Render Course
SketchUp with VRay Next

Render with VRay for SketchUp
Photorealistic Interior and Exterior Visualisations for Architects and Interior Designers
Learn how to use lights, materials and mapping, color, shadow, reflection and refraction

Lights
- Area lights shine from a light source
- Sunlight is a single bright light for daytime exterior and interior scenes.
- Photometric lights use IES files to determine the shape of the light cone and light falloff.
- Ambient light is the kind of flat, evenly-distributed light seen at dusk and dawn in real life.

Materials
Use the Material Library to create new materials from scratch as well edit preset materials.
V-Ray for SketchUp includes an extensive library of ready-to-use materials.
Materials can be used to achieve different looks as needed from simulating simple surface properties like plastics and metals to complex uses such as translucent objects and light emitting objects.

Render
To prepare the final Render V-Ray setting Elements or render passes, such as diffuse color, reflections, shadows, mattes, etc. gives fine tune control in the final image using compositing or image editing applications.

Rendering with VRay for SketchUp
COURSE CONTENT

Render
Rendering with the Default Settings
Render Options
  Global Switches
  Indirect Illumination
  Environment
Interactive render

Material Editor
  Assign materials in V-Ray
  add new material
  duplicate a material
  export material
  import new material

Lights
Add Lights
Multiplier
Direct and indirect lighting

Rectangular Light
  Double Sided Option

Omni Light

Light Units Values
  Scalar
  Lumens
  Watts

Interior illumination
Exterior illumination
Bounced light
Environment Lighting
HDRI - Environment light
Bitmap Environment light source

Materials
Reflection
> Fresnel Reflections
> Reflections and Highlights
> Reflection Glossiness
> Reflection Filter

Refraction
> Amount of transparency
> Color of refractive materials
> Glossiness of Refractive materials
> Shadows of refractive materials

Double-sided material
Translucent material

Fog Settings
> Fog color
> Fog Multiplier
> Object size
> Refraction IOR

Emissive Materials
> Emissive Intensity
> Emissive color
> Emissive Transparency
> Emissive Textures

Texture Mapping
        Texture adjustment
        Scale texture map
        Rotate texture map

Bump Maps
Alpha Contribution
        Alpha channel

Displacement
        Displacement Parameters

Bump Maps vs Displacement

Transparency Mapping

Light and Shadow
        The quality of Shadow
        Shadow edge
        Shadow Color

Render
V-Ray setting
        Adjusting the render options
        Setting up lighting
        Setting up exterior renderings

Final Render - some setting elements
        Atmospheric effects
        Caustics on the material
        Diffuse surface color
        Surface normals
        Diffuse surface global illumination
        Glossy reflections

Reflections on the surface
Refraction glossiness
Refractions on the surface
Self-illumination of the surface
Shadows
Surface specular highlights
Z-depth of the surface

Photoshop image editing

News from Render with VRay **Next** for SketchUp

List and manage materials, lights, geometries, render elements and textures in a unified way

Map **multiple material parameters with the same source** texture

Once a scene loads, **Auto exposure and white balance** return the right settings, making the entire process point-and-shoot simple

Now easier to visualize a scene's **real-world illumination values** in lux or footcandles.

Render interactively while you design. Fine-tune lights and materials and see the results right away. View the render result directly in the SketchUp viewport.

Adaptive Dome Light can automatically increase your render speed up to 7x faster. The ADL is exceptionally fast when working with interiors, and removes the need to add Portal Lights at windows and openings

With NVIDIA AI Denoiser, you can instantly **remove noise while you render**, cut render times by up to 50% and get automatic noise removal and clean updates as they work.

Render any type of **natural or artificial lighting** with a wide range of built-in light types.

ADAPTIVE LIGHTS
For scenes with lots of lights, the new Adaptive Lights mode can **help you speed up render times by up to 7x.**

SUN & SKY
Simulate realistic daylight for any time and any location.
Simulate **natural looking skies** with realistic atmospheric depth.

GLOBAL ILLUMINATION
Render photorealistic rooms and interiors with powerful and fast global illumination.

MESH LIGHT
Emit light from any scene object to simulate real world custom light shapes.

ENVIRONMENT LIGHTING
Light your scenes using a single **high-dynamic-range image (HDRI)** of its environment.

MATERIALS
Create great looking materials or **select from 500+** readily available ones in the asset library.

1000+ scanned materials. Import and render directly in V-Ray.

ENVIRONMENT FOG
Quickly add realistic **atmospheric depth and haze** and use true 3D fog with realistic light scattering.

Realistic material **light scattering and translucency**.

PROXY OBJECTS
Bring more detail to your project with memory-efficient proxy models of complex objects like grass, trees, cars and more.

DISPLACEMENT
Quickly add surface detail without extra modeling with the optimized VRay displacement. The 2d Displacement mode is perfect for **architectural materials** like brick and stone.

Create realistic grass, fabrics, and carpet with **V-Ray Fur**.

SECTION CUTS
Easily create quick cutaways and **section renders** with VRay Clipper