



SketchUp AEC

by Viewision



Google Authorised Training Centre

Course Objectives

The ability to deliver professional quality drawings is essential to the technician, the engineer and the architect. Construction drawings must contain subtle information to identify and differentiate between elements using lineweight, texture and/ or colour. Clear dimensioning and the ability to view a drawing from different scales is critical, along with notes, callouts, graphic devices, and titles. Such drawing requirements can take up huge resources in a busy office.

Layout allows the designer/ technician to import SketchUp scenes (or “viewports”) under different scales and styles, and to dynamically change the view whether 2d (orthogonal) or 3d (axonometric/ perspective.) The user is also shown how to create and view 2d CAD-like information within the Sketchup model and use this information to create construction drawings within LayOut. Users are instructed on the use of LayOut's graphic and interface tools to create text, textboxes, lines, curves, filled and outlined shapes, layering, alignment, colours, document size, scale settings, callouts, arrows, styles, lineweights, and drawing resolution among other elements. Documents are outputted in pdf format ready for printing.

To succeed fully in this course you should be able to:

- Compose groups, layers and components within SketchUp
- Manipulate SketchUp geometry and "stickyness"
- Utilise all of SketchUp's toolbars and standard drawing commands
- Understand and create groups and components in a hierarchy
- Scale groups and components
- View a model in section
- Align orthogonal views
- Turn on and off perspective
- Control section tools
- Import and export AutoCAD files
- Create rename and select styles

It is strongly recommended that candidates have private use of SketchUp Pro 7 in order to properly benefit from this training programme. Viewision can provide candidates with details and assistance on the purchase of 12 month student licenses for this purpose.

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

- Maximise the use of CAD files within SketchUp
- Create walkthroughs of a model
- View objects and surfaces inside a model using multiple techniques
- Use surface rendering options to assist drawing technique
- Auto-scale the model
- Lock components
- Demonstrate use of plugins to enhance drawing techniques
- Use the sandbox tools
- Create and use scenes to set up views for Layout
- Use layers and entity info to control colour and other settings

- Create and manipulate styles
- Use shadows and set location
- Create and name components, groups and layers in a structured approach
- Use Outliner to create, identify, organise and select groups and components
- Control SketchUp preferences and document settings
- Create a 2d layer for the preparation of construction information within Layout
- Update, scale, re-scale, change viewpoints of a SketchUp drawing reference within Layout
- Create drawing title blocks within Layout
- Use Layout's graphic tools to create various shapes, linetypes, thicknesses colours, infills, translucency, and masking options
- Use Layout's own layering system to control drawing information: turn off, lock, and organise layer visibility
- Control text size, positions and colours
- Turn on and off grid and control grid spacing
- Turn on and off snap to object and grid
- Create professional standard pdf construction drawings