

Daniel John Stine AIA, CSI, CDT

# Residential Design Using AutoCAD® 2022

Includes video instruction



Better Textbooks. Lower Prices.  
[www.SDCpublications.com](http://www.SDCpublications.com)



**ACCESS CODE**  
UNIQUE CODE INSIDE

Visit the following websites to learn more about this book:



[amazon.com](https://www.amazon.com)

[Google books](https://books.google.com)

[BARNES & NOBLE](https://www.barnesandnoble.com)

## Table of Contents

	<b>Page</b>
<b>1. Getting Started with AutoCAD 2022</b>	
1-1 What is AutoCAD 2022?	1-1
1-2 Overview of the AutoCAD 2022 User Interface	1-3
1-3 Open, Save & Close an Existing Drawing	1-11
1-4 Creating a New Drawing	1-15
1-5 Using Zoom & Pan to View Your Drawings	1-17
1-6 Using the AutoCAD Help System	1-23
1-7 Introduction to Autodesk A360	1-27
<i>Self-Exam &amp; Review Questions</i>	1-33
<b>2. Crash Course Introduction (The Basics)</b>	
2-1 Lines and Shapes	2-1
2-2 Object Snaps	2-16
2-3 Modify Tools	2-22
2-4 Annotations	2-35
2-5 Printing	2-39
<i>Self-Exam &amp; Review Questions</i>	2-43
<b>3. Drawing Architectural Objects (Draw &amp; Modify)</b>	
3-1 Rectilinear Objects	3-1
3-2 Objects with Curves	3-9
3-3 Using Layers	3-31
<i>Self-Exam &amp; Review Questions</i>	3-41
<b>4. FLOOR PLANS</b>	
4-1 Walls	4-1
4-2 Doors	4-21
4-3 Windows	4-36
4-4 Annotation and Dimensions	4-42
<i>Self-Exam &amp; Review Questions</i>	4-53
<u>Additional Tasks</u>	
Task 4-1 Fireplace - North	4-54
Task 4-2 Main Stairway	4-59
Task 4-3 Secondary Stairway	4-60
Task 4-4 Porch	4-61
Task 4-5 Garage Steps	4-62
Task 4-6 Fireplace - South	4-62
<b>5. EXTERIOR ELEVATIONS</b>	
5-1 Elevation Outlines	5-1
5-2 Windows	5-18
5-3 Doors	5-29
5-4 Chimney, Railing and Siding	5-37
<i>Self-Exam &amp; Review Questions</i>	5-51
<u>Additional Tasks</u>	
Task 5-1 Grade Line	5-52
Task 5-2 Draw the Other Chimney	5-54
Task 5-3 Print Content from a Website	5-55
Task 5-4 Adding Foundation Lines	5-55

	<b>Page</b>
<b>6. SECTIONS</b>	
6-1 Building Sections	6-1
6-2 Typical Wall Section	6-6
6-3 Adding Annotation to Wall Section	6-10
6-4 Stair Section	6-14
<i>Self-Exam &amp; Review Questions</i>	6-24
<u>Additional Tasks</u>	
Task 6-1 Additional Building Sections	6-25
Task 6-2 Wall Section at Garage	6-25
Task 6-3 Hatch Wall Sections	6-25
Task 6-4 Stair Detail	6-26
<b>7. PLAN LAYOUT &amp; ELEVATIONS</b>	
7-1 Bathroom Layout	7-1
7-2 Bathroom Elevation	7-8
7-3 Adding Furnishings to your Floor Plans	7-21
7-4 Using Tool Palettes	7-27
<i>Self-Exam &amp; Review Questions</i>	7-38
<u>Additional Tasks</u>	
Task 7-1 Toilet Room Plan Layouts	7-39
Task 7-2 Toilet Room Elevations	7-39
Task 7-3 Furniture Layout	7-39
<b>8. SITE PLAN</b>	
8-1 Draw Existing Survey	8-1
8-2 Add House, Driveway and Walks	8-10
8-3 Layout New Contours	8-14
<i>Self-Exam &amp; Review Questions</i>	8-21
<u>Additional Tasks</u>	
Task 8-1 Add Items to the Site Plan	8-22
Task 8-2 Draw another Grade Profile	8-22
Task 8-3 Update Grade Profile for Each Exterior Elev.	8-22
<b>9. SCHEDULES &amp; SHEET SET UP</b>	
9-1 Room Finish Schedule	9-1
9-2 Sheet Set up & Management (Sheet Sets)	9-17
9-3 Sheet Index	9-46
<i>Self-Exam &amp; Review Questions</i>	9-53
<u>Additional Tasks</u>	
Task 9-1 Create a Door Schedule	9-54
Task 9-2 Place All Your Views on Sheets	9-54
Task 9-3 Place Callout Blocks to Reference Your Drawings	9-54
Task 9-4 Add Additional Raster Images to Your Drawings	9-54
<b>10. LINEWEIGHTS &amp; PLOTTING</b>	
10-1 Lineweights	10-1
10-2 Plotting: Digital Set	10-12
10-3 Plotting: Hardcopy Set	10-26
<i>Self-Exam &amp; Review Questions</i>	10-36
<u>Additional Tasks</u>	
Task 10-1 Apply Lineweights to all your Drawings	10-37
Task 10-2 Plot all your Drawings Full Size	10-37
Task 10-3 Email a DWF File	10-37
Task 10-4 View your files in the Cloud	10-37
<b>Index</b>	Index-1

## Exclusive Bonus Content

Instructions for download on inside front cover of book

### 11. INTRODUCTION TO COMPUTERS- 49 page PDF

- 11-1 Computer Basics: Terms and Functions
  - 11-2 Overview of the Windows User Interface
  - 11-3 File Management Introduction
- Self-Exam & Review Questions*

### 12. INTRODUCTION: MUST KNOW COMMANDS- 89 page PDF

- 12-1 Drafting and Display Tools
  - 12-2 Draw Commands
  - 12-3 Modify – Part 1
  - 12-4 Modify – Part 2
  - 12-5 Annotation and Layers
  - 12-6 Plotting
- Self-Exam & Review Questions*

### Appendix A – Engineering Graphics - 38 page PDF

- A-1 Introduction
- A-2 Engineering Graphics
- A-3 Orthographic Projection

### Appendix B – ROOF STUDY WORKBOOK – DRAFT EDITION - 90 page PDF

### Appendix C – Sketching Exercises - 52 page PDF

- C-1 Introduction
- C-2 Freehand sketching from photos
- C-3 Surveying and Sketching Objects
- C-4 Sketching Floor Plans
- C-5 Sketching Elevations – two point perspective
- C-6 Sketching Elevations – one point perspective
- C-7 Sketching Plans – one point perspective

## Videos

1. User Interface
2. Getting Started
3. Draw Tools
4. Modify Tools
5. Annotation
6. Floor Plans
7. Exterior Elevations
8. Sections
9. Interior Design
10. Plotting