

Updated on 14/09/2023

Sign up

Revit Architecture Initiation

5 days (35 hours)

Presentation

Revit Architecture is BIM design software from Autodesk. Revit enables 2D models to be modified and visualized in 3D. Modifications are stored in a single database, reducing the risk of errors.

The program features numerous analytical tools used to minimize the impact of components on the environment. The main advantage of the tool is that it enables visual models to be created more quickly. In fact, Revit reduces the number of tasks involved in creating 3D models.

As always, we'll be presenting the latest stable version of the project ([Revit 2022.1](#)).

Objectives

- Knowledge of BIM methodology with Revit
- Quick and efficient software training

Target audience

Architects, Project Managers, Project Directors, Draughtsmen, Project Owners, Architecture Students, Construction Companies.

Prerequisites

Recommended: know the architectural design process

Revit Architecture Initiation training program

BIM THEORY.

- BIM: definition
- BIM: objectives and uses
- BIM levels
- BIM dimensions (2D to 7D)
- Model structure
- Progressive modeling and LODs
- Project milestones
- MacLeamy curve: learning BIM
- BIM-related professions
- Bonus: VR (augmented reality)

FUNDAMENTAL CONCEPTS OF REVIT

- File types: project, family, template
- Elements of a Revit project
- Element hierarchy : Category, Family, Type, Occurrence
- The families

NEW FILE, NAVIGATION AND INTERFACE

- New project. Select template. Save project.
- Basic shares
- Selection: Frame, TAB, Filter, Select all occurrences
- General interface
- Parenthesis: browse commands to understand
- Quick access toolbar
- Display control bar
- Selection filters
- Tree properties
- Tabs: knowing where to find commands
- Quickly pan over the main tabs: Architecture, Insert, Annotate, Volume and Site, View, Manage, Modify
- Browse the interface while using a tool
- Introduction to display in Revit: a hierarchy of graphic management tools

SETTING UP A NEW PROJECT

- Units, Hangings, Project information, Project location
- Project basics: Levels and level ratings
- Creating plan views
- Importing survey plans. Difference between linking and importing files.
- PDF import

MODELING A SITE AND CONTEXT VOLUMES

- Property limit
- The importance of locking components
- Topographic surface
 - Creation
 - Modification
- Sub-regions.
- Terre-plein
- Cutting zone
- Conceptual volumes

MODELING: THE BASICS

- Walls
 - Type creation and modification
 - Type properties and wall design
 - Profile Editing Tools
- Copy walls from one floor to another
- Windows and Doors
- Columns/Posts and Grids
- Load and Place Family/Component

MODELING: ELEMENTS PER SKETCH

- Flooring - Creation
- Roofing
 - Par Esquisse
 - By Profile
 - Flat Roof Modification Tools - Curtain Walls
- Openings - Cages
- False Ceilings
- Stairs
 - Creation
- Stairs
 - Modification
- Railings
 - Creation
 - Modification
- Component in situ

PARTS AND PARTS LISTS. Project quantities

- Tool Parts/Tool Surface
- Nomenclature
 - Creation
 - Modification
- Practical: Door table and Surface table

VIEW MANAGEMENT AND GRAPHICS

- VV/VG, View properties and Manage tab
- Views - Creation Elevations, Sections, Details
- View Range & Depth - 3D Views - Creation
- 3D views - Settings

ANNOTATIONS

- Annotations (Annotate tab)
- Dimensions

RETURNED

- Creating materials
- Basic rendering with Revit. Cloud rendering.

LAYOUT AND PRINTING

- Leaves
 - Creation and Modification
 - Inserting Views in the Sheet
 - Printing and PDF creation
 - Export DWG, Image

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.