

# **Corona Renderer for 3ds Max Essentials Course**

## **Target Audience**

- Architects and Architectural Visualization Artists seeking high-quality photorealistic rendering skills.
- Interior Designers looking to create realistic design presentations and client-ready visualizations.
- 3D Artists and Visualization Professionals working with 3ds Max.
- BIM and CAD professionals interested in enhancing project presentations through rendering.
- Students and design professionals pursuing careers in architectural visualization.

## **Course Objectives**

- Understand the complete Corona Renderer workflow within 3ds Max.
- Create realistic materials, lighting setups, and camera compositions for architectural visualization.
- Develop professional-quality interior and exterior renderings using industry-standard techniques.
- Learn rendering optimization, post-processing, and production workflows.
- Build a portfolio-ready visualization project demonstrating professional rendering capabilities.

## **Course Outcomes**

Upon completion of this course, participants will be able to:

- Configure and manage Corona Renderer projects efficiently.
- Create physically accurate materials and realistic lighting environments.
- Produce high-quality interior and exterior architectural visualizations.
- Apply advanced rendering, optimization, and post-processing techniques.
- Deliver professional-grade photorealistic renderings suitable for client presentations and marketing materials.

## **Course Outline**

The course comprises **32**-hours of theory and labs and is divided into **9** different Modules. Each chapter will be followed by hands-on lab exercises to reinforce learning and gauge understanding of the topics covered.

## **Table of Contents:**

### **Module 1: Introduction to Corona Renderer**

- Overview of Corona Renderer and Rendering Workflow
- Corona Installation and Licensing
- User Interface and Render Setup
- Understanding Corona Rendering Engine
- Workflow Integration with 3ds Max
- Project Setup and Scene Preparation

### **Module 2: Materials and Shaders**

- Introduction to Corona Physical Material
- Creating Realistic Surface Materials
- Reflection, Refraction and Glossiness
- Metal, Glass, Plastic and Fabric Materials
- Material Layering and Advanced Material Techniques
- Material Library Management

### **Module 3: Lighting Fundamentals**

- Understanding Light Behavior in Corona
- Corona Sun and Sky System
- Corona Light Types
- HDRI Lighting Techniques
- Interior Lighting Setup
- Exterior Lighting Setup

### **Module 4: Camera and Composition**

- Corona Camera Fundamentals
- Exposure and White Balance
- Depth of Field Techniques
- Motion Blur Settings
- Photographic Composition Principles
- Architectural Visualization Camera Setup

### **Module 5: Interior Visualization Workflow**

- Interior Scene Preparation
- Material Assignment Strategies
- Daylight Interior Rendering
- Artificial Lighting Techniques
- Render Optimization for Interiors
- Interior Rendering Best Practices

### **Module 6: Exterior Visualization Workflow**

- Landscape and Environment Creation
- Exterior Material Development
- Sunlight and Environmental Lighting
- HDRI-Based Exterior Rendering
- Architectural Exterior Rendering Techniques
- Render Quality Optimization

### **Module 7: Rendering, Post-Processing and Animation**

- Interactive Rendering Workflow
- Render Elements and Passes
- Corona VFB (Virtual Frame Buffer)
- Tone Mapping and Color Corrections
- Post-Processing Techniques
- Introduction to Animation Rendering

### **Module 8: Advanced Rendering**

- Scatter and Object Distribution Techniques
- Corona Pattern and Mapping Tools
- Render Optimization Strategies
- Noise Reduction and Denoising
- Production Rendering Workflow