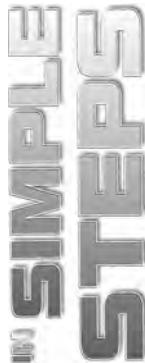


Table of Contents

Chapter 1 ■ Introduction to AutoCAD 2012	1
Introducing New and Enhanced Features in AutoCAD 2012.....	2
Understanding the Hardware and Software Requirements to Install AutoCAD 2012.....	3
Installing AutoCAD 2012.....	4
Exploring the AutoCAD 2012 User Interface	12
The Application Menu	13
The Quick Access Toolbar	14
The InfoCenter Toolbar.....	14
The Navigation Bar.....	14
Ribbon	15
The Status Bar.....	15
The Quick View Layouts Button.....	17
The Quick View Drawings Button	17
Tooltips	18
Working with the Command Line Window.....	19
Entering a Command in the Command Line Window.....	19
Resizing the Command Line Window.....	20
Hiding the Command Line Window	21
Introducing AutoCAD Files	23
Exploring the Menu Bar	23
Exploring Workspaces.....	24
Switching Between Workspaces	24
Customizing a Workspace.....	26
Working with a Drawing	31
Starting a Drawing	31
Setting the Units Format and Precision	33
Saving a Drawing	34
Opening an Existing Drawing File	36
Using the Help Feature in AutoCAD 2012	37
Summary	38



Chapter 2 ■ Drafting a Basic Floor Plan

39

Understanding Drafting in AutoCAD 2012.....	40
Understanding the Coordinate System.....	41
Understanding 2D Coordinates.....	41
Understanding 3D Coordinates.....	42
Understanding Direct Distances.....	42
Drawing Walls.....	42
Creating a Boundary Wall.....	42
Creating Exterior Walls.....	51
Creating Interior Walls	55
Modifying Walls	65
Drawing Doors and Windows	77
Drawing the Doors.....	77
Drawing a Window.....	89
Working with Blocks	92
Creating a Block.....	93
Saving a Block	95
Adding Door Blocks to the Floor Plan	97
Adding a Main Entrance Door Block	97
Adding a Kitchen Door Block.....	101
Working with DesignCenter.....	105
Working with Fence Walls.....	110
Adding the Fence Wall	110
Modifying the Fence Wall	113
Summary	116

Chapter 3 ■ Adding Text and Dimensions to the Floor Plan

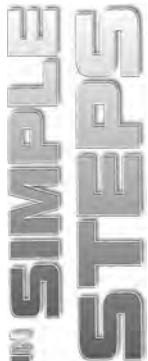
117

Working with Text Styles.....	118
Creating a New Text Style.....	119
Editing a Text Style.....	120
Adding Text to a Floor Plan.....	121
Single Line Text.....	122
Multiline Text.....	124
Working with Dimensions.....	126
Creating a New Dimension Style	126
Modifying a Dimension Style	130

Table of Contents

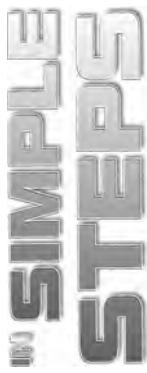
Adding Dimensions to a Floor Plan	131
Using the Continue Dimensions Command	135
Working with Leaders.....	138
Creating a Leader Style.....	138
Drawing a Leader	141
Summary.....	142
Chapter 4 ■ Working with Layers 143	
Working with Layers.....	144
Creating a New Layer	144
Setting the Color of a Layer.....	146
Loading Linetypes on a Layer.....	147
Setting the Lineweight of a Layer.....	149
Assigning Objects to Appropriate Layers.....	151
Managing Layers.....	153
Turning off a Layer.....	153
Freezing or Thawing a Layer	155
Managing Transparency of Objects in a Layer	156
Locking a Layer.....	157
Summary.....	158
Chapter 5 ■ Drafting Civil Architecture 159	
Exploring Different Types of Construction	160
Building Construction.....	160
Heavy/Civil Construction.....	160
Industrial Construction.....	161
Drafting Mall Plan	161
Creating a Boundary Wall.....	161
Creating Exterior Walls for Shops	162
Creating Interior Walls for Shops	163
Modifying Walls	168
Working with Blocks	174
Creating Blocks	174
Adding Various Blocks in a Mall Plan.....	180
Working with DesignCenter.....	188
Adding Furniture Blocks in the Mall Plan	188
Adding Accessory Blocks in the Mall Plan	191
Working with Railing Walls	192

AutoCAD 2012 in Simple Steps



Adding a Railing Wall	192
Modifying the Railing Wall.....	195
Summary.....	198
Chapter 6 ■ Working in 3D	199
Working with the 3D Workspaces.....	200
Switching to the 3D Modeling Workspace.....	200
Setting Visual Styles in the 3D Modeling Workspace.....	201
Working with 3D Commands	203
Exploring the Solid Modeling Commands.....	203
Exploring the Solid Editing Commands.....	210
Working with Navigation Tools	220
Using the ViewCube Tool.....	220
Exploring the SteeringWheels Tool.....	221
Summary.....	222
Chapter 7 ■ Drafting a Township Project in AutoCAD 2012	223
Exploring the Basic Concepts for the Development of Construction Project.....	224
Planning the Construction.....	224
Scheduling the Site Preparation Activities.....	225
Understanding the Construction Administration.....	226
Estimating the Budget of a Construction.....	226
Drafting a Township Project.....	226
Creating Boundary Walls	227
Creating Exterior Walls.....	228
Creating Interior Sections	229
Modifying Walls	231
Working with Blocks	237
Drawing Blocks in the Township project	237
Adding Blocks in the Township Project	255
Working with DesignCenter.....	268
Adding Accessories in the Township Project	268
Adding Plant Life Blocks in the Township Project.....	270
Importing Drawings in the Township Project.....	273
Importing the Floor Plan	273
Importing the Mall Plan.....	277
Summary.....	278

Table of Contents



Chapter 8 ■ Working with Mechanical Objects	279
Understanding Mechanical Engineering	280
Setting the Visual Styles used in Drafting Objects.....	280
Working with Shapes in 3D.....	285
Creating Windmill Blades	285
Creating a Windmill Base	292
Modifying the Windmill Mechanical Object.....	298
Rendering the Windmill Mechanical Object	305
Summary	306
Chapter 9 ■ Plotting and Printing	307
Working with Sheet Set Manager	308
Setting Up Drawing for Plotting	312
Adding a Custom Paper Size from Scratch for a Layout.....	312
Creating a New Page Setup.....	318
Plotting a Drawing	322
Plotting Files in the PDF Format.....	324
Summary	327