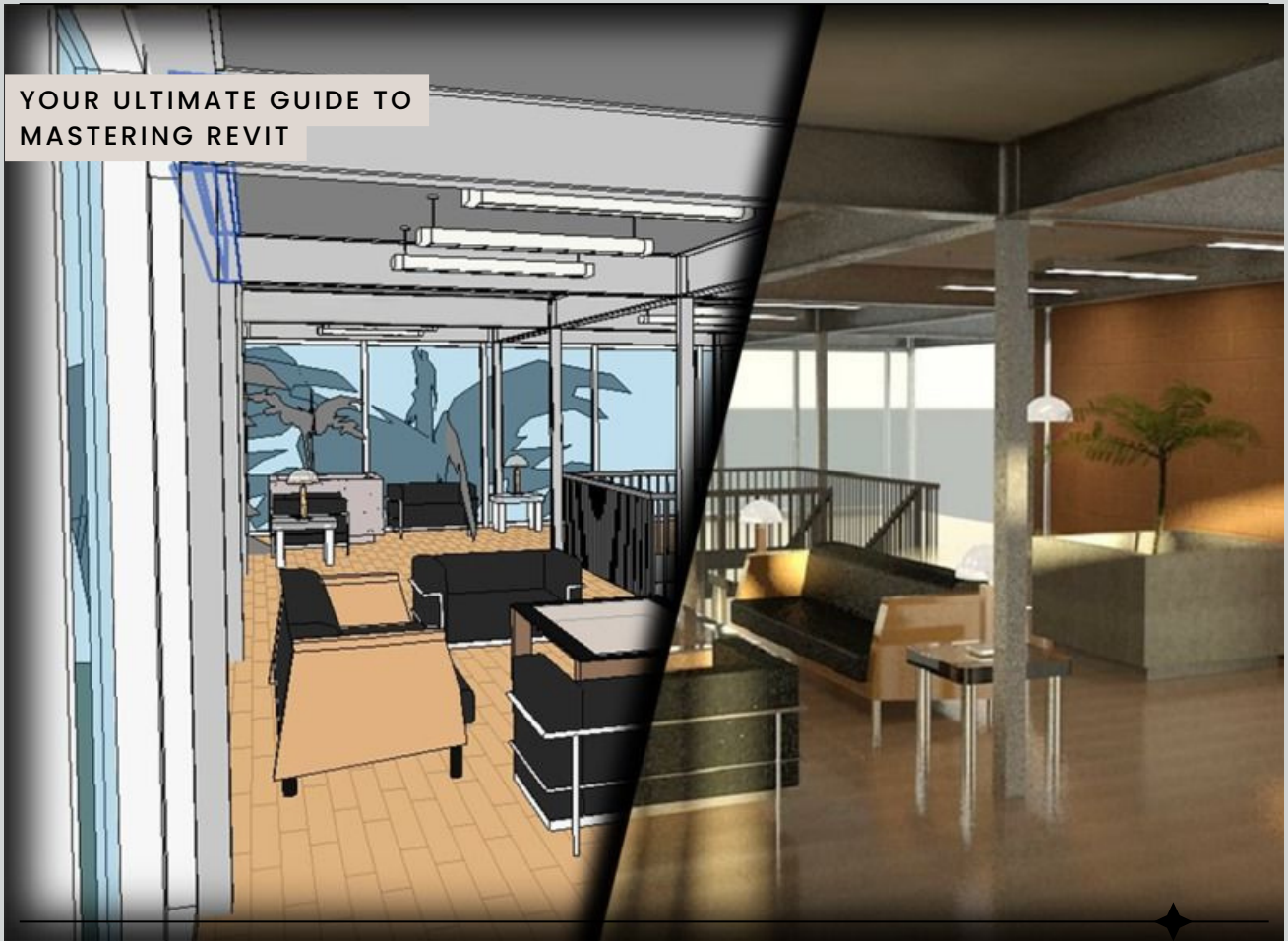


YOUR ULTIMATE GUIDE TO
MASTERING REVIT



Revit Architecture

"Unlock the Power of Building Design: A Complete
Revit Architecture Course for Beginners to
Advanced Users"

ARTIAGO
ART & DESIGN
INSTITUTE

Artiago.org

CREATED BY
AR MUJAHID SHAHID

TABLE OF CONTENTS

01

FUNDAMENTAL CONCEPTS

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Aliquam vitae odio non lacus
semper scelerisque id vel
ligula. Suspendisse egestas
tempus sapien.

