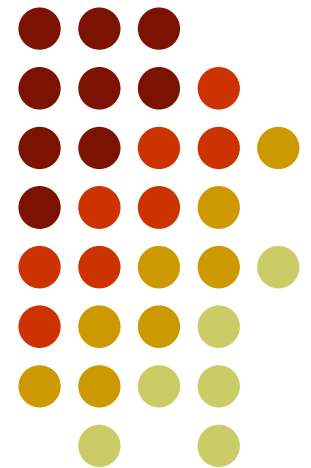


# Building Construction & Graphics AutoCAD

Lecture-2

## Command Basics



# AutoCAD



## Command Basics

- Command Format
- Methods to Initiate a Command
- Command Techniques
- Pan command

# Command Basics

---



## Command Format

AutoCAD displays a prompt that tells what to do next after executing any command.

The format for command prompts on the command line is as follows:

current instruction or [options] <current value>:

The ***current instruction*** explains what to do. For example, choosing an editing command, the prompt usually instructs to “Select objects.”

# Command Basics

---



## Command Format (cont.)

current instruction or [options] <current value>:

The text in the *square brackets* lists the various options available for the command.

The *angled brackets* tell the current value or default option for the command, if any.

# Command Basics

---



## Command Format (cont.)

### *Choose an Option*

Many commands have options that one need to choose before continuing to use the command. To choose an option using the command line, do one of the following:

- a) Type the one or two letters that are capitalized in the option name usually (but not always) the first letter(s) of the option. You can type the letter(s) in lowercase. Press Enter.

# Command Basics

---



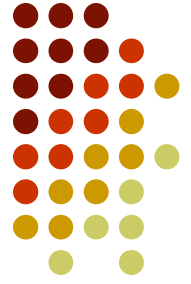
## Command Format (cont.)

### *Choose an Option*

- b) Press Enter to choose a default option or current value.
  
- c) Right-click in the drawing area and choose one of the options from the shortcut menu. This works best for options that won't need any numerical input on the command line.

# Command Basics

---



## Methods to initiate a command

One can give commands in AutoCAD by one of the following methods:

- Using menus
- Using shortcut menus
- Using toolbars
- Using The Command Line

# Command Basics

---



## Using Menus

A menu item can do three things — execute a command, open a submenu, or open a dialog box.

As in all Windows programs, the menu items provide clues to let you know what is going to occur after you click a menu item, as follows:

- A right arrow opens a submenu with more options.
- An ellipsis (. . .) opens a dialog box.
- A plain menu item immediately executes a command.



# Command Basics

---



## Using Shortcut Menus

Shortcut menus appear when you right-click your mouse. The shortcut menus try to include the most common tasks you might want to complete. As a result, the menu that appears on right-click depends on the situation:

If you have neither started a command nor selected any object, you get the default menu when you right-click in the drawing area. Here you can cut, copy, paste, undo, pan, zoom, and so on.

# Command Basics

---



## Using Shortcut Menus

If you've selected any objects, you see the edit-mode menu, which lists the most common editing commands.

If you've started a command, the command-mode menu opens, letting you choose an option for that command. I explain this in more detail later in this chapter.

# Command Basics

---



## Using Shortcut Menus

Other menus include the toolbar list you get when you right-click a toolbar and the command-line history you see when you right-click the command line and choose Recent Commands.

# Command Basics

---



## Using Toolbars

Toolbars provide a quick way to execute a command with one click of the mouse.

When you click a toolbar button, in order to complete the command, you usually need to look at the command line, to follow the prompts there.

# Command Basics

---



## Using Toolbars

A few of the toolbars have *flyouts*, attached toolbars containing additional buttons.

Click and hold a second and the flyout flies out, revealing several other buttons, drag down and choose any one of the options.

# Command Basics

---



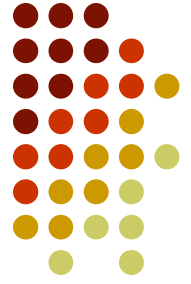
## Using Toolbars

Normally, you have the Standard, Styles, Layers, Properties, Draw, and Modify toolbars showing. You can open other toolbars as you need them.

