

# D5 Render 101 — Beginner Level (4 Weeks)

**Course Duration:** 4 Weeks

**Classes per Week:** 3

**Class Duration:** 4 Hours

**Total Hours:** 48

**Level:** Beginner

**Next Level:** D5 Render 102 (Intermediate)

**Course Goal:** To introduce students to real-time rendering and visualization using D5 Render. Students will learn how to import models, set up materials, lighting, and cameras, and produce high-quality images and animations for architectural or product visualization.

## Week 1 — Introduction & Interface

### ***Class 1: Getting Started with D5 Render***

- Understanding real-time rendering concepts
- System requirements and software setup
- D5 Render interface overview
- Navigating the viewport and scene hierarchy
- Exercise: Explore a demo scene and test live rendering

### ***Class 2: Importing Models***

- Supported file formats (SKP, FBX, 3DM, etc.)
- LiveSync with SketchUp, Revit, Rhino, 3ds Max
- Managing imported assets and scaling
- Exercise: Import a SketchUp model into D5 Render

### ***Class 3: Material Editing Basics***

- Applying and editing D5 materials
- Adjusting color, roughness, metallic, and normal maps
- Using the D5 Asset Library materials
- Exercise: Apply materials to a simple architectural model

## Week 2 — Lighting and Environment

### ***Class 4: Natural and Artificial Lighting***

- Sun and Sky system setup
- HDRI environments and custom skies
- Adding and controlling artificial lights (Spot, Point, Area, Strip)
- Exercise: Light an interior scene using D5 lights

### ***Class 5: Environment Effects***

- Weather and atmosphere controls
- Fog, precipitation, and volumetric lighting
- Time of day and sun angle adjustments
- Exercise: Create a morning and evening lighting scenario

### ***Class 6: Camera and Composition***

- Setting up cameras and focal lengths
- Depth of field, exposure, and focus control
- Composition rules (rule of thirds, leading lines)
- Exercise: Create three camera views for a house exterior

## **Week 3 — Advanced Materials & Rendering**

### ***Class 7: Material Customization***

- Using textures and procedural maps
- Glass, metal, and water materials
- Subsurface scattering and emissive materials
- Exercise: Create custom materials for furniture and décor

### ***Class 8: Rendering Settings***

- Render quality levels and performance optimization
- Output resolutions and aspect ratios
- Batch rendering and export settings
- Exercise: Render an interior scene at different quality levels

### ***Class 9: Asset Library & Vegetation***

- Using D5 Asset Library (furniture, people, vehicles, vegetation)
- Scatter tools and placement techniques
- Animating people and objects
- Exercise: Create a landscaped exterior scene

## **Week 4 — Animation & Final Project**

### ***Class 10: Animation Fundamentals***

- Setting up camera paths and keyframes
- Animating objects and lights
- Exporting animations in MP4 or MOV formats

- Exercise: Create a short camera flythrough animation

### ***Class 11: Final Project Work (Guided)***

- Students begin final rendering or animation project
- Instructor guidance on lighting, materials, and camera setup

### ***Class 12: Final Project Presentation & Review***

- Students present final D5 rendered scenes or animations
- Instructor critique and feedback
- Course summary and introduction to D5 Render 102 topics

## **Learning Outcomes**

- Navigate and customize the D5 Render interface
- Import and manage 3D models efficiently
- Apply realistic materials and lighting to 3D scenes
- Render high-quality still images and animations in real time
- Produce a final architectural or product visualization project