AutoCAD® 2010 Essentials

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AutoCAD® 2010 design and documentation software, one of the world's leading CAD programs, allows you to speed up documentation, share ideas accurately, and explore ideas more intuitively in 3D. It is powerful and flexible, and you can customize it for your specific needs.

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PREFACE

INTRODUCTION

- ◊ AutoCAD® has been the de facto drafting tool for PC users since 1982. As you read this, millions and millions of engineers, draftsmen, project managers, and engineering students are creating their drawings with AutoCAD.
- ◊ This book is perfect for new and novice users of AutoCAD 2010. It is also a very handy tool for college and university drafting instructors using AutoCAD 2010.
- ◊ This book will not teach what engineering drafting is or how to produce it. Knowing drafting and design concepts are prerequisites for using this book.
- ◊ This text can be instructor-led or self-taught.
    - The estimated time to complete instructor-led courseware is three days at eight hours a day.
    - If you opt to teach yourself, you have the luxury of completing the courseware at your own pace.
- ◊ At the end of each chapter, you will find Chapter Review questions that will help you test yourself to see if you understand the subject.
- ◊ There are 40 exercises integrated throughout the book to help you quickly implement what you have learned.
- ◊ There are 21 workshops that, together, will complete a full project (a small villa), starting with the creation of the project through plotting. Solving all of the workshops will teach you to:
    - Simulate a real-life project from beginning to end, thereby allowing you to implement what you have learned.

- Organize the information in a logical order.
- Learn all of the basic commands and functions in AutoCAD 2010.

◊ This text will cover the basic and intermediate levels of AutoCAD 2010.

PURPOSE AND OBJECTIVES

◊ At the completion of this book, the reader will be able to:

- Understand what AutoCAD is and how to deal with its basic operations, including the filing system
- Draw different objects with speed and precision
- Set up drawings
- Construct drawings in simple steps
- Modify any object in a drawing
- Create, insert, and edit blocks
- Hatch using different hatch patterns and methods
- Create text and tables
- Insert and edit dimensions
- Prepare and plot a drawing

PREREQUISITES

◊ The author assumes that you have experience using computers and the Microsoft® Windows® operating system.

◊ Also, you should have knowledge of starting new files, opening existing files, saving files, using "Save As" with files, closing files with or without saving, and exiting software.

◊ Because these commands are similar in all software packages, the author does not cover these subjects, unless it is necessary to demonstrate a command specific to AutoCAD.

ABOUT THE DVD

◊ A DVD is included in the book and contains the following:

- The AutoCAD 2010 trial version, which will last for 30 days starting from the day of installation. This version will help you solve all of the exercises and workshops in the book. Students with a valid university email address can visit http://students8.autodesk.com/?lbon=1 for student versions of the AutoCAD material for the duration of the class.
- Exercise and workshop files, which will be your starting point to solving all exercises and workshops in the book. Copy the **Book Exercises** and **Book Workshops** folder onto your hard drive. You will find two folders inside the workshop folder. The first one is named **Metric** for the metric units workshops, and the second one is named **Imperial** for the imperial units workshops.