



## AutoCAD LT 2010

This course explores the latest tools and techniques covering all draw commands and options, editing, dimensioning, hatching, and plotting techniques available with AutoCAD LT 2010. The course takes the user across a wide spectrum of engineering solutions through progressive examples, comprehensive illustrations, and detailed exercises, thereby making it ideal for both the novice and the advanced user.

The course features an effective introduction detailing the tools and commands covered in each module including changes and enhancements specific to AutoCAD LT 2010. The student will discover the utility of AutoCAD LT 2009 commands, Ribbon, Menu Browser, toolbars, palettes, and shortcut menus.

- First, every module is covered and they begin with a section that provides a detailed explanation of the commands and tools in AutoCAD LT 2010.
- Next, the command section is followed by tutorials that are created using these commands. This approach allows the student to use the text initially as a learning tool and then later as reference material.
- Lastly, the students will work on specific projects that show the preferred method of application of AutoCAD LT 2010 for their job requirements.



## Course Syllabus

### I. IDENTIFYING INFORMATION

**Course:** AutoCAD LT 2010  
**Prerequisite:** Basic computer skills  
**Time Frame:** 24 total contact hours, 8 modules will be covered  
**Instructor:** Noah Cavitt  
BS Engineer, Mechanical,  
14 years in the CAD field  
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### II. REFERENCE MATERIALS

1. AutoCAD LT 2010 for Designers by: Sham Tickoo

### III. COURSE GOALS AND OBJECTIVES

1. Work with screen commands
2. Open and close a new drawing
3. Open and close an existing drawing
4. Work with coordinate systems
5. Understanding basic display demands
6. Plot drawings
7. Drawing arcs, rectangles, ellipses and polygons
8. Editing, moving and copying sketches
9. Create text and tables
10. Basic geometric dimensioning and tolerancing
11. Plotting and hatching drawings
12. Create and insert annotative blocks



#### **IV. METHODOLOGY**

This course provides the solid fundamentals of the CAD tool to prepare the student for more specific and advanced functions. Each module will introduce new material that will prepare the student for the projects to be completed.

##### **Lectures**

Each detailed subject will be presented in a lecture format outlining the theory and standardized accepted methodology. A PDF file of the lecture material will be provided for the student's personal use as reference material. Lecture note outlines will be distributed to the students for each lecture to help the student capture personal notes.

##### **Specific Industry Examples**

Real life industry examples will be covered that detail out the application of the theory to demonstrate how different companies apply these tools and techniques. This will give the students a clear understanding of how and why these techniques are utilized at different companies and industries in different manners.

##### **In-Class Assignments**

Using the theory and industry examples the student will conduct several projects that outline each key principal on in-class projects. These projects will increase in complexity as the students further develop their skills in applying these tools and techniques.



**V. COURSE OUTLINE AND ASSIGNMENTS**

**Module 1: Introduction to AutoCAD LT 2010**

Screen Components	Discussion
Commands	Discussion
Saving Files and Backup	Discussion
Drawing Lines, Circles, etc.	Discussion
Plotting	Discussion
Layers	Discussion

**Module 2: Drawing Sketches**

Drawing Sketches	Discussion
Modifying sketches	Discussion
Grips	Discussion
Drawing Options	Discussion

**Module 3: Creating Text and Tables**

Creating Text	Discussion
Creating Tables	Discussion
Modifying Tables	Discussion

**Module 4: Dimensioning**

Dimensioning Terms	Discussion
Associative Dimensions	Discussion
Dimensional Constraints	Discussion
Multi-Leaders	Discussion

**Module 5: Constraints**

Adding Dimensional Constraints	Discussion
Equations	Discussion
Viewports	Discussion
Inserting Layouts	Discussion

**Module 6: Templates and Plotting**

Plotting Drawings	Discussion
Setting Plot Parameters	Discussion
Hatching	Discussion
Using the Tool Palette	Discussion



**Module 7: Blocks**

Forming Blocks  
Dynamic Blocks  
Inserting Blocks  
Defining Attributes

Discussion  
Discussion  
Discussion  
Discussion

**Module 8: Technical Drawing**

Orthographic Projections  
Dimensioning  
Sections and Views  
World Coordinate System (WCS)

Discussion  
Discussion  
Discussion  
Discussion