Introduction

The complexity of urban systems and the uncertainty of the impact of urbanization and climate change asks for new ways of thinking about planning objectives and solidarity in action. Cities are complex, adaptive systems of networked services and infrastructures. Growing urban populations, the concentration of resources and capital, unclear contingency planning, the often inadequate and environmentally unsound water supply and sewage management, the menacing continual destruction of ecosystems, and outdated infrastructures and buildings, all present massive challenges to city planning.

With the goal of strengthening resilience, there has been a lasting change of perspective in planning. The scope has been broadened from a specialized viewpoint to an interdisciplinary understanding of interactions and processes within the cityscape. Resilience is an anticipatory principle that transcends risk reduction and attempts to mitigate the effects of system failures while increasing capacities. The overall aim is to combine resilience strategies and sustainability by: i) enhancing sustainable urbanization, ii) improving ecosystems and nature-based solutions iii) developing climate change adaptation and mitigation, and iv) strengthening community-based approaches and social resilience.

Research projects of our research team at Technical University Darmstadt might demonstrate possibilities and challenges of this approach. Resource sensitive-Urban Design- Solutions may show that passive solutions on the building level and decentralized infrastructures are now being raised anew.

The course therefore aims to introduce the topic of resource sensitive urban design as an issue of growing importance. The classes are built on the lectures, followed by group work, in which the students should discuss, present and critically access the most important tools for climate adaptive planning and building and resource sensitive urban design.

Modules

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<td>You Should Attend If you are a...</td>
<td>• Student of Architecture and Engineering of year 4 and higher or faculty from reputed academic and technical institutions.</td>
<td>• Professionals and practitioners (Architects and Engineers) in the building design sector</td>
<td>• Executives, engineers and researchers from manufacturing, service and government organizations including R&amp;D laboratories.</td>
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Fees

The participation fees for taking the course is as follows:

- Participants from abroad: US $300
- Industry/Research Organization Professionals: INR 7500
- Faculty from academic institutions: INR 5000
- Students: INR 2500

The above fee include all instructional materials and course kit. Meal and accommodation will be chargeable as per actuals.

Register for the course through GIAN portal: http://www.gian.iitkgp.ac or contact the program coordinator

Course Coordinators: Dr. Nand Kumar || Dr. Satish Pipralia