Sustainable Architectural Design 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

Sustainable Architectural Design is a rapidly evolving discipline that integrates green building technologies, climate-responsive design, energy efficiency, carbon-neutral architecture, and regenerative design principles to create buildings that minimize environmental impact while maximizing human well-being. Sustainable Architectural Design Training Course equips learners with advanced competencies in eco-friendly materials, passive design strategies, smart energy systems, and lifecycle assessment, aligning architectural practice with global sustainability frameworks such as LEED, BREEAM, and Net Zero Carbon standards.

As urbanization accelerates and climate change challenges intensify, sustainable architecture has become a critical pillar of the future built environment. This course provides hands-on expertise in bioclimatic design, circular construction systems, renewable energy integration, and sustainable urban planning, empowering professionals to design resilient structures that respond intelligently to environmental conditions while meeting modern aesthetic and functional demands.

Programme Curriculum

Sustainable Architectural Design Training Course

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Course Duration

5 days

Course Objectives

1. Master principles of sustainable architecture and green building design
2. Apply climate-responsive and bioclimatic design strategies
3. Understand Net Zero Energy Building (NZEB) concepts
4. Integrate renewable energy systems in architectural design
5. Utilize eco-friendly and recycled construction materials
6. Conduct building lifecycle assessment (LCA)
7. Implement energy-efficient HVAC and lighting systems
8. Design using passive solar architecture techniques
9. Develop skills in smart building automation and IoT integration
10. Align projects with LEED and BREEAM certification standards
11. Explore circular economy in construction and demolition waste reduction
12. Enhance urban resilience through sustainable city planning
13. Create carbon-neutral and regenerative building solutions

Target Audience

1. Architects and architectural designers
2. Civil and structural engineers
3. Urban planners and city development officers
4. Construction project managers
5. Sustainability consultants
6. Interior designers interested in green design
7. Real estate developers and investors
8. Architecture and engineering students

Course Modules

Module 1: Foundations of Sustainable Architecture

- Principles of sustainability in the built environment
- Global environmental challenges and architecture’s role
- Introduction to green building rating systems
- Sustainable design ethics and frameworks
- **Case Study:** Bosco Verticale, Milan – vertical forest concept

Module 2: Climate-Responsive Design

- Bioclimatic design principles
- Orientation, shading, and natural ventilation
- Regional climate analysis techniques

- Passive cooling and heating strategies
- **Case Study:** Earthships in New Mexico

Module 3: Energy-Efficient Building Systems

- Low-energy architectural systems
- Smart HVAC integration
- LED and daylighting optimization
- Energy modeling tools introduction
- **Case Study:** The Edge, Amsterdam

Module 4: Sustainable Building Materials

- Eco-friendly material selection criteria
- Recycled and upcycled construction materials
- Low-carbon concrete alternatives
- Timber and bamboo structural systems
- **Case Study:** Tamedia Office Building, Zurich

Module 5: Renewable Energy Integration

- Solar PV and solar thermal systems
- Wind and geothermal applications in buildings
- Energy storage solutions
- Net Zero Energy building strategies
- **Case Study:** Bahrain World Trade Center wind integration

Module 6: Water and Waste Management Systems

- Rainwater harvesting systems
- Greywater recycling techniques
- Sustainable drainage systems (SuDS)
- Construction waste reduction methods
- **Case Study:** One Central Park, Sydney

Module 7: Smart and Digital Green Buildings

- IoT in smart architecture
- Building Information Modeling (BIM) for sustainability
- AI-driven energy optimization
- Smart sensors for environmental control
- **Case Study:** Salesforce Tower, San Francisco

Module 8: Sustainable Urban Development

- Smart city planning principles
- Green infrastructure integration
- Transit-oriented development (TOD)
- Urban heat island mitigation strategies
- **Case Study:** Masdar City, UAE

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
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000

Start Date	End Date	Location	Price
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

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