**3-Month Mentor-Led Course: Optimizing Daylight & Natural Ventilation in Buildings**

**Total Live Sessions:** 12
**Duration per Session:** 1–1.5 hours
**Total Mentor Interaction:** 12–18 hours

**Course Fees:**

**Live Mentor Sessions:** 12 sessions x $60 = **$720 USD**

**e-LMS Platform Access (one-time): $50 USD**

**Total Course Fee: $770 USD**

**Session-Wise Breakdown**

**Session 1: Introduction & Course Overview**

Sustainable building design principles

Overview of daylighting & natural ventilation benefits

**Session 2: Climate Analysis & Site Contex**

Interpreting climate data

Site orientation and impact on design decisions

**Session 3: Fundamentals of Daylighting**

Daylighting metrics and visual comfort

Solar geometry and daylighting potential

**Session 4: Daylighting Strategies & Systems**

Design of light shelves, skylights, and glazing

Shading devices and daylight control

**Session 5: Daylighting Simulation Tools**

Introduction to tools (e.g., DIALux, Radiance)

Basic hands-on simulation exercise

**Session 6: Advanced Daylight Harvesting Techniques**

Integration with electric lighting systems

Case studies on daylight harvesting

**Session 7: Fundamentals of Natural Ventilation**

Types: cross ventilation, stack effect, atrium design

Building geometry for airflow

**Session 8: Design Strategies for Ventilation**

Placement and sizing of windows/vents/louvers

Passive and hybrid ventilation systems

**Session 9: Ventilation Simulation & Analysis**

Introduction to airflow modeling tools

Interpreting simulation results

**Session 10: Integrated Design Approach**

Combining daylighting & ventilation strategies

Building automation and smart controls

**Session 11: Codes, Standards & Performance Verification**

LEED, WELL, local building codes for daylight & ventilation

Documentation, compliance, and verification

**Session 12: Capstone Project & Review**

Project presentation: Design integrating all learned strategies

Mentor feedback, peer review, Q&A, and course wrap-up