

# SketchUp

<b>Name:</b>	Google SketchUp 7
<b>Produced:</b>	Google, USA
<b>Operating system:</b>	Windows, Mac, Linux
<b>Native filetype:</b>	SKP
<b>Description:</b>	Free-form modelling software
<b>Next version release:</b>	
<b>Homepage:</b>	<a href="#">SketchUp</a>
<b>See also:</b>	<a href="#">Free-form modelling</a>
	<a href="#">Google</a>
<b>Link:</b>	<a href="#">LEARN, The Catalogue</a>
	<a href="#">Official Support</a> <a href="#">Post a question to Media Centre</a>
<b>Introduction:</b>	SketchUp is a very popular free-form 3D modelling software. It is very easy to use (perhaps the easiest on the market) and a good way to get started with digital modelling. It is fast to use, relatively accurate and, most importantly perhaps, free to download from <a href="#">here</a> . As a free-form modeller it is naturally less accurate than <a href="#">BIM</a> .
<b>Primary functions:</b>	<p>SketchUp was developed in order to let designers "sketch" in 3D. This notion of easy, light-hearted free-form modelling still remains central to the SketchUp experience. Standard functions therefore for which SketchUp is used include:</p> <ol style="list-style-type: none"> <li>1. <b>Massing</b> (3D detailing, meshes)</li> <li>2. <b>Rapid modelling</b>. Rapid modelling is often undertaken in SketchUp using a placed DWG to generate the model's foundation.</li> <li>3. <b>As mediating software</b> between your CAD package of choice and a final rendering package. For example, using ArchiCAD to get up the plans or do the basic modelling for a project, putting the file through SketchUp for some added geometries and then exporting the final model into Max for rendering.</li> <li>4. <b>Componenting</b>. SketchUp's component tool is excellent for digital fabrication.</li> <li>5. <b>Rendering</b>. There are many rendering plug-ins for SketchUp available online. See for example <a href="#">SU Podium</a>. Interestingly, the standard renderer that comes with SketchUp works best if you're running the program on a Mac, but it is only rudimentary on Windows. For handy rendering information and more rendering plug-ins try <a href="#">here</a>.</li> <li>6. <b>Short video clips</b>.</li> </ol> <p>Similar to SketchUp in terms of functionality is <a href="#">3DS Max</a>. Also, compare digital fabrication and iterative modelling functions in <a href="#">AutoCAD</a>, <a href="#">ArchiCAD</a>, <a href="#">Rhino</a>, <a href="#">3Ds Max</a>.</p> <p>Additional functions expected to be included in the next version release (SketchUp 8) include:</p> <ol style="list-style-type: none"> <li>1. <b>Parametric features</b> are rumoured to enter the game.</li> <li>2. <b>Scripting capabilities</b> are likewise supposed to be incorporated with the next release. There is quite a bit of interest to see how these will be added to the software and in what ways functionality will be improved.</li> </ol>
<b>Primary outputs:</b>	<p>Primary outputs from SketchUp are:</p> <ol style="list-style-type: none"> <li>1. <b>Print</b> SketchUp has decent line-drawing export functions which can be improved by fine tuning the drawing in Illustrator.</li> <li>2. <b>Laser-cutting</b></li> <li>3. <b>Video</b>. SketchUp is often used to make small video clips.</li> <li>4. <b>3D printing</b></li> </ol>
<b>Usability:</b>	<p>As noted already, SketchUp is perhaps the easiest 3D modeller available to us. It is recognised and awarded (in 2000) for having a very short learning period when compared with similar programs. Expect to be able to execute standard functions and get around the interface easily within 20 minutes.</p> <p>In part, SketchUp's ease of use is due to a very intuitive interface. The software is logical and highly usable. It operates using graphic menus. The interface feels simple and quick - in a good way.</p> <p>The Pro version of SketchUp is very interoperable and uses all the major filetypes. Also, note that SketchUp files, SKP, open directly in MicroStation without any intermediary steps. This can be handy when you want to begin drafting your model, or fine tuning in some way.</p>
<b>Strengths/weaknesses:</b>	<p>Over and above those strengths and weaknesses listed already, SketchUp at present is:</p> <p>++ Excellently integrated with other Google apps such as GoogleEarth and <a href="#">Google 3D Warehouse</a> (for 3D model sharing).</p>
<b>Learning support:</b>	<p>Google provides <a href="http://sketchup.google.com/training/videos.html">official learning support</a> [http://sketchup.google.com/training/videos.html]. Additionally, Media Centre suggests the following tutorials:</p> <p><a href="#">Beginner A</a> <a href="#">Beginner B</a> <a href="#">Beginner C</a></p> <p><a href="#">Intermediate A</a></p> <p><a href="#">Advanced A</a></p> <p>You will also likely find interesting:</p> <p><a href="#">SketchUcation</a> Architecturion provide an excellent range of SketchUp tutorials which can be found <a href="#">here</a></p>
<b>Additional:</b>	<p>Google also offer a minor suite of additional software to accompany SketchUp:</p> <ol style="list-style-type: none"> <li>1. <b>LayOut</b> is still a little clunky, but it's a good plug-in in general. The next version is expected to be better.</li> <li>2. <b>Style Builder</b></li> <li>3. <b>3D Warehouse</b></li> <li>4. <b>Google Earth</b></li> </ol>
<b>Image gallery:</b>	
<b>References:</b>	

<b>External links:</b>	
<b>Published:</b>	First published Mon. 1 Feb. 2010