



Teaching materials

Course Code EDA 2308 Computer Aided Design for 3D Presentation 1

Department of Interior Design and Exhibition

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Chapter 02

Fundamentals of working with objects (Principal toolkit)

selection of components or adding decorative patterns to dampen the work It is an essential foundation for getting started with SketchUp. It will make the work more convenient and faster.

Understanding objects and models

In SketchUp, 3D objects or models are created from "borders" and "surfaces." will be called "Geometry".

01.Start by drawing a border or "Edge"

02. When the line closes, a surface or "Face" is formed.

03. Decorate with various orders It will be a 3D shape or "Geometry".

Working in SketchUp, the user has to work with these two components using various tools and commands. Decorate until the 3D model of the desired shape, so basic tools for working with components such as selection or editing. Therefore, it is very important to learn and understand each other first. Let's start with the Principal tools, which are the most basic set of tools to work from one topic to the next.

Use Principal tools to work with objects.

Principal tools are basic tools that cover all objects in SketchUp, from selecting components to filling patterns. These tools usually appear in the standard toolbar of the program. Or in the side hand box when we prepare a large tool set.

Note

In the event that the program does not display such tools Or if you want a full toolbox, click View > Toolbars > Principal.

Keyboard Shortcuts for Principal Tools

Select Press the <Spacebar> key.

Eraser Press the <E> button.

Make Component Press the <G> key.

Paint Bucket Press the key.

Selected components can be lifted by clicking on an empty area. in the working window The program will cancel all selected components.

To select components using the drag-mouse method Dragging the mouse from top to bottom or from bottom to top has no effect on performance. The program splits the selection pattern from left to right direction. or right to left only

Select the required components with the Selet tool.

Select is a tool for selecting elements. Or select an entire object to continue your work. It is considered a basic tool that has been lost from choosing to use. There are also many ways to work, for example, when clicking once, it will be a normal selection. But when double-clicking, the program selects other components. adjacent to it

Users can use the Select and Opions tools of this tool as follows.

01. Change the view until you see the part you want to select.
02. Click the Select tool.
03. One click
04. The texture of the clicked part will be selected and displayed as a blue pattern.
05. Double click to select the texture.
06. This time the lines around will also be selected.
07. Triple click to select the same texture.
08. All components of the model

In addition to clicking Users can also use the drag mouse method to select. Multiple components together for drag-mouse selection Dragging direction affects the selection as described below.

01. Make sure the Select tool is selected.
02. Drag the mouse from left to right
03. The whole framed component is selected. Any portions that the frame passes over but are not completely in the frame will be unselected.
04. Drag the mouse from right to left.
05. All elements that the frame is drawn through will be selected. Whether it's all in the frame or not

In addition to selecting components with the previous method In work, we may want to select components to use more than one component. Selecting components to increase or decrease from the previously selected can be done as follows.

- » <Ctrl+Click> or <Ctrl+Drag your mouse> to select an additional element from the previously selected element.
- » <Ctrl+Shift+Click> or <Ctrl+Shift+Drag Mouse> cancels the selected element.
- » <Shift+Click> or <Shift+Drag Mouse> toggles between selecting and unselecting an element, e.g. if a selected element is pressed <Shift+Click> then the program will revert to canceling the selection. As for if it is not already selected and then press <Shift+Click> it will select more.

<Ctrl+click> or <Ctrl+drag mouse> select more, the mouse cursor will have a plus sign.

<Ctrl+Shift+Click> or <Ctrl+Shift+Drag mouse> cancels the selected element. The cursor will have a minus sign.

<Shift+Click> or <Shift+Dragmouse> toggles the selection. The mouse cursor has plus and minus signs.

Group selected components with the Make Component tool.

Make Component is a tool for grouping objects that we build into a single set, for example arranging a door as a separate component from an existing model. Grouping

selected components with the Make Component tool can be done in the following steps.

01. Click the Select tool.
02. Select the components you want to run.
03. The component will be selected to work.
04. Click the Make Component tool.
05. Component details window will appear.
06. Set the desired name. In other parts, use the standard value first.
07. Click the Create button.

The selected component is now a group of objects. You can notice from the time selected that a dark square will appear.

After Component has been created. If you want to edit a component in a component, you'll need to double-click on it before you can edit other components.

After you've finished editing, exit the component by clicking on a blank area or pressing <Esc>. on the keyboard

Remove unwanted components with the Eraser tool.

Eraser is a tool for erasing lines. The way to use it is to click on it.