

# Contents

---

Introduction	xv
<b>Chapter 1 ■ Getting Familiar with AutoCAD</b>	<b>1</b>
Understanding the AutoCAD Window	2
Starting a Drawing	19
Panning and Zooming to Adjust Your View	23
Understanding the Layout View	25
Understanding How Command Options Work	27
Getting Help	29
Summary	32
<b>Chapter 2 ■ Understanding the Drafting Tools</b>	<b>33</b>
Understanding the AutoCAD Coordinate System	34
Setting Up a Drawing	44
Using a Digital T Square and Triangle	49
Getting a Visual Reference with the Grid Mode	52
Snapping to the Grid or Other Regular Intervals	53
Changing the Grid and Snap Settings	54
Selecting Exact Locations on Objects	57
Aligning Objects Using Object Snap Tracking and Tracking Points	63
Using the Temporary Tracking Point Feature	67
Summary	69

<b>Chapter 3 ■ Drawing 2D Objects</b>	<b>71</b>
Working with the 2D Draw Control Panel	72
Drawing Straight Lines	72
Drawing Circles and Arcs	73
Drawing Curves	76
Drawing Parallel Lines	82
Drawing Revision Clouds	83
Working with Hatch Patterns and Solid Fills	85
Drawing Regular Polygons	100
Using Objects to Lay Out Your Drawing	101
Summary	108
<b>Chapter 4 ■ Editing AutoCAD Objects</b>	<b>109</b>
Selecting Objects	110
Editing the Windows Way	113
Changing Objects with Grips and Dynamic Input	118
Controlling Objects Using the Properties Palette	122
Summary	124
<b>Chapter 5 ■ Editing with the 2D Draw     Control Panel Tools</b>	<b>125</b>
Selecting Objects	126
Erasing Objects	127
Joining Objects	128
Moving and Copying	135
Scaling, Stretching, and Rotating	139
Breaking an Object into Two	144
Editing Xrefs and Blocks	145
Editing Polylines	147
Summary	149

<b>Chapter 6 ■ Creating 3D Drawings</b>	<b>151</b>
Getting to Know the 3D Modeling Workspace	152
Drawing in 3D Using Solids and Surfaces	155
Changing Your Point of View	168
Creating 3D Forms from 2D Shapes	173
Specifying Exact Distances in 3D Space	186
Controlling the Appearance of Your Model	187
Summary	200
<b>Chapter 7 ■ Getting Organized with Layers</b>	<b>201</b>
Creating and Assigning Layers	202
Setting the Current Layer	206
Controlling Layer Visibility	207
Locking Layers from Printing and Editing	212
Finding the Layers You Want	213
Taming an Unwieldy List of Layers	214
Saving and Recalling Layer Settings	219
Using the Layers II Toolbar for Managing Layers	220
Organizing Visual Content Using Properties	223
Summary	232
<b>Chapter 8 ■ Using Blocks, Groups, Xrefs, and DesignCenter</b>	<b>233</b>
Using Blocks to Organize Objects	234
Organizing Objects Using Groups	243
Getting Multiple Uses from Drawings	
Using External References	247
Keeping Track of Drawing Components with DesignCenter	251

Keeping Tools on Hand with Tool Palettes Window	258
Summary	261
<b>Chapter 9 ■ Creating Text</b>	<b>263</b>
Adding and Formatting Text	264
Understanding Text and Scale	273
Using Styles to Organize Your Fonts	274
Adding Single Words with the Single-Line Text Object	277
Adding Tables to Your Drawing	278
Summary	292
<b>Chapter 10 ■ Using Dimensions</b>	<b>293</b>
Understanding the Parts of an AutoCAD Dimension	294
Dimensioning in the Model Tab or a Layout Tab	295
Drawing Linear Dimensions	296
Dimensioning Nonorthogonal Objects	299
Adding a Note with an Arrow Using the Leader Tool	303
Using Ordinate Dimensions	306
Adding Tolerance Notation	307
Editing Dimensions	309
Setting Up the Dimension's Appearance	313
Summary	324
<b>Chapter 11 ■ Gathering Information</b>	<b>325</b>
Measuring Areas	326
Finding the Coordinate of a Point	329
Measuring Distances	329
Measuring Angles	330

Getting the General Status of the Drawing	331
Finding the Time Spent on a Drawing	332
Adding Nondrawing Data to Store with Your Drawing	333
Finding Text in a Drawing	333
Locating and Selecting Named Components	334
Finding Missing Support Files	335
Summary	338
<b>Chapter 12 ■ Laying Out and Printing Your Drawing</b>	<b>339</b>
Setting Up a Drawing for Printing	340
Printing Your Drawing	351
Storing Your Printer Settings	358
Controlling Color, Lines, and Fills through Plot Styles	359
Assigning Named Plot Styles Directly to Layers and Objects	366
Converting a Drawing from Color Plot Styles to Named Plot Styles	369
Summary	370
Index	371

