

TMS 
CADCentre

SOLIDWORKS®

DraftSight: Essentials



Contents

Introduction

About This Course	2
Prerequisites	2
Course Design Philosophy	2
Using this Book	2
About the Training Files.....	3
Windows.....	3
Conventions Used in this Book	3
Use of Color	4
Graphics and Graphics Cards	4
Color Schemes	4
More DraftSight Training Resources	4

Lesson 1: User Interface

What is DraftSight?	6
The User Interface	6
Stages in the Process.....	9
Pointing Devices.....	9
Title Bar	13
Toolbars.....	15
Dock and Undock.....	16
Tool palettes	18
Customize - Tool palettes	19
Exercise 1: Mouse Gestures	26
Exercise 2: Tool Palettes.....	29

**Lesson 2:
View Commands**

Viewing Drawings in DraftSight 32
 Stages in the Process..... 32
 Dynamic Pan..... 32
 Dynamic Zoom..... 35
 Zoom Window 36
 Zoom Fit..... 37
 Rebuild 37
 Display Quality..... 37
 Zoom Previous 38
 Named Views 39
 View Tiles..... 41
 Viewports 42
 Exercise 3: Zoom and Pan 47
 Exercise 4: Views 50

**Lesson 3:
Coordinates**

DraftSight Coordinate System 56
 Stages in the Process..... 56
 Cartesian Coordinates..... 56
 Inquiries 59
 Distance 59
 Area..... 59
 Get Properties 60
 Get Time..... 61
 Units 61
 Unit Length Types 62
 Angular Unit Types 62
 Base Angle 63
 Coordinate Entry..... 64
 Quick Input..... 64
 Entity Snaps 66
 Esnap From Point 68
 Drawing Boundaries..... 70
 Exercise 5: Inquiries 72
 Exercise 6: Entity Snaps and Coordinates 75

Lesson 4:**Creating a Simple Drawing**

DraftSight Drawing Basics	80
Stages in the Process	80
New Drawings	80
Lines	82
Delete	86
Selection Methods	86
Rectangle	90
Circle	90
Undo / Redo	93
Arc	94
Polygon	97
Exercise 7: Create a simple drawing	98

Lesson 5:**Modifying Entities**

Modifications	102
Stages in the Process	102
Move	102
Rotate	104
Mirror	106
Stretch	107
Copy	109
Scale	110
Quick Modify	111
Power Trim	112
Exercise 8: Move and Rotate	115
Exercise 9: Mirror and Stretch	118
Exercise 10: Power Trim & Scale	121

Lesson 6:**Properties and Layers**

Layers	124
Stages in the Process	124
Layer States	124
Show or Hide Layers	125
Freeze and Thaw Layers	126
Locked Layers	127
Layer Manager	131
Entity Properties	131
Color	131
Line Style	132
Line Weight	133
Properties Painter	134
Clean	136
Merge Layers	139
Exercise 11: Layers and Properties	142

**Lesson 7:
Dimensions**

Dimensions 148
 Stages in the Process 148
 Dimension Styles 149
 Smart Dimension 153
 Linear Dimension 155
 Angular Dimension 156
 Diameter Dimension 157
 Dimension Palette 159
 Continue Dimensions 162
 Split Dimension 164
 Exercise 12: Dimension Style 166
 Exercise 13: Dimensioning 168
 Exercise 14: Modifying Dimensions 170

**Lesson 8:
Text**

Text 174
 Stages in the Process 174
 Text styles 175
 Simple Notes 176
 Notes 178
 Note Formatting 180
 Smart Leaders 184
 Curved Text 186
 Find and Replace 189
 Spell Check 190
 Exercise 15: Adding Text 192
 Exercise 16: Format Text 195

**Lesson 9:
Blocks**

Blocks 198
 Stages in the Process 199
 Make Blocks 200
 Paste as Block 203
 Insert Block 204
 Edit Component 207
 Assign Attributes 208
 Update Block Attributes 209
 Block Attributes Display Mode 210
 Edit Attributes 211
 Exercise 17: Creating and Inserting Blocks 214

Lesson 10: Custom Blocks

What are Custom Blocks?	220
What is an Element?	221
What is an Activity?	222
Stages in the Process	223
Edit Blocks	224
Mirror Element	224
Mirror Activity	227
Visibility States	230
Toggle Visibility	234
Exercise 18: Creating and testing a Custom Block.	238

Lesson 11: Entity Groups

Entity Groups	246
Stages in the Process	246
Creating Entity Groups	246
Entity Group Selection	247
Entity Group Display Mode	248
Entity Group	249
Edit Entity Group	253
Exercise 19: Creating and Editing Entity Groups.	254

Lesson 12: Printing

Printing in DraftSight	260
Stages in the Process	261
Print Previews	261
Print Configurations	264
Quick Print	268
Manual setup	271
Additional Options	273
Style Table	276
Exercise 20: Manual Print.	282