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Course details

Autodesk Certified Professional in Revit for Architectural Design

Exam objectives

AUTODESK
Revit
CERTIFIED PROFESSIONAL
Architectural Design

Target audience

The Autodesk Certified Professional (ACP) certification is designed for candidates who have advanced skills and can solve complex challenges in production workflow and design. This type of experience typically comes from having worked with the software on a regular basis for at least two years, which is equivalent to approximately 400 hours (minimum) to 1,200 hours (recommended) of Autodesk software experience. Certification at this level demonstrates a comprehensive skill set that provides an opportunity for individuals to stand out in a competitive job market.

Candidates who obtain this certification will have demonstrated proficiency in creating and managing Revit models and processes that result in suitable deliverables to convey architectural design and construction intent. Earning this certification can help differentiate candidates in the job market by validating their skills in Revit in an architectural environment by demonstrating their knowledge in associated workflows, processes, and project objectives.

Prerequisite skills

It's expected that candidates will already know how to:

- Navigate the user interface.
- View and navigate a model.
- Open and save files and understand available file types.
- Understand the concepts of architectural 3D modeling.
- Create a basic 3D model by using out-of-the-box system and loadable architectural components, including creating new types within the project.
- Understand the differences between instance and type parameters.
- Place rooms and areas.
- Set up basic schedules.
- Set up basic 2D views (e.g., plans, sections, elevations, and drafting views).
- Set up basic 3D views (e.g., section box, camera views, and oriented views).
- Use preconfigured annotation elements (e.g., dimensioning, text, and tags).
- Set up documentation sheets.
- Annotate revisions on a sheet.

Exam Format

You won't have access to the software during the exam, as all questions are in a selected response format and are designed to be answered without the software user interface. Learn more about our exam format and question types in our Autodesk Certification FAQs.

Exam Outline

Here are some topics and software features that may be covered in the exam. This table lists the main content domains and their weightings, followed by the complete exam content outline.

Exam Domain	% of Exam
Modeling	31%
Documentation	24%
Collaboration and coordination	22%
Collaboration and coordination	11%
Information analysis	11%

1. Modeling

1.1. Create and modify advanced architectural components

1.1.a Create and edit wall types, including creating and manipulating layers, and using sweeps and reveals.

1.1.b Create and modify curtain walls.

1.1.c Create and edit roofs, floors, and ceiling types.

i. May include creating layers and materials, and defining slope and edges

1.1.d Configure stairs, including multi-level stairs.

1.1.e Configure railings.

1.1.f Create openings in building elements.

1.1.g Create and modify columns.

1.1.h Create relationships between various architectural components, including joining, attaching, and hosting.

1.2. Create, configure, and apply materials

1.2.a Create a custom material, use multiple material libraries in a project, and

create custom material libraries.

1.2.b Apply materials in a system or loadable family.

1.2.c Apply various materials using the Split Face and Paint tools.

1.3. Configure rooms

1.3.a Configure area and volume computations.

1.3.b Modify room parameters.

1.3.c Create and assign room bounding elements, including rooms from linked files.

1.4. Create and configure basic 3D parametric families

1.4.a Create a family using the correct template.

1.4.b Add reference planes and/or lines.

1.4.c Create parameters and assign to elements.

i. May include length, visibility, text, and materials

1.4.d Demonstrate and understanding of family categories.

1.4.e Control family visibility/graphics overrides.

i. May include control arrows, subcategory creation, detail level, and graphic display override

1.4.f Apply simple mathematical formulas to parameters.

1.4.g Create 3D solid and void geometry.

i. May include extrusion, sweep, blend, revolve, swept blend, and void

1.4.h Recognize how nested families function and differentiate between families that are shared or not shared.

1.4.i Recognize when to use a loadable family versus an in-place family.

1.5. Create topography

1.5.a Create and place points.

1.5.b Assign point elevations.

1.5.c Create building pads.

1.5.d Create and modify subregions.

1.5.e Create topography from a linked CAD or CSV file.

1.6. Create, modify, and manage model groups

1.6.a Identify proper use cases for groups.

1.6.b Recognize how hosted and non-hosted elements are used in groups.

1.6.c Demonstrate an understanding of relationships between objects both in

and outside of a group.

2. Documentation

2.1. Create and control advanced model views, visibility, and graphics

2.1.a Create and use view templates and recognize the relationship between view

types and view templates.

2.1.b Create and apply filters.

2.1.c Apply and use visibility overrides, including element-level overrides.

2.1.d Use the tools in the View Control bar.

2.1.e Apply and use object styles.

i. May include applying materials to categories

2.1.f Create view types.

2.1.g Duplicate views and create dependent views.