To display a toolbar, right-click any toolbar and choose the toolbar you want to display. Displayed toolbars have a checkmark next to their name. To hide a toolbar, follow the same procedure — choose the toolbar to deselect it.

# Command Basics

---



## Using Toolbars

As soon as a toolbar is open, you can close it by clicking the Close button at the upper-right corner, as long as it is not *docked* — that is, parked at one edge of the screen.

You can move them by dragging them and reshape them by dragging any edge. To dock a floating toolbar, drag it by its title bar to any edge of the application window. Docked toolbars have *grab bars* (which look like a double line) at one end; grab bars enable you to easily undock and move the toolbars.

# Command Basics

---

## *Using The Command Line*



You can execute a command by typing it directly on the command line.





# Command Basics

---

## Command Techniques

To make working with commands easier, AutoCAD offer shortcuts for repeating and canceling commands as well as undo and redo options.

## Repeating commands

The most common way to repeat a command you have just used is to press Enter. The most recent command appears again.

# Command Basics

---



## Repeating commands

You can also press the Spacebar at the **Command:** prompt to repeat a command you just used.

You can also use the shortcut menu to repeat the command you just use.

# Command Basics

---



## Canceling commands

Sometimes you start a command and then realize you don't need it. In this situation, you can cancel the command and then choose a different command.

Press *Esc* to cancel a command that you've already started. The `Command:` prompt reappears.

# Command Basics

---



## *Pan Command*

Often you cannot see the entire drawing on your screen. You therefore need a way to see the parts of your drawing that are not currently visible.

The PAN command moves the display in the direction and distance that you indicate without changing the magnification. Real-time panning moves the drawing as you move the cursor.

# Command Basics

---



## *Pan Command*

To pan the drawing, choose *Pan Realtime* from the *Standard toolbar*. The *cursor changes to a hand*. Place the cursor anywhere in your drawing, then *click and drag* in the direction that you want the objects to go. Pan can be used transparently, while you're in the middle of another command.

To leave Pan mode, press Esc or Enter, or start any command using a menu or toolbar. You can also right-click to open the shortcut menu and choose Exit or one of the other display options.

# Command Basics

---



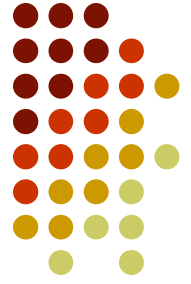
## Undoing a command

Like other Windows applications AutoCAD also offers Undo and Redo commands.

AutoCAD remembers every command starting from the time you open a drawing. You can therefore undo every action and return your drawing to its initial condition when you opened it.

# Command Basics

---



## How to start Undo command

Undo command can be started by one of the following methods

- Ctrl + Z (*like other window applications*)
- Edit → Undo
- Click *Undo Button* from *Standard Toolbar*.
- Type *u* in Command Line → Press Enter



# Command Basics

---

## Redoing a command

If you undo a command, you might realize that you want to undo the undo. This is called redoing a command. Redoing only applies when you have just undone a command.

Redo command can be started by one of the following methods

- Ctrl + y (*like other window applications*)
- Edit → Redo
- Click *Redo Button* from *Standard Toolbar*.



# Command Basics

---



## Setting up New Drawing

The first step after starting a new drawing is to set its *limits* and *unit type*.

Units are set through the *Drawing Units* dialog box.

Drawing units dialog box can be opened by one of the following methods:

- Format → Units
- Type *units* in Command Line → Press Enter
- Type *un* in Command Line → Press Enter

# Command Basics

---



## Setting up New Drawing

One can specify the area of drawing, also called the limits. The drawing limits are the outer edges of the drawing, specified in X,Y coordinates.

The limits define an artificial and invisible boundary of the drawing. However, one can draw outside the limits.

# Command Basics

---



## Setting up New Drawing

Limits are set through the *LIMITS COMMAND*.

Limits command can be started by one of the following methods:

- Format → Drawing Limits
- Type *limits* in Command Line → Press Enter

# Command Basics

---



## Setting up New Drawing

After defining the Limits it is required to Zoom All the view. This will bring the full area within the display window.

To zoom all the view do one of the following

- View → Zoom → All
- Type *z* in Command Line → Enter → *a* → Enter
- Click *Zoom All Button* from *Standard Toolbar*.