02

PROJECT SETUP

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Aliquam vitae odio non lacus
semper scelerisque id vel
ligula. Suspendisse egestas
tempus sapien.

03

BASIC MODELING TECHNIQUES

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Aliquam vitae odio non lacus
semper scelerisque id vel
ligula. Suspendisse egestas
tempus sapien.

04

ADVANCED MODELING TECHNIQUES

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Aliquam vitae odio non lacus
semper scelerisque id vel
ligula. Suspendisse egestas
tempus sapien.

05

DETAILED WALL CREATION & ROOM DESIGNS

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Aliquam vitae odio non lacus
semper scelerisque id vel
ligula. Suspendisse egestas
tempus sapien.

06

BOQ AND BUILDING ANALYSIS

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Aliquam vitae odio non lacus
semper scelerisque id vel
ligula. Suspendisse egestas
tempus sapien.

TABLE OF CONTENTS

07

PLOTTING AND PUBLISHING

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Aliquam vitae odio non lacus
semper scelerisque id vel
ligula. Suspendisse egestas
tempus sapien.

08

MANAGING MATERIALS AND VIEWS GENERATION

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Aliquam vitae odio non lacus
semper scelerisque id vel
ligula. Suspendisse egestas
tempus sapien.

09

INTRODUCING LUMION

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Aliquam vitae odio non lacus
semper scelerisque id vel
ligula. Suspendisse egestas
tempus sapien.

10

QUALITY RENDERING IN LUMION

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Aliquam vitae odio non lacus
semper scelerisque id vel
ligula. Suspendisse egestas
tempus sapien.

11

ATMOSPHERE AND CAPTURE IN LUMION

Lorem ipsum dolor sit amet,
consectetur adipiscing elit.
Aliquam vitae odio non lacus
semper scelerisque id vel
ligula. Suspendisse egestas
tempus sapien.

Let's begin...

FUNDAMENTAL CONCEPTS

Session 1

Fundamental Concepts

Introducing building information modeling (BIM)

- Understanding the Revit Elements
- Editing elements within the Revit hierarchy

Interface Primer

- Familiarizing with the user interface
- View Navigation, Selection, Shortcut Keys

Practice Exercises:

- Create a simple BIM model
 - Open multiple views (plan, elevation, 3D) and navigate between them
 - Identify and describe different Revit elements (walls, floors, roofs)
 - Modify properties of elements within the Revit hierarchy
 - Familiarize yourself with the user interface, practice view navigation, selection techniques, and shortcut keys
-

PROJECT SETUP

Session 2

Project Setup

Creating a New Project

- Using templates, configuring projects
- Adding levels and grids
- Refining layout with temporary dimensions
- Adding columns

Setting North

- Project North & True North, Sun Path, Solar Path, Shadow

Practice Exercises:

- Create a new project from a template and configure it
- Add levels and grids to the project
- Use temporary dimensions to refine the layout
- Insert columns into the project
- Set Project North and True North, explore sun path, solar path, and shadows

BASIC MODELING TECHNIQUES

Session 3

Basic Modeling Techniques

Adding and Modifying Elements

- Walls, doors, windows, plumbing fixtures, and other components
- Using snaps, location walls, and modified tools

Constraints and Parametric Modeling

- Wall joints, modeling contours

Practice Exercises

- Add and adjust properties of walls, doors, and windows
- Use modify tools to manipulate components
- Add plumbing fixtures and other components
- Apply constraints and practice parametric modeling
- Model site contours

