Lighting Design for Architecture 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

Lighting Design for Architecture is a cutting-edge professional training course focused on integrating architectural lighting design, sustainable illumination systems, daylight optimization, LED technology, smart lighting controls, and human-centric lighting (HCL) into modern built environments. As architecture evolves toward energy-efficient buildings, smart cities, and WELL-certified spaces, lighting design has become a critical discipline that influences aesthetics, functionality, safety, and occupant well-being. Lighting Design for Architecture Training Course equips learners with advanced skills in lighting simulation, photometric analysis, glare control, and BIM-integrated lighting workflows, ensuring they meet global standards in contemporary architectural practice.

The program emphasizes real-world applications of AI-driven lighting design tools, IoT-enabled smart lighting systems, green building standards (LEED, BREEAM), and parametric lighting design techniques. Participants will learn how to create emotionally responsive and energy-efficient lighting environments for residential, commercial, hospitality, landscape, and urban spaces. With a strong focus on innovation, sustainability, and digital design transformation, this course prepares professionals to lead in the rapidly growing field of architectural lighting consultancy and design engineering.

Programme Curriculum

Lighting Design for Architecture Training Course

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Course Duration

5 days

Course Objectives

1. Master architectural lighting principles and photometric fundamentals
2. Apply human-centric lighting (HCL) design strategies in built environments
3. Develop expertise in LED lighting systems and smart lighting technologies
4. Use DIALux, Revit Lighting Plugins, and lighting simulation software effectively
5. Understand daylight harvesting and passive lighting design techniques
6. Implement energy-efficient and net-zero lighting solutions
7. Design with smart city lighting infrastructure and IoT integration
8. Analyze glare control, luminance ratios, and visual comfort standards
9. Integrate lighting design into BIM (Building Information Modeling) workflows
10. Apply LEED and WELL certification lighting compliance standards
11. Create aesthetic lighting concepts for architectural storytelling
12. Optimize outdoor, façade, and landscape lighting systems
13. Deliver professional lighting design documentation and technical reports

Target Audience

1. Architects and Architectural Designers
2. Interior Designers and Spatial Designers
3. Lighting Design Consultants
4. Civil and Building Engineers
5. Urban Planners and Landscape Architects
6. Construction and Project Managers
7. BIM Specialists and CAD Technicians
8. Architecture and Design Students

Course Modules

Module 1: Fundamentals of Architectural Lighting Design

- Light physics and perception
- Natural vs artificial lighting principles
- Lighting terminology and standards
- Visual comfort and human response

- Introduction to lighting design process
- **Case Study:** Analysis of daylight integration in modern residential villas

Module 2: LED Technology and Lighting Fixtures

- LED system components and performance
- Fixture selection and specification
- Color temperature and CRI optimization
- Energy efficiency comparisons
- Maintenance and lifecycle analysis
- **Case Study:** LED retrofitting in commercial office buildings

Module 3: Human-Centric Lighting (HCL)

- Circadian rhythm and biological lighting
- Wellness-focused lighting environments
- Adaptive lighting systems
- Workplace productivity lighting design
- Psychological effects of illumination
- **Case Study:** Hospital patient recovery lighting system design

Module 4: Lighting Simulation & Software Tools

- DIALux EVO workflows
- Revit lighting integration
- Photometric data interpretation
- Rendering and visualization techniques
- Simulation-based design validation
- **Case Study:** Retail showroom lighting simulation optimization

Module 5: Daylight & Passive Lighting Design

- Daylight factor calculations
- Solar geometry and shading devices
- Glare reduction strategies
- Passive lighting architecture
- Climate-responsive design techniques
- **Case Study:** School building daylight optimization project

Module 6: Smart Lighting & IoT Integration

- Smart sensors and automation systems
- Wireless lighting control systems
- AI-driven adaptive lighting
- Smart building integration
- Energy monitoring dashboards
- **Case Study:** Smart office building lighting automation system

Module 7: Exterior, Landscape & Façade Lighting

- Urban nightscape design principles
- Architectural façade illumination

- Landscape lighting techniques
- Safety and security lighting design
- Dynamic RGB lighting systems
- **Case Study:** Waterfront promenade lighting redevelopment project

Module 8: Sustainable & Green Lighting Design

- LEED & BREEAM lighting credits
- Net-zero lighting strategies
- Carbon footprint reduction techniques
- Renewable energy lighting systems
- Sustainable material selection
- **Case Study:** Eco-friendly green commercial complex lighting design

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
21 Sep 2026	25 Sep 2026	Online	$1,000
21 Sep 2026	25 Sep 2026	Physical	$1,500
21 Sep 2026	25 Sep 2026	Physical	$0
21 Sep 2026	25 Sep 2026	Physical	$0
21 Sep 2026	25 Sep 2026	Physical	$0
21 Sep 2026	25 Sep 2026	Physical	$0
21 Sep 2026	25 Sep 2026	Physical	$0
21 Sep 2026	25 Sep 2026	Physical	$0

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

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