



# Autodesk Revit: Family Creation for Structure

## Course Length: 1 Day

Building Information Modeling (BIM) is an approach to the entire building life cycle. Autodesk Revit is a powerful BIM program for structure 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. Families are the backbone of Autodesk Revit. They are the elements you add as you model a building and its services, as well as the tools you use as you are annotating views.

The objective of the Autodesk Revit: Family Creation for Structure course is to enable users who have worked with the software to expand their knowledge in creating custom system, in-place, and component families.

This Autodesk Revit course contains practices that are specific to the structure discipline.

### Topics Covered:

- Create custom wall and floor types.
- 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, and add additional parameters.
- Create specific families, including in-place families, profiles, annotations, and parameters.

This course also contains structural discipline-specific practices for families, including gusset plates, built-up columns, tapered concrete column, truss family, and tapered moment frame.

Course description shown for Autodesk Revit 2022. Topics, curriculum, and/or prerequisites may change depending on software version.

## Prerequisites:

You should be comfortable with the fundamentals of the Autodesk Revit software, as found in the Autodesk Revit: Fundamentals for Structure course. Knowledge of basic techniques is assumed, such as creating standard elements, copying and moving elements, and creating and working with views. Information on Collaboration Tools, Conceptual Design, and Site and Structural Design are covered in other courses.

## Learning Guide Contents

### Introduction to Revit Families

#### Chapter 1: Custom System Families

- 1.1 Creating Wall, Roof, Floor, and Ceiling Types
- 1.2 Vertically Compound Walls
- 1.3 Stacked and Embedded Walls

#### Chapter 2: Component Family Concepts

- 2.1 Creating Component Families
- 2.2 Creating the Parametric Framework
- 2.3 Creating Family Elements
- 2.4 Creating Family Types

#### Chapter 3: Advanced Family Techniques

- 3.1 Additional Tools for Families
- 3.2 Visibility Display Settings

#### Chapter 4: Additional Family Types

- 4.1 Creating 2D Families
- 4.2 Creating Line-based Families
- 4.3 Creating In-Place Families
- 4.4 Working with Shared Parameters

#### Chapter 5: Creating Structural-Specific Families

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## Cancellation Policy

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