

# Autodesk Certified User Exam Objectives

## Revit for Architectural Design



Revit

### Target Audience

The Autodesk Revit Certified User for Architecture exam demonstrates competency in building information modeling. The exam covers the basic use of the Revit software as well as basic architectural and design practices. An individual earning this certification has approximately 150 hours of instruction and hands-on experience with the product, has proven competency at an industry entry-level, and is ready to enter the job market.

### Candidate Description

A successful candidate for this certification is familiar with Inventor features and capabilities, as well as the relevant workflows of building design. They are competent using the core architecture and annotation tools. They can perform basic modeling tasks with limited assistance from peers, product documentation, and support services. They can answer routine conceptual and applied questions about how to use Revit without referring basic questions to others. Additionally, they can comprehend a 3D model and have a basic concept of drafting standards.

### Prerequisites

It is expected that all candidates will understand how to:

- Navigate the Revit interface
- View and navigate a Revit model
- Understand the concept of architectural 3D modeling
- Demonstrate basic digital literacy skills
- Navigate views using the project browser

### Objective Domain

Some of the topics and features of the software that may be covered in the exam are listed below each objective.

*Note: Within the context of this exam series, all references to "create, select, manage, etc." indicate "know how to create, select, manage, etc."*

## 1. Modeling

### 1.1 Work with walls

- 1.1.a Place and modify basic walls
  - i. Define the wall location line
- 1.1.b Apply wall constraints
  - i. Base and top
- 1.1.c Attach a wall to a floor or roof

### 1.2 Add doors, windows, and openings

- 1.2.a Select and place the appropriate types
- 1.2.b Place at the appropriate level and orientation
  - i. Sill height and head height

# AUTODESK CERTIFIED USER EXAM OBJECTIVES

- 1.2.c Cut openings in building elements
  - i. Shaft and wall

## 1.3 Add and edit floors, ceilings, and roofs

- 1.3.a Place and modify floors
  - i. Specify boundary lines
  - ii. Use the draw tools
- 1.3.b Place and modify ceilings
  - i. Automatic or sketch
- 1.3.c Place and modify roofs
  - i. Roof by footprint
  - ii. Specify a slope using the Define Slope option
  - iii. Specify an overhang
- 1.3.d Use the draw tools
  - i. Line, rectangle, start-end-radius arc, pick lines, pick walls
  - ii. Understand boundary lines
  - iii. Understand chain selection
  - iv. Use the Extend into Wall option
  - v. Escape, Shift, Alt, Tab, and PageUp

## 1.4 Place a component

## 1.5 Work with grids and columns

- 1.5.a Position grid lines
- 1.5.b Change the grid name (bubble value)
- 1.5.c Place and modify architectural columns on a grid

## 1.6 Work with stairs, ramps, and railings

- 1.6.a Place straight stairs
  - i. Create a run and/or landing
- 1.6.b Place ramps
  - i. Sketch a run or boundary
- 1.6.c Place and edit railings
  - i. Create a railing by sketch
  - ii. Place a railing on a stair or ramp
  - iii. Edit a railing path

## 1.7 Place rooms

- 1.7.a Place a room with or without a tag
- 1.7.b Rename the room
- 1.7.c Identify and set whether an element is room bounding
- 1.7.d Create room separation lines

## 1.8 Use modify tools

- 1.8.a Move, copy, or rotate elements
- 1.8.b Trim or extend elements
  - i. Trim/extend to corner, single element, or multiple elements
- 1.8.c Align or offset elements
- 1.8.d Mirror elements
  - i. Pick axis or draw axis
- 1.8.e Split an element with or without a gap

# AUTODESK CERTIFIED USER EXAM OBJECTIVES

- 1.8.f Create a linear or circular array of elements
- 1.8.g Resize elements
  - i. Scale
- 1.8.h Pin/unpin elements
  - i. Use Copy and Paste Aligned Tools from the clipboard

## 2. Display

### 2.1 Use levels to define the height or story within a building

- 2.1.a Add a level with or without a corresponding plan view
- 2.1.b Edit a level in a view

### 2.2 Create and modify views

- 2.2.a Create 2D plan views
  - i. Floor and ceiling plans
- 2.2.b Create section and elevation views
- 2.2.c Use call-out views
  - i. Detail and reference views
- 2.2.d Create drafting views
- 2.2.e Create 3D views
  - i. Turn on and modify the boundary of a section box
- 2.2.f Create camera views
- 2.2.g Modify view boundaries
  - i. Apply a crop region to control the display of a view
- 2.2.h Duplicate views
  - i. Duplicate, Duplicate with Detailing, Duplicate as Dependent

### 2.3 Control view display

- 2.3.a Set view properties
  - i. View scale, detail level, visual style, temporary view properties
  - ii. Hide or isolate elements or categories in a view
  - iii. Reveal hidden elements
- 2.3.b Control underlay
- 2.3.c Manage view range

### 2.4 Configure family types

- 2.4.a Load families
- 2.4.b Understand system, loadable, and in-place families
- 2.4.c Duplicate, rename, and modify an existing family type
  - i. Width or height parameter values
  - ii. Wall layer thickness
- 2.4.d Reassign a material to an element or part of an element

## 3. Documentation

### 3.1 Create and modify text

- 3.1.a Place or modify text or model text
  - i. Resize or rotate a text box
- 3.1.b Assign the text type
- 3.1.c Duplicate, rename, and modify an existing family type
  - i. Text font and text size

# AUTODESK CERTIFIED USER EXAM OBJECTIVES

- 3.1.d Add a leader
- 3.1.e Set text alignment
  - i. Horizontal and vertical justification

## 3.2 Add tags

- 3.2.a Tag by Category
- 3.2.b Tag All
- 3.2.c Room tags
- 3.2.d Edit a door or room number in the tag

## 3.3 Use dimensions

- 3.3.a Place dimensions
  - i. Linear, aligned, angular, radial, and diameter
- 3.3.b Utilize dimensional constraints
  - i. Toggle dimension equality
  - ii. Lock a dimension
- 3.3.c Apply dimension types
- 3.3.d Edit the witness lines

## 3.4 Create and use schedules

- 3.4.a Create schedules
  - i. Door and window schedules
- 3.4.b Configure schedules
  - i. Fields, filters, and sorting/grouping
  - ii. Itemize every instance (or not)
- 3.4.c Enter and modify schedule data

## 3.5 Add 2D annotation detail elements to views

- i. Detail lines
- ii. Detail components
- iii. Filled or masking region
- iv. Insulation

## 3.6 Create and arrange sheet composition

- 3.6.a Place and adjust a view on a sheet
  - i. Change the size of the view
  - ii. Adjust view title and extension line
  - iii. Activate/deactivate a view
- 3.6.b Enter information on a title block