

Payne-Gallway Publishers Limited

# Introduction to AutoCAD 2002



J. T. Roberts



BPB PUBLICATIONS

# Contents

Preface .....	6
Conventions used in this Book .....	6
Introduction .....	7
What is AutoCAD? .....	7
Who is AutoCAD for? .....	7
What if I use an earlier version of AutoCAD? .....	7
I've never drawn in 3D .....	7
What's in the book? .....	8
The Scenario .....	8
<b>Chapter 1 — The Basics .....</b>	<b>9</b>
Activate AutoCAD .....	9
The Keyboard .....	11
The Pointing Device .....	12
The Text Window .....	14
Drawing in AutoCAD .....	15
<b>Chapter 2 — Setting up the Drawing .....</b>	<b>17</b>
Target Drawing .....	17
Starting the Target Drawing .....	20
Drawing Aids .....	22
Units Precision .....	23
Drawing using Layers .....	24
To Add a New Layer .....	24
Layer Colours .....	26
Saving Drawings .....	28
<b>Chapter 3 — Drawing the Building .....</b>	<b>29</b>
Enlarging the view of the Drawing (The Zoom Command) .....	33
Modifying the Drawing .....	34
Closing Down a Toolbar .....	37
Adding the Door Openings .....	38
Moving around the Drawing (The Pan Command) .....	39
Modifying the Drawing (The Break Command) .....	40
Modifying the Drawing (The Extend command) .....	41
<b>Chapter 4 — Drawing the Windows .....</b>	<b>45</b>
Changing Layers .....	45
Copying Objects (The Array Command) .....	45
Drawing with Object Snap .....	47
Drawing the Glazing .....	52
Copying with the Offset Command .....	53
.....	54
<b>Chapter 5 — Drawing with Arcs .....</b>	<b>61</b>
Copying with the Mirror Command .....	61
Drawing Arcs .....	64
<b>Chapter 6 — Making Repetitive Symbols .....</b>	<b>68</b>
Rules for Drawing Blocks .....	68
The Process of Creating a Block .....	68
The Process of Inserting a Block .....	69
Exporting blocks .....	70
Creating Blocks for the Drawing .....	70
.....	72

**Contents**

Creating Blocks of the Furniture Symbols .....	82
Inserting the Blocks .....	83
<b>Chapter 7 — Drawing the Exterior Details .....</b>	
Drawing the Boundary Wall .....	86
Drawing the Driveway .....	86
Drawing the Patio Edge .....	89
Using a Hatch Pattern for the Patio .....	90
91	
<b>Chapter 8 — Dimensioning and Annotating the Drawing.....</b>	93
Setting up the Dimension Style .....	94
Dimensioning the Drawing .....	97
Setting the Text Style to Annotate the Drawing .....	100
Adding Text to the Drawing .....	101
<b>Chapter 9 — Changing the View of the Drawing .....</b>	103
Creating 3D from 2D .....	104
Making the Drawing look Solid .....	105
To Draw the Roof .....	106
Drawing with 3D Coordinates .....	106
Making the Roof Solid .....	108
Changing to a User Coordinate System .....	109
Saving the UCS Position .....	110
Changing the UCS .....	111
Hatching the Roof .....	112
To View the Completed 2D target Drawing .....	116
<b>Chapter 10 — Paper Space and Plotting .....</b>	117
Changing to Paper Space .....	119
Inserting the Pre-drawn Border .....	120
Moving between Model Space and Paper Space .....	123
Plotting the Drawing .....	125
To Export Blocks for use in Other Drawings .....	126
<b>Chapter 11 - Drawing Exercises .....</b>	127
Introduction to Drawing with Coordinates .....	128
Absolute Coordinates .....	129
Relative Coordinates .....	129
Polar Coordinates .....	129
Exercise 1 .....	130
Drawing with Absolute Coordinates .....	131
Drawing with Relative Coordinates .....	131
Drawing with Polar Coordinates .....	132
Drawing Accurately with Grid and Snap .....	133
Exercise 2 .....	135
Drawing with Object Snap .....	135
Exercise 3 .....	138
Exercise 4 .....	138
Exercise 5 .....	139
Exercise 6 .....	139
Exercise 7 .....	140
Exercise 8 .....	140
Exercise 9 .....	141
	142
<b>Index .....</b>	