ELISE MOSS Autodesk Certified Instructor

Autodesk Revit 2021 Architecture Basics From the Ground Up





Better Textbooks. Lower Prices. www.SDCpublications.com

Visit the following websites to learn more about this book:





Googlebooks



TABLE OF CONTENTS

Preface	i
Acknowledgements	i
Table of Contents	ii
Lesson 1 The Revit Interface Exercise 1-1	
Using the Steering Wheel & ViewCube Exercise 1-2	1-9
Changing the View Background Exercise 1-3	1-17
Closing and Opening the Project Browser and Properties Palette Exercise 1-4	1-20
Using the System Browser Exercise 1-5	1-22
Changing the Ribbon Display Exercise 1-6	1-24
Temporary, Permanent, and Listening Dimensions	1-26
Exercise 1-7 Setting File Locations	1-68
Exercise 1-8 Adding the Default Template to Recent Files	1-69
Exercise 1-9 Turning Off the Visibility of Ribbons	1-71
Quiz 1	Q1-1
Lesson 2 Mass Elements Exercise 2-1	
Shapes	2-2
Exercise 2-2 Create a Conceptual Model	2-10
Exercise 2-3 Adding an In-Place Mass	2-14
Exercise 2-4 Modifying Mass Elements	2-17
Exercise 2-5 Create Wall By Face	2-24
Exercise 2-6 Adding Doors and Windows	2-29
Exercise 2-7 Creating a Conceptual Mass Exercise 2-8	2-36
Using a Conceptual Mass in a Project	2-45

Additional Projects	AP2-1
Quiz 2	
Lesson 3	
Floor Plans Exercise 3-1	
Placing a Grid	3-3
Exercise 3-2	5-5
Placing Walls	3-7
Exercise 3-3	
Converting an AutoCAD Floor plan	3-17
Exercise 3-4	
Wall Properties	3-24
Exercise 3-5	
Add Level 1 Interior Walls	3-31
Exercise 3-6	
Add Level 2 Interior Walls	3-34
Exercise 3-7	2.41
Add Doors	3-41
Exercise 3-8	2.45
Define a Starting View	3-45
Exercise 3-9	3-48
Exploring Door Families Exercise 3-10	3-48
Adding Stairs	3-56
Exercise 3-11	5-50
Creating a Handrail on a Wall	3-59
Exercise 3-12	5.57
Modifying the Floor Plan – Skills Review	3-65
Exercise 3-13	
Defining a 2-hr Wall	3-68
Exercise 3-14	
Adding an Elevator	3-69
Exercise 3-15	
Load Family	3-77
Exercise 3-16	
Adjust Room Sizes	3-83
Exercise 3-17	
Mirror Components	3-87
Exercise 3-18	
Create a 3D View	3-92
Exercise 3-19	
Copying Lavatory Layouts	3-94
Exercise 3-20	
Add a Door to a Curtain Wall	3-98
Exercise 3-21	
Modifying a Curtain Wall	3-104
Exercise 3-22	-
Curtain Wall with Spiders	3-109

Exercise 3-23 Adding Windows	3-113
Exercise 3-24	5-115
Floor Plan Layout	3-119
Additional Projects	AP3-1
Quiz 3	Q3-1
Lesson 4	
Materials Exercise 4-1	
Modifying the Material Browser Interface Exercise 4-2	4-3
Copy a Material from a Library to a Project Exercise 4-3	4-11
Create a Custom Material Library Exercise 4-4	4-15
Create Paint Materials	4-16
Exercise 4-5 Add Categories and Materials to a Custom Library	4-20
Exercise 4-6 Defining Wallpaper Materials	4-22
Exercise 4-7 Defining Vinyl Composition Tile (VCT)	4-25
Exercise 4-8 Define a Glass Material	4-33
Exercise 4-9 Defining Wood Materials	4-38
Exercise 4-10	
Defining Site Materials Exercise 4-11	4-39
Defining Masonry Materials Exercise 4-12	4-43
Assigning Materials to Stairs	4-46
Additional Projects	AP4-1
Quiz 4	Q4-1
Lesson 5 Floors and Ceilings	

Floors and Cellings	
Exercise 5-1	
Creating Floors	5-1
Exercise 5-2	
Copying Floors	5-6
Exercise 5-3	
Creating a Shaft Opening	5-8

Exercise 5-4	
Adding an Opening to a Floor	5-11
Exercise 5-5	
Creating Parts	5-14
Exercise 5-6	
Viewing Parts in a Floor Plan View	5-21
Exercise 5-7	
Adding a Railing	5-23
Exercise 5-8	
Creating Ceilings	5-27
Exercise 5-9	
Adding Lighting Fixtures	5-28
Exercise 5-10	
Applying Paints and Wallpaper to Walls	5-30
Additional Projects	AP5-1
Quiz 5	Q5-1

