Rethinking architecture, energy efficiency and participation in urban development

Overview

Architecture has throughout its history transgressed several phases related to new realities, primarily those of innovations in technology. At each stage architecture has been re-conceptualized, and changed. We are now at the dawn of a new era where architecture again will have to change in order to contribute towards a global future.

To do so it cannot rely on technology alone, partly because technology is resource dependent, and resources are unevenly distributed, partly because sustainability is invariably dependent on social and political acceptance. Given the role of the built environment and urbanization the future is critically hinged on architectural and urban reconceptualization and innovation. Hence a sustainable society will depend on perceptions and attitudes as much as it will on knowledge.

Also the focus on participation has increased in recent years. There are several reasons for that, but it has also happened due to new and much faster communication tools. These are easily accessible and have given more people involvement opportunities and communication channels. In urban development we got new Planning and Building Acts, where participation is the focus. Most of these legal obligation activities are based on oral and written dialog, but also other, new ways are existing. This is an exciting field, under constant development and improvement and we will try to show some examples through this platform.

Objectives

This course will use higher education in architecture and urbanism to find contextual and appropriate knowledge as well as foster attitudes through modes of learning where participation is the principle vehicle in dealing with energy efficiency. Engaging the students at the involved institution is in itself a means to that end.

The primary objectives of the course are as follows:

i) To use the participants’ insight, local knowledge, scientific methods and abilities and their reflection on and during the process to come up with new ideas, foster existing ones and their implementation regarding user dependent energy saving.

ii) The application of research results that have been reached through innovations in teaching, through materialization of a “live studio” design project or “real life” appropriation.

iii) Reflection on the common as a means in generating new knowledge and manifesting attitudes.

iv) Exposing participants to the regulatory framework and urban development;

v) Building in confidence and capability amongst the participants in the application of participative methods.

vi) Learning tools and techniques and mapping the organizational activities at a given area.

vii) Providing exposure to practical problems and their solutions, through case studies and live projects; - manifesting attitudes.

Modules

A: Rethinking architecture and energy efficiency: August 13 – August 18

Day wise Modules

DAY 1

- Rethinking architecture and energy efficiency in buildings and urban development
- The cities development and form dependency
- Regulatory framework and Urban Development-Focus on FSI
- Representing registration material and preparation for analysis
| DAY 2 | Participation – from theory to practice, from obligation to involvement  
|       | Case studies in Urban Development  
|       | Field Visit  
| DAY 3 | Smart cities Vs smart citizens, A critical observation of contemporary development in urban design and planning  
|       | Contemporary developments in Housing  
|       | Analysis and resulting possibilities/ actions  
| DAY 4 | Rethinking participation, Small-scale initiatives in the cities  
|       | Energy efficient initiatives in Housing  
|       | Transformation – Urban Green - Energy  
|       | Discussion and solutions on Site visit and case areas  
| DAY 5 | Learning tools and techniques for involving and mapping the organizational activities at a given area-Practical problems and solutions  
|       | Resulting possibilities/ actions  
|       | Challenges in Urban Development in Indian context  
|       | Discussion and solutions on Site visit and case areas, Conclusive remarks  

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

**You Should Attend If...**
- Student students at all levels (B.Arch/M.Arch/M.Planning)
- Faculty from reputed academic institutions and technical institutions
- Architects and Planners from Industry (Professionals from Government and Private or Corporate Architectural firms/ Planning Organizations)

**Fees**
The participation fees for taking the course is as follows:
- Participants from abroad: US $500
- Industry/Research organisations: Rs.3000
- Academic Institutions Staff/Faculty: Rs.2000
- Academic Institutions students: Rs.1000

The above fee include all instructional materials, computer use for tutorials and assignments, laboratory equipment usage charges, Free internet facility.
The Faculty

Prof. Markus Schwai is currently a full Professor of Department of Urban Design and Planning, Norwegian University of Science and Technology, Trondheim since spring 2017. He has a Master’s degree in Architecture from Graz University of Technology in Austria and a PhD from Graz University of Technology and NTNU. Since 2010 he is responsible for the bachelor education in urban design and planning for students in architecture. He leads a research and teaching cooperation with universities in the Western Balkans, financed by the Norwegian foreign Ministry. His research interests include local planning and urban design, where Typological development and participation in planning and building processes are his peak competence.

Karteek Guturu is an Architect and Urban Designer Assistant Professor in Department of Architecture, School of Planning and Architecture, Vijayawada and currently pursuing his Doctoral studies at SPA Vijayawada. He has authored and presented technical papers in the field of Architecture and Urban Design at various International platforms. He was selected for Faculty Exchange programme at Norwegian University of Science and Technology funded by Erasmus under the “Global Mobility Programme” to undertake his research “Floor Space Index and Livability-Establishing linkages for retrofitting”. His research interests are in sustainable urban forms, sustainable practices in the global and technologically driven cities and studies on compact and ecological cities.

Daketi Srinivas is an Assistant Professor in Department of Architecture, School of Planning and Architecture, Vijayawada and currently pursuing his Doctoral studies at SPA Vijayawada. He has authored and presented technical papers in the field of Architecture and Housing at various International platforms. He is part of the “Building Inclusive Urban Communities” research initiative, a project funded under EU Erasmus+ Program in the field of capacity building in Higher education. He was also part of the research undertaken by SPA Vijayawada in collaboration with Building Material and Technology Promotion Council, Government of India. His research interests include contemporary developments in housing, culture and built form.

Course Co-ordinators

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