



Skillsfuture@ PA 3D Digital Interior Design Using Blender

Objective:

The training course will cover architecture and interior design, global illumination, color and texture, material management, graphics rendering, camera control and walk-through.

Course Outline

MODULE 1 Getting Started (3hrs)

In this module, students will learn the followings:

- 1: Overview of the Course
- 2: Introduction to Blender's Interface
- 3: Viewport Configuration and Manipulation.
- 4: Creating Basic Mesh
- 5: Created Curve and Bezier Tangent Manipulation.
- 6: Transformations: Move, Rotate and Scale
- 7: Hiding and Isolating Meshes.
- 8: Duplication, Instantiation of Meshes.

MODULE 2 Modeling and Material (3hrs)

In this module, students will learn the followings:

- 1: 2D Shapes to 3D Mesh conversion.
- 2: Extrusion, Bevel and Loop Tools.
- 3: Boolean Operations: Subtract, Union, and Intersect
- 4: Materials: PBR System, BSDF System, and Texturing.
- 5: UV Mapping: Smart UV Project and Manual UV Edit.
- 6: Material Type Creation Exercise, Plastic, Metal, Glass, etc...

MODULE 3 Camera and Lighting (3hrs)

In this module, students will learn the followings:

- 1: Standard Camera Settings
- 2: Animation: Key Framing and Keyframe Retiming.
- 3: Creating a Walk through Animation.
- 4: Blender Light Types: Point, Sun Spot, Area, etc...
- 5: Professional Lighting Techniques
- 6: Cycles Renderer Setting Exploration

MODULE 4 Case Studies (3hrs)

In this module, students will learn the followings:

- 1: Freeform Q and A to Student's real world requirements.
- 2: Exploration of external resources to enhance 3D realism.
- 3: Exploration of Blender's add-on system.
- 4: Tips and Tricks to speed up Blender's Rendering.
- 5: Brief look into Blender's Eevee Rendering system.