3D Architectural Modeling Training Course

Professional Development Training Course Outline

Category	Architectural Engineering	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

3D Architectural Modeling is a high-demand skill at the intersection of architecture, visualization, and digital design, empowering professionals to create photorealistic 3D models, immersive environments, and data-driven building concepts. With the rise of BIM (Building Information Modeling), real-time rendering, AI-assisted design, and virtual reality (VR), this field has become essential for architects, engineers, interior designers, and real estate developers. 3D Architectural Modeling Training Course is designed to equip learners with cutting-edge tools, industry workflows, and advanced visualization techniques to transform conceptual ideas into compelling digital assets.

This course emphasizes hands-on learning, project-based workflows, and real-world case studies, enabling participants to master software like AutoCAD, Revit, SketchUp, 3ds Max, and Blender, along with rendering engines such as V-Ray and Lumion. By integrating parametric design, sustainable architecture principles, and cloud collaboration tools, learners will gain future-ready skills aligned with Industry 4.0 and smart city development trends.

Programme Curriculum

3D Architectural Modeling Training Course

Introduction

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Course Duration

5 days

Course Objectives

1. Master 3D Modeling Fundamentals & Digital Twin Technology
2. Develop skills in BIM (Building Information Modeling) Workflows
3. Create Photorealistic Rendering using V-Ray & Lumion
4. Understand Parametric & Generative Design Concepts
5. Apply AI-powered Design Tools & Automation Techniques
6. Design Sustainable & Green Building Models
7. Learn Real-Time Visualization & VR Integration
8. Build Interior & Exterior Architectural Visualization Projects
9. Optimize models for Game Engines (Unreal Engine / Unity)
10. Implement Cloud Collaboration & Remote Design Workflows
11. Produce High-quality Walkthrough Animations & Flythroughs
12. Enhance workflows with Procedural Modeling & Texturing
13. Prepare Industry-ready Portfolio with Professional Projects

Target Audience

1. Architecture Students & Graduates
2. Civil Engineers & Construction Professionals
3. Interior Designers & Space Planners
4. 3D Artists & Visualization Specialists
5. Real Estate Developers & Marketing Teams
6. Game Designers & VR/AR Developers
7. Freelancers in Design & Animation
8. Professionals transitioning into **Digital Design & BIM Careers**

Course Modules

Module 1: Fundamentals of 3D Architectural Modeling

- Introduction to 3D Design Principles
- Understanding Geometry, Scale & Proportion
- Basics of CAD Drafting
- **Case Study:** File Formats & Interoperability
- Industry Workflow Overview

Module 2: Software Essentials

- 2D to 3D Conversion Techniques

- BIM Modeling Basics
- Creating Floor Plans & Elevations
- Parametric Components
- **Case Study:** Model Organization & Layer Management

Module 3: Advanced 3D Modeling Techniques

- Complex Geometry Creation
- Procedural Modeling
- Mesh & Surface Modeling
- Optimization Techniques
- **Case Study:** High-poly vs Low-poly Modeling

Module 4: Materials, Texturing & Lighting

- PBR (Physically Based Rendering) Materials
- UV Mapping Techniques
- Natural & Artificial Lighting Setup
- HDRI Environment Usage
- **Case Study:** Realistic Surface Detailing

Module 5: Rendering & Visualization

- V-Ray & Lumion Rendering
- Real-time Rendering Techniques
- Camera Angles & Composition
- Post-processing in Photoshop
- **Case Study:** Creating Photorealistic Outputs

Module 6: Animation & Walkthroughs

- Camera Animation Paths
- Flythrough & Walkthrough Creation
- Scene Transitions
- Export Settings for Video
- **Case Study:** Presentation Techniques

Module 7: VR, AR & Real-Time Applications

- VR Integration in Architecture
- Unreal Engine Basics
- Interactive Environments
- Immersive Client Presentations
- **Case Study:** Metaverse & Digital Twin Concepts

Module 8: Portfolio Development & Industry Practice

- Portfolio Design Strategies
- Freelancing Platforms & Client Handling
- Project Documentation

· **Case Study:** Industry Standards & Best Practices

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com