



## Intermediate SketchUp Training

### Course Objectives

The design of successful architectural spaces requires visualizing spaces in three dimensions. The interplay of light, color, space and form are what make for exciting spaces. Traditional methods for exploring these issues are very labor intensive and often require specialized drawing abilities. Use of computer software has enabled everyone to participate in this activity. A side benefit is that computer study models are often more accurate and can be generated far more quickly, making computer modeling more attractive as part of the normal workflow, and not a specialized additional service and cost (at least this is true with SketchUp).

Successful integration of modeling software within an architectural practice hinges on how facile a designer is with using the computer to move information among, between, and ultimately out of modeling programs to communicate to the design team, clients and review agencies. This course is intended to enable students to do exactly that; communicate their design ideas with ease and assurance.

The output from your SketchUp computer models may be rendered in many different ways. You can work with straight computer printouts, raster images (for retouching with photo editing software), vector graphics (for use in CAD or illustration software), or accurate perspective layouts (as an underlays for developing hand renderings).

This course requires prior basic experience with SketchUp. The course provides students with an excellent start at understanding how to use SketchUp efficiently to build up a three dimensional model.

#### **To succeed fully in this course, students should *already* be able to:**

Define fundamental geometrical terms, including polygon, parallel, perpendicular, axes, arc, and array.  
Define 3 dimensional drawing terms, including rendering, field of view, and point of view.  
Demonstrate mouse skills, including double-clicking, drag, single-clicking, and context-clicking (right-clicking).  
Demonstrate proficient use of the line (pencil), move, erase, orbit, zoom, and select tools in SketchUp.

#### **Upon completion of this course, you should be able to:**

- Understand stickiness in the model
- Use Groups and Components to isolate geometry
  - Know the difference between a group and a component
  - Create a component
  - Demonstrate component behavior
  - How to edit a component
- Make a component that cuts a hole
- Use component nesting for efficient modeling
- Demonstrate the effect of scaling on components
- Understand the use of Layers within SketchUp
- Export a model to a component library
- Insert a component from a file
- Swap (reload) components in a model
- Model from a photograph using the Texture Tweaker
- Demonstrate the Follow me tool
- Infer points in 3D space
- Intersect complex forms using the pencil (line) tool
- Draw parallel edges



Sound, Solid, SketchUp™ Training