2.1.h Configure view properties.

i. May include graphics, underlay, extents, identify data, camera, and phasing

2.1.i Control crop boundaries and create and assign scope boxes.

2.1.j Create and configure plan regions.

2.2. Configure and manage annotative elements

2.2.a Create text styles and associated leaders.

2.2.b Configure and place keynotes.

2.2.c Create dimension styles.

2.2.d Create generic annotation families.

2.2.e Create a matchline and view references.

2.3. Use document revisions

2.3.a Control revisions that appear on sheets.

2.3.b Issue a revision.

2.3.c Create and manage revisions.

2.4. Create and manage legends

2.4.a Add legend components.

2.4.b Add and configure a color fill legend.

2.4.c Create a keynote legend.

2.5. Create and control detail and drafting views

2.5.a Add drafting views from other models.

2.5.b Create and edit filled and masking regions.

2.5.c Reference drafting views in model views.

2.5.d Create and use a repeating detail component.

2.5.e Create and edit model and detail line styles.

2.5.f Create and edit fill patterns.

2.6. Create and configure basic 2D parametric families

2.6.a Set the family category of a tag.

2.6.b Create a new tag with labels and linework, including

family, shared, and

built-in parameters.

2.6.c Create and use detail components.

2.7. Create, modify, and manage detail groups

2.7.a Create and place detail groups.

2.7.b Set the detail group origin point.

2.7.c Attach detail groups to model groups.

3. Collaboration and Coordination

3.1. Configure worksets and initiate worksharing

3.1.a Activate worksharing and create detached models.

3.1.b Modify worksharing display settings (visibility and

display mode).

3.1.c Create and use worksets and manage worksets in linked

models.

3.2. Link and manage various file formats

3.2.a Link Revit files with correct positioning.

3.2.b Control link visibility and graphics, including managing

halftone and

underlay settings.

3.2.c Use the Manage Links dialog to link files (images, PDFs, DWGs, and point clouds).

3.2.d Predict the implications of linking versus importing CAD files.

3.3.Perform basic model maintenance

3.3.a Find and address errors and warnings and predict their impact.

3.3.b Execute a selective purge.

3.3.c Audit and compact a model.

3.3.d Recognize the implications of exploding DWG files.

3.4.Manage and configure phasing

3.4.a Control the status of element phases.

3.4.b Manage project phase settings, including project phases, phase filters, and graphic overrides.

3.4.c Map phases in linked Revit models.

3.5.Create, configure, and manage design options

3.5.a Create and manage design options and design option sets.

3.5.b Assign design options to a view.

3.5.c Assign elements to a design option and move elements from one design option to another and/or to and from the main model.

3.6.Use the Copy/Monitor process and features

3.6.a Copy elements from a linked model.

3.6.b Monitor elements from a linked model.

3.6.c Modify copy options and control the category of copy elements.

3.6.d Perform a coordination review on a linked model.

4. Project Standards and Setup

4.1. Configure custom user interface settings

4.1.a Set save reminders.

4.1.b Set file locations.

4.1.c Configure tabs.

4.1.d Locate and edit shortcuts.

4.1.e Control element selections.

4.1.f Configure and use snaps.

4.2. Configure and manage project settings and location

4.2.a Create a new project parameter, including assigning and managing appropriate categories.

4.2.b Configure object styles.

4.2.c Configure project units.

4.2.d Transfer project standards.

4.2.e Configure Project North and True North orientations.

4.2.f Set the project location.

4.2.g Manage project information.

4.3.Use and manage the project browser

4.3.a Create and edit browser organization schemes for views, sheets, and schedules.

4.3.b Perform effective searches using the search function.

4.4.Configure print and export settings

4.4.a Configure print sets.

4.4.a Configure print sets.

4.4.b Configure settings and export to CAD format.

4.4.c Export to IFC, image, and PDF.

4.4.d Save library files.

4.4.e Export schedules.

5. Information Analysis

5.1. Create and manage schedules

5.1.a Schedule elements from linked models, phases, and design options.

5.1.b Add and modify instance and type parameters, including calculated and combined parameters.

5.1.c Create and configure various types of schedules such as elements, materials, sheets, notes, and views.

i. May include filtering, sorting, and grouping, and formatting

5.1.d Create a note block and place it on a sheet.

5.1.e Create and use a key schedule.

5.2. Create and edit area schemes and area plans

5.2.a Create and edit area schemes and associated area boundaries.

5.2.b Apply color fill legends to area schemes.

5.2.c Recognize the relationship between a scheme and its associated plans andschedules.

5.3.Create sun and shadow studies

5.3.a Add a still, single, and multi-day solar study.

5.3.b Set the geographic location of a project.

5.3.c Export a sun study.

- Use pre-created materials in the model.

- Modify objects using modifying tools.