# BASICS

## INTRODUCTION

### BY THE REVIT TUTOR

# Introduction to BIM and Autodesk Revit

This guide is divided into three sections: Introduction to BIM and Autodesk Revit, Design Development, and Construction Documents.

The first section provides an overview of using Building Information Modeling (BIM) with the Autodesk® Revit® software, working with the software interface, how to use the basic drawing and modify tools, and incorporating datum elements.

This section includes the following chapters:

- Chapter 1: Introduction to BIM and Autodesk Revit

- Chapter 2: Basic Sketching and Modify Tools

- Chapter 3: Starting Architectural Projects

# Design Development Phase

The second section of this guide focuses on teaching you how to use the tools available in the Autodesk® Revit® software to create the building model. It also describes the viewing tools required to produce the model.

This section includes the following chapters:

- Chapter **4**: Modeling Walls

- Chapter 5: Working with Doors and Windows

- Chapter 6: Working with Curtain Walls

- Chapter 7: Working with Views

- Chapter 8: Adding Components

- Chapter 9: Modeling Floors

- Chapter 10: Modeling Ceilings

- Chapter 11: Modeling Roofs

- Chapter 12: Modeling Stairs, Railings, and Ramps

# Construction Documents Phase

The third section of this guide continues to teach the Autodesk® Revit® tools, focusing on tools that help you to create accurate construction documents for a design.

This section includes the following chapters:

- Chapter 13: Creating Construction Documents

- Chapter 14: Annotating Construction Documents

- Chapter 15: Adding Tags and Schedules

- Chapter 16: Creating Details

## END OF FUNDAMENTALS COURSE

# Introduction to Worksets

Worksharing is a workflow used in the Autodesk® Revit® software when multiple people are working on a single project model. The model is broken up into worksets. Individuals open and work on in local files that are synchronized to a central file upon saving.

For more information about establishing and using Worksets, refer to the *Autodesk Revit Collaboration Tools* guide.

### Learning Objectives in this Appendix

- Review worksharing principles.
- Open a local file to make changes to your part of a project.
- Synchronize your local file with the central file, which contains changes from all the local files.

# Additional Tools

There are many other tools available in the Autodesk® Revit® software that you can use when creating and using models. This appendix provides details about several tools and commands that are related to those covered in this guide.

## Learning Objectives in this Appendix

- Save and use selection sets of multiple building elements.
- Edit wall joins.
- Add wall sweeps and reveals as well as roof fascias, gutters, and floor slab edges.
- Create a Curtain Wall type with an equally spaced grid pattern.
- Clarify views using Split Face, Paint, Linework, and Cut Profiles.
- Add dormers to roofs.
- Use guide grids to help place views on sheets.
- Add revision clouds, tags, and information.
- Use Path of Travel to analyze travel distances between points in the model.
- Annotate dependent views with matchlines and view references.
- Import and export schedules.
- Create basic building component schedules.
- Create repeating detail types.
- Place keynotes in a detail and add keynote legends that describe the full content of the keynotes.

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# Certification Exam Objectives

The following table will help you to locate the exam objectives in the chapters of the Autodesk® Revit® 2020 Architecture guides to help you prepare for the Autodesk Revit Architecture Certified Professional exam.

| Exam Topic | Exam Objective | Learning Guide | Chapter & Section(s) |
|---|---|---|---|
| | Copy and monitor elements in a linked file | • Revit Collaboration Tools | • 2.3 |
| | Use worksharing | • Revit Collaboration Tools | • 4.1, 4.2, 4.3 |
| | Import DWG and image files | • Revit Fundamentals for Architecture | • 3.1 |
| | | • Revit Collaboration Tools | • 3.1, 3.2, 3.3 |
| | Use Worksharing Visualization | • Revit Collaboration Tools | • 4.4 |
| | Assess review warnings in Revit | • Revit Fundamentals for Architecture | • 12.1 |