Lesson 6 Schedules

Exercise 6-1	
Adding Door Tags	6-2
Exercise 6-2	
Creating a Door Schedule	6-5
Exercise 6-3	
Modifying Family Parameters	6-11
Exercise 6-4	
Creating Shared Parameters	6-18
Exercise 6-5	
Adding Shared Parameters to a Schedule	6-22
Exercise 6-6	
Adding Shared Parameters to Families	6-29
Exercise 6-7	
Creating a Custom Window Schedule	6-33
Exercise 6-8	
Adding an Image to a Schedule	6-38
Exercise 6-9	
Create a Finish Schedule	6-41
Exercise 6-10	
Adding Schedules and Tables to Sheets	6-46
Exercise 6-11	
Using Keynotes	6-48
Exercise 6-12	
Create a Building Elevation with Keynotes	6-53
Exercise 6-13	
Find and Replace Families	6-61
Exercise 6-14	
Modifying Family Types in a Schedule	6-62

Exercise 6-15	
Export a Schedule	6-66
Exercise 6-16 Assigning Fonts to a Schedule	6-69
Exercise 6-17	0-09
Using a View Template for a Schedule Exercise 6-18	6-71
Exporting a View Template to another Project	6-73
Additional Projects	AP6-1
Quiz 6	Q6-1
Lesson 7	
Roofs	
Exercise 7-1 Creating a Roof Using Footprint	7-2
Exercise 7-2	7-2
Modifying a Roof Exercise 7-3	7-7
Modifying a Roof Form	7-14
Exercise 7-4 Adding Roof Drains	7-16
Exercise 7-5	/-10
Adding a Gable by Modifying a Roof Sketch	7-18
Additional Projects	AP7-1
Quiz 7	Q7-1
Lesson 8	
Elevations, Details & Plans Exercise 8-1	
Creating Elevation Documents	8-2
Exercise 8-2 Using Line Work	8-5
Exercise 8-3	0-5
Creating a Section View Exercise 8-4	8-8
Modifying Keynote Styles	8-19
Exercise 8-5 Adding Window Tags	8-25
Exercise 8-6	8-23
Changing Window Tags from Type to Instance Exercise 8-7	8-26
Creating a Plan Region View	8-29
Exercise 8-8 Creating a Drafting View	8-33
Creating a Drafting View Exercise 8-9	0-33
Adding a Callout	8-40

Exercise 8-10	
Adding a Detail to a Sheet	8-42
Exercise 8-11	
Importing a Detail View	8-45
Exercise 8-12	
Reassigning a Callout to a new Drafting View	8-49
Exercise 8-13	
Using a Matchline	8-52
Exercise 8-14	
Modifying a Crop Region	8-59
Exercise 8-15	
Updating a Schedule Using Shared Parameters	8-61
Exercise 8-16	
Create a Sheet List	8-62
Exercise 8-17	
Create a PDF Document Set	8-65
Additional Projects	
	AP8-1
Quiz 8	Q8-1

Qı	ıiz	8
		•

Lesson 9 Rendering

Exercise 9-1	
Create a Toposurface	9-1
Exercise 9-2	
Create a Split Region	9-4
Exercise 9-3	
Create a Building Pad	9-6
Exercise 9-4	
Add Site Components	9-10
Exercise 9-5	
Defining Camera Views	9-12
Exercise 9-6	
Rendering Settings	9-16
Exercise 9-7	
Render Region	9-19
Exercise 9-8	
Space Planning	9-21
Exercise 9-9	
Building Sections	9-25
Exercise 9-10	
Decals	9-27
Exercise 9-11	
Creating a 3D Camera View (Reprised)	9-31
Exercise 9-12	
Rendering Using Autodesk 360	9-36

Exercise 9-13 Placing a Rendering on a Sheet	9-39
Exercise 9-14	0.44
Placing a Path for a Walkthrough Exercise 9-15	9-44
Playing the Walkthrough	9-46
Exercise 9-16	
Editing the Walkthrough Path	9-47
Exercise 9-17 Creating an Animation	9-49
C C C C C C C C C C C C C C C C C C C	
Additional Projects	AP9-1
Quiz 9	Q9-1
Lesson 10	
Customizing Revit	
Exercise 10-1 Creating an Annotation Symbol	10-1
Exercise 10-2	10-1
Creating a Custom Title Block	10-6
Exercise 10-3	
Using a Custom Title Block	10-16
Exercise 10-4	10.10
Creating a Line Style Exercise 10-5	10-18
Defining Keyboard Shortcuts	10-20
Exercise 10-6	10 20
Defining Reference Plane Object Styles	10-23
Exercise 10-7	
Creating a Furniture Family	10-25
Exercise 10-8 Modifying a Family	10-48
Modifying a Family Exercise 10-9	10-40
Adding a Shared Parameter to a View Label	10-49
Exercise 10-10	
Managing Family Subcategories	10-60
Quiz 10	Q10-1
	· · ·

Revit Hot Keys

About the Author