ADVANCED MODELING TECHNIQUES

Session 4

Advanced Modeling Techniques

Sketch-Based Modeling Essentials

- Floors, footprint roofs, attaching walls to roofs
- Extrusion roofs, shape editing tools, slope arrows, ceilings, openings

Stairs and Railings

- Adding stairs, railings

Practice Exercises

- Create floors and footprint roofs, attach walls to roofs
- Use shape editing tools to create a flat roof
- Work with slope arrows and create ceilings
- Add openings to walls and roofs
- Add stairs and railings to the project

DETAILED WALL CREATION AND ROOM DESIGNS

Session 5

Detailed Wall Creation and Room Designs

Wall Families and Curtain Walls

- Stacked walls, curtain grids, mullions, panels, sweeps, and reveals

Room Design

- Adding rooms, controlling room numbering, room bounding elements

Practice Exercises:

- Understand and create different wall families
- Add curtain walls and their components
- Create and apply sweeps and reveals
- Add and manage rooms, control room numbering
- Create tags, add and modify schedule views, generate schedules

BOQ AND BUILDING ANALYSIS

Session 6

BOQ and Building Analysis

Calculating Quantities and Cost Estimation

- Energy and Solar Analysis

Annotation and Fine Detailing

- Adding text, dimensions, symbols, legend views, creating detail-callouts

Practice Exercises

- Calculate quantities and perform cost estimation
- Conduct energy and solar analysis
- Add text, dimensions, symbols, and legend views to the project
- Create a detailed callout in the project

PLOTTING AND PUBLISHING

Session 7

Plotting and Publishing

Sheets and View References

- Adding and creating new sheets, working with placeholder sheets, aligning views with a guide
- Exporting to AutoCAD, plotting, and creating a PDF

Practice Exercises

- Add and create new sheets, work with placeholder sheets
- Align views using a guide
- Export the project to AutoCAD and create a PDF plot

MANAGING MATERIALS AND VIEWS GENERATION

Session 8

Managing Materials and Views Generation

Material Management

- Using Revit-provided materials, creating custom materials, adjusting material details

Views Generation

- Setting cameras, orthographic and perspective views, camera styles

Practice Exercises

- Use Revit-provided materials and create custom materials
- Adjust material details for different components
- Set up cameras, switch between orthographic and perspective views, experiment with camera styles

INTRODUCING LUMION

Session 9

Introducing Lumion

Introduction to Lumion Interface

- Starting Lumion from Revit, understanding views, using navigation tools, setting the time of day, asset library

Scene Creation

- Create views, render images, batch render, video creation, export video, create panoramas, manage uploads, adding sound, VR headset, collaboration tool, export project

Practice Exercises:

- Explore the Lumion interface and start Lumion from Revit
 - Use navigation tools and set the time of day
 - Use assets from the library in your project
 - Create views, render images, batch render, create and export videos, create panoramas, manage uploads, add sound, use VR headset, utilize collaboration tool
 - Export the project from Lumion
-

QUALITY RENDERING IN LUMION

Session 10:

Quality Rendering in Lumion

Rendering Techniques

- Rendering an image, style, exposure, projection, depth of field, focal and field of view, rendering quality, contrast, color, brightness, effects

Practice Exercises:

- Render images with different styles and exposure settings
- Adjust projection and depth of field
- Experiment with focal length and field of view
- Adjust rendering quality, contrast, color, and brightness
- Apply various effects to enhance the rendering

ATMOSPHERE & CAPTURE IN LUMION

Session 11

Atmosphere and Capture in Lumion

Atmosphere Settings

- Fog, illumination, horizon, wind, carpet, grass, clouds

Capture Techniques

- Customization, input, performance, preferences

Practice Exercises:

- Adjust settings for fog, illumination, horizon, wind, carpet, grass, and clouds
- Use the capture tab to take screenshots and record videos
- Customize Lumion settings for input, performance, and preferences within Revit