Course Outline

In an unforeseen event of fire in an urban built environment, it is important to protect the occupants, property, and restore functionality. Passive measures to control fire are achieved by following guidelines, codes, and standards during the design process. The use of appropriate building materials is also important due to their flammability properties. Active control is required for large-scale and higher occupancy areas. Along with the design of urban built forms, evacuating occupants in case of fire is crucial. An evacuation plan should be in place with appropriate wayfinding. Training occupants to respond to fire alarms is also important in case of a fire. Smoke poses a major limitation during evacuation, and thus controlling smoke spread through design and mechanical means must be adopted. Evacuating people before the spread of both fire and smoke is desirable. This course will provide an overview of fire safety measures for different types of built urban areas and occupancies, from multilevel facilities like hotels and hospitals to industrial areas. Structural safety to prevent collapse will also be addressed. Visits to built-up spaces within our campus that have active firefighting systems installed will be explained, along with hands-on demonstrations of different firefighting equipment.

Note:

- ✓ Certificate shall be provided after successful completion of the course
- ✓ PDF copy of the lectures will be provided

Centre of Excellence in Urban Planning & Design
Department of Architecture & Regional Planning

Coordinators

Dr. Sumana Gupta
+91 9433729054 | sumana@arp.iitkgp.ac.in

Dr. Shankha Pratim Bhattacharya
+91 9474602101 | spb@arp.iitkgp.ac.in

Guests

Eminent professors and Technical experts from reknowned institutions involved in the field of Fire-safety Engineering.

Program Fee

Faculty, Professionals,
Students, Research Scholars

INR 2000/-*

(*including GST)

Program Schedule

3-day On-campus (OFFLINE) course

9 - 11 December 2024

(10 AM - 5 PM)

Last date of registration

6th December 2024

Who will benefit (Eligibility)

Faculty Members in Architecture, Civil Engineering, Urban Planning, Interior design; **Professionals** in Industry and Research Organizations; **Practicing** Architects, Interior designers, Urban Planners; **Students**- Undergraduate, Postgraduate, Research Scholars in Architecture, Planning, Civil Engineering, Interior design

How to Apply: Use the link below **or** scan the QR code

https://erp.iitkgp.ac.in/CEP/courses.htm

Sign Up → Login → Profile Fillup → Choose a Program → Apply Now

CENTRE OF EXCELLENCE IN URBAN PLANNING & DESIGN IIT KHARAGPUR

Centre of Excellence in Urban Planning & Design
Department of Architecture & Regional Planning
IIT Kharagpur

presents

A Short-Term Course
on

Awareness of Fire Safety in an Urban Built Environment

under

Continuing Education Programme
IIT Kharagpur

3 days
9 - 11 December 2024

Coordinators

Dr. Sumana Gupta is currently working as Associate Professor in the Department of Architecture and Regional Planning at IIT Kharagpur since 2013. She completed her Master's degree and Doctoral Degree from the same Institute in 2008 and 2012 with a special interest in transportation planning and service quality evaluation of railway stations. Prior to this she worked for fourteen years both as a professional architect and later as a Lecturer in a Government Polytechnic College. During her professional exposure as an architect she was involved in various large-scale architectural projects. Currently she teaches basic courses and advanced courses like Tall Building design & services and Building Acoustics at the undergraduate level. She has offered online courses under NPTEL currently running on Building Materials & Composites and Architectural Acoustics. Shortly, a course under Swayam portal on Fire Safety in Buildings will be offered through media coverage. She has also lectured and organised Short Term Courses under the Continuing Education Programme of IIT Kharagpur.

Dr. Shankha Pratim Bhattacharya is an Associate Professor in the Department of Architecture and Regional Planning at IIT Kharagpur. He graduated in Architectural Engineering from Regional Engineering College, Calicut (presently NIT Calicut) and earned his Masters in Structural Engineering and PhD on "Modeling of Building Structure under Seismic Excitation" from Birla Institute of Technology, Mesra. With over twenty years of teaching experience, his research includes Building Physics, Thermal Comfort, Building Energy Modelling, Earthquake-resistant structural systems, Vulnerability and Disaster Risk Assessment. He has developed the "Structural System" course under NMEICT and created NPTEL courses on "Architectural Acoustics" and "Structural Systems in Architecture." Dr. Bhattacharya has published over ten technical papers in international journals, conducted one GIAN course, and four Short Term Courses at IIT Kharagpur. In 2015, he received the "Eminent Architectural Engineer" award from the Institution of Engineers (India).

Programme

- **Introductory session:**

  To be delivered by the coordinators

  (Dr. Sumana Gupta & Dr. Shankha Pratim Bhattacharya)

- **Guest Speaker sessions:**
  - Prof. Arghya Deb, Department of Civil Engineering, IIT Kharagpur
  - Dr. Arup Das, Department of Architecture & Regional Planning, IIT Kharagpur

- **Coordinators' Lectures:**
  - Dr. Sumana Gupta
  - Dr. Shankha Pratim Bhattacharya

- **Live Demonstration:**

  Usage of fire-fighting equipment will be demonstrated as a mini-workshop session by a Team of experts from the Institute of Fire and Safety Engineering, Haldia, West Bengal.

- **Expert Talk:**

  An in-depth discussion with Technical Expert from the West Bengal Fire Services Department, Govt. of West Bengal.

- **Evaluation & Valedictory session:**

  Participants will be evaluated prior to a valedictory session, where you can share your thoughts on the programme.

Venue

Department of Architecture & Regional Planning

IIT Kharagpur

How to reach:

From NSC Bose International Airport at Kolkata (CCU), take a taxi or pre-booked cab to Kharagpur, which is about 120 km away.

From Howrah Railway Station: take a train to Kharagpur, which takes approximately 2-3 hours. The institute campus is located around 5 kms from the Kharagpur Railway Station.

Accommodation

Limited stay available on sharing and first-come, first-served basis within IIT Kharagpur campus against nominal charges.

Nearby Accommodation (outside IIT campus):

- Hotel Ashiana : (03222) 256 016
- Hotel Park : 083730 53400