Overview

India is experiencing one of the fastest rates of planned and unplanned urbanization, which is increasing the vulnerability of historic urban areas to natural hazards such as earthquakes, floods, cyclones and fires, thereby putting people, properties, infrastructure, economy as well as cultural heritage at greater risk than ever before. Climate Change is further exacerbating their exposure to hydrometeorological hazards such as floods and cyclones as exemplified during recent Chennai floods. Therefore it is important to undertake measures to reduce risks to historic urban areas at policy, planning, management and structural levels.

Considering these issues and challenges, the primary objectives of the course are to understand the significance and vulnerabilities of historic cities especially those that are located in risk prone areas, to introduce key principles and approaches for urban disaster risk management, to undertake integrated risk assessment of urban areas with special focus on historic cities and to learn about various measures for pre-disaster risk reduction/mitigation, emergency response and post disaster recovery in historic urban areas.

Course will introduce the principles and key terminology on disaster risk management and climate change adaptation, strategies for mitigating urban disaster risks due to floods & cyclones, earthquakes and landslides, fires and stampedes, especially in holy places. Special considerations will be given on an integrated approach for risk assessment drawing on lessons from the past and the process of formulating disaster risk management plans including the planning for Post Disaster Recovery in Historic Urban Areas and ways of integrating them with larger Urban Planning, Development and Institutional framework. Recent international initiatives related to urban disaster risk reduction through Sendai Framework on Disaster Risk Reduction, UNISDR Resilient City Campaign, UNFCCC COP22, Habitat III and Sustainable Development Goals will also be the focus of discussion during the course.

Course participants will learn these topics through lectures and hands-on experiments. Through field visit and case studies, participants will be exposed to a methodology for integrated risk assessment of historic urban areas and develop disaster scenarios and undertake prioritisation of risk mitigation strategies, prepare and respond to emergencies, especially through Emergency Simulation Exercise. Case studies and assignments will be shared to stimulate research motivation of the participants.

Module

June 20 – June 25.

Number of participants for the course will be limited to fifty.

Who Should Attend

- Architects, archeologists, town planners, urban designers, engineers and researchers from various governments, non-governmental and private organizations engaged in historic preservation, urban and environmental planning & development, heritage and conservation planning & management.
- Student at all levels (B.Arch/BTech/MSc/MTech/PhD) or Faculty from reputed academic institutions and technical institutions.
The participation fees for taking the course is as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Fee</th>
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<tbody>
<tr>
<td>Participants from abroad</td>
<td>$ 300</td>
</tr>
<tr>
<td>Industry/ Research Organizations</td>
<td>₹ 10000</td>
</tr>
<tr>
<td>Academic Institutions</td>
<td>₹ 5000</td>
</tr>
<tr>
<td>Bonafide students of Academic Institutions</td>
<td>₹ 1000 (to be refunded after completion of course)</td>
</tr>
</tbody>
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The above fee include all instructional materials, computer use for tutorials and assignments, laboratory equipment usage charges, 24 hr. free internet facility. The participants will be provided with accommodation on payment basis.

**The Faculty**

**Dr. Lee Bosher** is a member of faculty in the Water Engineering and Development Centre, School of Civil and Building Engineering, Loughborough University, England. Undertaking research and teaching on disaster risk reduction (DRR) he is internationally recognized for numerous publications and a portfolio of projects related to the inter-disciplinary integration of structural and non-structural DRR strategies into the (re) development of the built environment. His other research and teaching interests are related to sustainable vulnerability reduction and the technical, social and institutional roles in improving the resilience of society and critical assets to natural hazards and human-induced threats.

**Dr. Rohit Jigyasu** is a conservation architect and risk management professional currently working as an UNESCO Chair Professor at the Institute for Disaster Mitigation of Urban Cultural Heritage at Ritsumeikan University, Kyoto, Japan and Senior Advisor at the Indian Institute for Human Settlements (IIHS). He is the elected President of ICOMOS-India since 2014 and ICOMOS International Scientific Committee on Risk Preparedness (ICORP) since 2010. He is also a Member, ICOMOS Executive Committee.

**Dr. Shankha Pratim Bhattacharya**, is Assistant Professor, Architecture & Regional Planning & Vice-Chairman, Civil Construction and Maintenance (Architecture & Planning), Indian Institute of Technology Kharagpur. He is an Architectural Engineer and his areas of research interest include structural systems, building physics and disaster management. He served as state level resource persons for NPCBAREM for state government of Jharkhand and visiting faculty for state level disaster management training programme at administrative training institute, Ranchi, Jharkhand.

**Dr. Sanghamitra Basu**, Associate Professor of Architecture & Regional Planning Department, Indian Institute of Technology, Kharagpur, is an architect and urban planner with specialization in conservation studies. She is actively involved in teaching, consultancy and research in the field of heritage studies, conservation planning and management. She served as Member of National Monuments Authority (NMA), Gol, (2011 -2014), and is presently a member of COMOS India, an advisor to Indian Heritage Cities Network (IHCN) and is also involved with research projects sponsored by the Indian National Trust for Art & Cultural Heritage (INTACH), New Delhi.

**Course Co-ordinator**

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**Registration Process**

Registration for GIAN courses is not automatic because of the constraints on maximum number of participants allowed to register for a course. In order to register for one or multiple non-overlapping courses, you have to apply online using the following steps:

1. Create login and password at www.cep.iitkgp.ac.in/gian
2. Login and complete the registration form.
3. Select courses
4. Confirm your application and payment information.
5. Pay ₹ 500 (non-refundable) through online payment gateway.

The course coordinators of the selected courses will go through your application and confirm your selection as a participant one month before the starting date of the courses. Once you are selected you will be informed and requested to pay the full fees through online payment gateway service.