

V-RAY FOR 3DS MAX ESSENTIALS

Prerequisite: Working knowledge of Windows, basic knowledge of 3DS MAX.

Time: (6) Sessions – 4 Hours per session, mornings 9:00am-1:00pm or afternoons 1:00pm to 5:00pm

OBJECTIVE

This course introduces you to the essentials of V-Ray for 3DS MAX covering several topics that are indispensable for enhancing architectural design.

TOPICS INCLUDE

UI & VFB

- The lessons in this category provide an overview of V-Ray's components, what they do, and where to find them in the interface.
- User Interface A guide to the most commonly used V-Ray components
- Frame Buffer What the V-Ray Frame Buffer is, and its most useful features

RENDER ENGINES

- This section covers the two main rendering engines of V-Ray.
 - V-Ray RT How to use V-Ray RT as an ActiveShade renderer, and how to set it up to render animations.
 - V-Ray Production An overview of the standard V-Ray rendering engine, and how to use it.

SAMPLING

Sampling – An in-depth explanation of how to optimize antialiasing and render times.

LIGHTING

- V-Ray Light The most commonly used settings of the V-Ray Light. •
- V-Ray Ambient Light An overview of the settings of the V-Ray Ambient Light.
- V-Ray Dome Light The workflow to generate Image Based Lighting with the V-Ray Dome Light.
- V-Ray IES Light How light profiles and V-Ray's IES light can create realistic lighting.
- V-Ray Sun and Sky System Set up day time illumination with the V-Ray's Sun and Sky system.

GLOBAL ILLUMINATION

- GI Introduction. The theory of tracing global illumination, and the technical differences between the different GI Engines in V-Ray.
- GI for Exterior Scenes The workflow for setting up GI for Exterior Scenes.
- GI for Interior Scenes The workflow for setting up GI for Interior Scenes.
- Caustics How to generate sharp photon mapped caustics.
- GI for Fly-Through Animations Optimize the rendering of fly-through animations.

CAMERA

- Physical Camera Physical Camera settings, and how they affect the exposure of the rendered image.
- Physical Camera: Motion Blur and Depth of Field How to use Motion Blur and Depth of Field effects, and how to balance the exposure of the rendered image.



SHADING

- V-Ray Material V-Ray material settings, and how to use them to simulate a wide range of real world materials.
- V-Ray SSS Materials V-Ray FastSSS2 and V-Ray Skin materials, and how to use them to create translucent or subsurface scattering materials.
- V-Ray 2-Sided Material V-Ray 2-Sided material, and how to use it to create thin translucent materials such as fabric or paper.
- V-Ray Blend and Bump Materials How to create more complex materials.
- Random Color Techniques How the V-Ray Multi Sub texture and the V-Ray User Color node can generate random colors in a shading network.

VOLUMETRICS

V-Ray Aerial Perspective and V-Ray Environment Fog atmospheric effects in an exterior scene

DYNAMIC GEOMETRY

- V-Ray Displacement Adding fine detail to scenes with the V-Ray Displacement Modifier.
- V-Ray Proxy Optimize high poly count scenes with V-Ray's Proxy geometry.
- V-Ray Instancer Instance multiple V-Ray Proxy geometries with the help of a ParticleFlow system and the V-Ray Instancer helper.
- V-Ray Fur Generate realistic grass with V-Ray Fur.

RENDER ELEMENTS

• V-Ray Render Elements – How to split the rendered image into render elements and combining them in compositing.