



## SKETCHUP AND VRAY ESSENTIAL TRAINING

### Objectives

This 3-day course is to teach trainee the core skills required to model faster and more efficiently using SketchUp Pro software and understand the basic of V-Ray lighting, materials, settings and render elements to create photorealistic visualization. After completing this course trainee will be able to:

- ✓ Navigate interface
- ✓ Manipulate objects
- ✓ Create 3D Model
- ✓ Work with components
- ✓ Work with styles and shadow
- ✓ Render still images using V-Ray

### Training Programme Day 1

Chapter	Topic	Duration	Time
<b>Chapter 1</b>	<b>Getting started with SketchUp</b> <ul style="list-style-type: none"> <li>• Interface basics</li> <li>• Navigating in SketchUp</li> <li>• Walking around in SketchUp</li> <li>• Creating camera views</li> <li>• Shading faces and edges</li> <li>• Creating shadows and fog</li> <li>• Using scenes to create multiple views</li> <li>• Configuring toolbars</li> </ul>	<b>1-Hour</b>	<b>09.00 am-10.00 am</b>
<b>Chapter 2</b>	<b>Manipulating Objects</b> <ul style="list-style-type: none"> <li>• Selecting and moving objects</li> <li>• Scaling and rotating objects</li> <li>• Manipulating faces and edges</li> <li>• Advanced selection tools</li> </ul>	<b>1-Hour</b>	<b>10.00 am-11.00 am</b>

<b>Chapter 3</b>	<b>Drawing in SketchUp</b> <ul style="list-style-type: none"> <li>• Line tool fundamentals</li> <li>• Using the Line tool for 3D drawing</li> <li>• Eraser tools</li> <li>• Using the Rectangle tool</li> <li>• Creating rotated rectangles</li> <li>• Pushing and pulling faces into 3D</li> <li>• Using the Offset tool to create outlines</li> <li>• Drawing curved and freehand shapes</li> <li>• Creating circles and polygons</li> <li>• Softening and smoothing edges</li> <li>• Using the Follow Me tool</li> <li>• Creating 3D text</li> </ul>	<b>2-Hour</b>	<b>11.00 am-01.00 pm</b>
<b>Chapter 4</b>	<b>Measuring and Labelling</b> <ul style="list-style-type: none"> <li>• Using the Tape Measure to create guidelines</li> <li>• Using the Protractor tool</li> <li>• Creating sections</li> <li>• Creating labels</li> <li>• Dimensioning</li> </ul>	<b>1-Hour</b>	<b>02.00 pm-03.00 pm</b>
<b>Chapter 5</b>	<b>Keeping Model Organized</b> <ul style="list-style-type: none"> <li>• Grouping objects</li> <li>• Working with layers</li> <li>• Using the Outliner and Entity Info</li> </ul>	<b>2-Hour</b>	<b>03.00 pm-05.00 pm</b>

Training Programme Day 2

<b>Chapter</b>	<b>Topic</b>	<b>Duration</b>	<b>Time</b>
<b>Chapter 6</b>	<b>Working with Components, 3D Warehouse and Google Earth</b> <ul style="list-style-type: none"> <li>• The Component window</li> <li>• Creating components</li> <li>• Using the 3D Warehouse</li> <li>• Using the Component Options window</li> <li>• Using the Interact tool</li> <li>• Geo-locating a model</li> <li>• Viewing a model in Google earth</li> </ul>	<b>2-Hour</b>	<b>09.00 am-11.00 am</b>
<b>Chapter 7</b>	<b>Working with Materials</b> <ul style="list-style-type: none"> <li>• Applying materials</li> <li>• Editing materials</li> <li>• Creating materials</li> </ul>	<b>1-Hour</b>	<b>11.00 am-12.00 pm</b>
<b>Chapter 8</b>	<b>Working with Styles and Shadow</b> <ul style="list-style-type: none"> <li>• Applying styles</li> <li>• Creating styles</li> <li>• Discovering the shadow setting</li> </ul>	<b>1-Hour</b>	<b>12.00 pm-01.00 pm</b>

<b>Chapter 9</b>	<b>Exporting Animations and CAD files</b> <ul style="list-style-type: none"> <li>• Exporting a Movie</li> <li>• Figuring out the animation export option settings</li> <li>• Exporting a 2D DWG files</li> <li>• Exporting a 3D DWG file</li> </ul>	<b>1-Hour</b>	<b>02.00 pm-03.00 pm</b>
<b>Chapter 10</b>	<b>Creating Presentation and Documents with LayOut</b> <ul style="list-style-type: none"> <li>• Building a LayOut Document</li> <li>• Changing the SketchUp Model</li> <li>• Showing the Presentation</li> <li>• Exporting the Presentation</li> <li>• Document Setup and Preferences</li> </ul>	<b>2-Hour</b>	<b>03.00 pm-05.00 pm</b>

Training Programme Day 3

<b>Chapter</b>	<b>Topic</b>	<b>Duration</b>	<b>Time</b>
<b>Chapter 11</b>	<b>Working with Vray for SketchUp Environment</b> <ul style="list-style-type: none"> <li>• Introduction to V-Ray for SketchUp</li> <li>• Vray framing system</li> <li>• Using templates and parameters</li> </ul>	<b>1-Hour</b>	<b>09.00 am-10.00 am</b>
<b>Chapter 12</b>	<b>Introduction to framing and Cameras</b> <ul style="list-style-type: none"> <li>• Import and Export</li> <li>• The render output and camera</li> <li>• Aspect ratio and Focal length</li> </ul>	<b>1-Hour</b>	<b>10.00 am-11.00 am</b>
<b>Chapter 13</b>	<b>Working with Lightings</b> <ul style="list-style-type: none"> <li>• Vray Light</li> <li>• Vray IES</li> <li>• VRay Dome and VRay SKy</li> </ul>	<b>2-Hour</b>	<b>11.00 am-01.00 pm</b>
<b>Chapter 14</b>	<b>Working with Materials</b> <ul style="list-style-type: none"> <li>• Material Editor , Categories and Vray workspace</li> <li>• Bump , Reflection , refraction and mapping</li> <li>• Understand Color Mapping</li> <li>• Texture editor and parameters</li> <li>• Vray texture editor materials</li> </ul>	<b>2-Hour</b>	<b>02.00 pm-04.00 pm</b>
<b>Chapter 15</b>	<b>Final Render</b> <ul style="list-style-type: none"> <li>• Vray setting of render</li> <li>• Preset and ambient occlusion</li> <li>• Use the render elements</li> </ul>	<b>1-Hour</b>	<b>04.00 pm-05.00 pm</b>