Overview

The course intends to familiarise participants with the fundamentals of IEQ in an energy efficient buildings. The course starts from basics of heat transfer in buildings integrating active and passive cooling strategies for thermal comfort, concepts of daylighting: DA, sDA and UDI and its optimisation alongside artificial lighting in buildings, indoor air quality (IAQ) and acoustics management. The program duration of 20 hours would include theoretical lectures and hands-on workshops starting from Friday (evening): 3hrs, following to Saturday and Sunday (morning+evening): 8.5 hrs each.

Course Outline

Lectures:

- · Basics of building science
- Heat transmission through building envelope and thermal comfort parameters
- Active and Passive cooling strategies
- Indoor Air Quality management
- Daylighting and Artificial Lighting (DA, sDA and UDI)
- Building Acoustics, Noise deduction principles

Workshops:

- OpenStudio
- E-Certificate shall be provided after successful completion of Course.
- · Pdf copy of each lecture PPT shall be provided.



About Us



Dr. Shankha Pratim Bhattacharya Associate Professor Department of Architecture and Regional Planning, IIT Kharagpur



Dr. Aaditya Pratap SanyalAssistant Professor
Department of Architecture, Planning and Design, IIT BHU



Naddunuri Kumar Research Scholar Department of Architecture and Regional Planning, IIT Kharagpur

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Tanya Kaur Bedi Assistant Professor Department of Architecture, School of Planning and Architecture, Bhopal



Deepali RanavainshawResearch Scholar
Department of Architecture and
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Registration Link: (How to apply)

<u>nttps://erp.iitkgp.ac.in/CEP/courses.htm</u> to apply online



Who will benefit (Eligibility):

- Students Undergraduate (Third year and Above), Post-Graduate Students and Research Scholars from Architecture and Planning, Civil Engineering, Environmental Planning
- Faculty- Architecture, Civil engineering, Urban Planning, Environmental Planning.
- Personnel from Government Institutions, Industry, and Research Organizations, Practicing Architects, Urban Planners, Civil Engineers.

Date of the programme: 30, 31 August and 01 September, 2024

(Friday:3 Hr,Saturday:8.5 Hr and Sunday:8,5 Hr)

Total duration: 20 hours
Last Date of Registration: 27 Aug 2024

<u>Program Fee (including GST):</u> Students- 1000/-, Faculty/Industry- 2500/-

Principal Coordinators:
Dr. Shankha Pratim Bhattacharya (9474602101/8670682049)
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Fundamental Principles of Indoor Environmental Quality (I.E.Q)

Short - Term Course (MODE- ONLINE)



Department of Architecture & Regional Planning Indian Institute of Technology, Kharagpur