advanced Family Techniques

- 5.1 Additional Tools for Families
- 5.2 Visibility Display Settings

#### Chapter 6: Additional Family Types

- 6.1 Creating 2D Families
- 6.2 Creating Line-based Families
- 6.3 Creating In-Place Families
- 6.4 Working with Shared Parameters

*Course description shown for Autodesk Revit 2019. Topics, curriculum, and/or prerequisites may change depending on software version.*





### **Chapter 7: Creating Architectural Specific Families**

- 7.1 Creating Custom Doors and Windows
- 7.2 Creating Angled Cornices and Copings
- 7.3 Creating Custom Railings

### **Chapter 8: Creating MEP Specific Families**

### **Chapter 9: Creating Structural Specific Families**

### **Appendix A: Additional Management Tools**

- A.1 General Settings
- A.2 Creating Object Styles
- A.3 Creating Fill Patterns
- A.4 Creating Materials
- A.5 Settings for Mechanical Projects
- A.6 Settings for Electrical Projects
- A.7 Settings for Structural Projects
- A.8 Additional Schedule Types
- A.9 Basic User Interface Customization

### **Appendix B: Autodesk Revit Certification Exam Objectives**

*Course description shown for Autodesk Revit 2019. Topics, curriculum, and/or prerequisites may change depending on software version.*





## Cancellation Policy

The following cancellation policy shall apply to all training engagements, Live Online, Consulting Services and Dedicated/Custom Training:

- Company reserves the right to reschedule or cancel the date, time and location of its class at any time. In the event that a Training Class is cancelled by Company, Customer is entitled to a full refund. Company shall not be responsible for any other loss incurred by Customer as a result of a cancellation or reschedule.
- For Customer cancellations when written notice is received (i) at least ten (10) business days in advance of the class, the Customer is entitled to a full refund of its payment or reschedule enrollment, (ii) less than ten (10) business days, Customer shall not be entitled to a refund, but shall receive a class credit to be used within three (3) months of the date of the original class.
- Student substitutions are acceptable with at least two (2) days prior notice to the class, provided substitution meets course prerequisites and is approved by Company's Training Coordinator ([trainingcoordinator@rand.com](mailto:trainingcoordinator@rand.com))
- For all Training orders, cancellation notices must be submitted to [trainingcoordinator@rand.com](mailto:trainingcoordinator@rand.com). Company is not responsible for any error in the delivery of the email notice. In the event of any reschedule of Consulting Services and/or Dedicated/Custom Training by Customer, Company will invoice Customer for all non-cancellable travel expenses.

To request more information or to see training locations, visit [www.imaginit.com/contact-us](http://www.imaginit.com/contact-us).

*Course description shown for Autodesk Revit 2019. Topics, curriculum, and/or prerequisites may change depending on software version.*

