B_RE_U_COM_
Building Resilient Urban Communities

KRVIA

CENTRE FOR URBAN AND REGIONAL EXCELLENCE

UNIVERSITY OF TWENTE. | ITC

DONAU UNIVERSITÄT KREMS

SPARC

Co-funded by the Erasmus+ Programme of the European Union

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PDP

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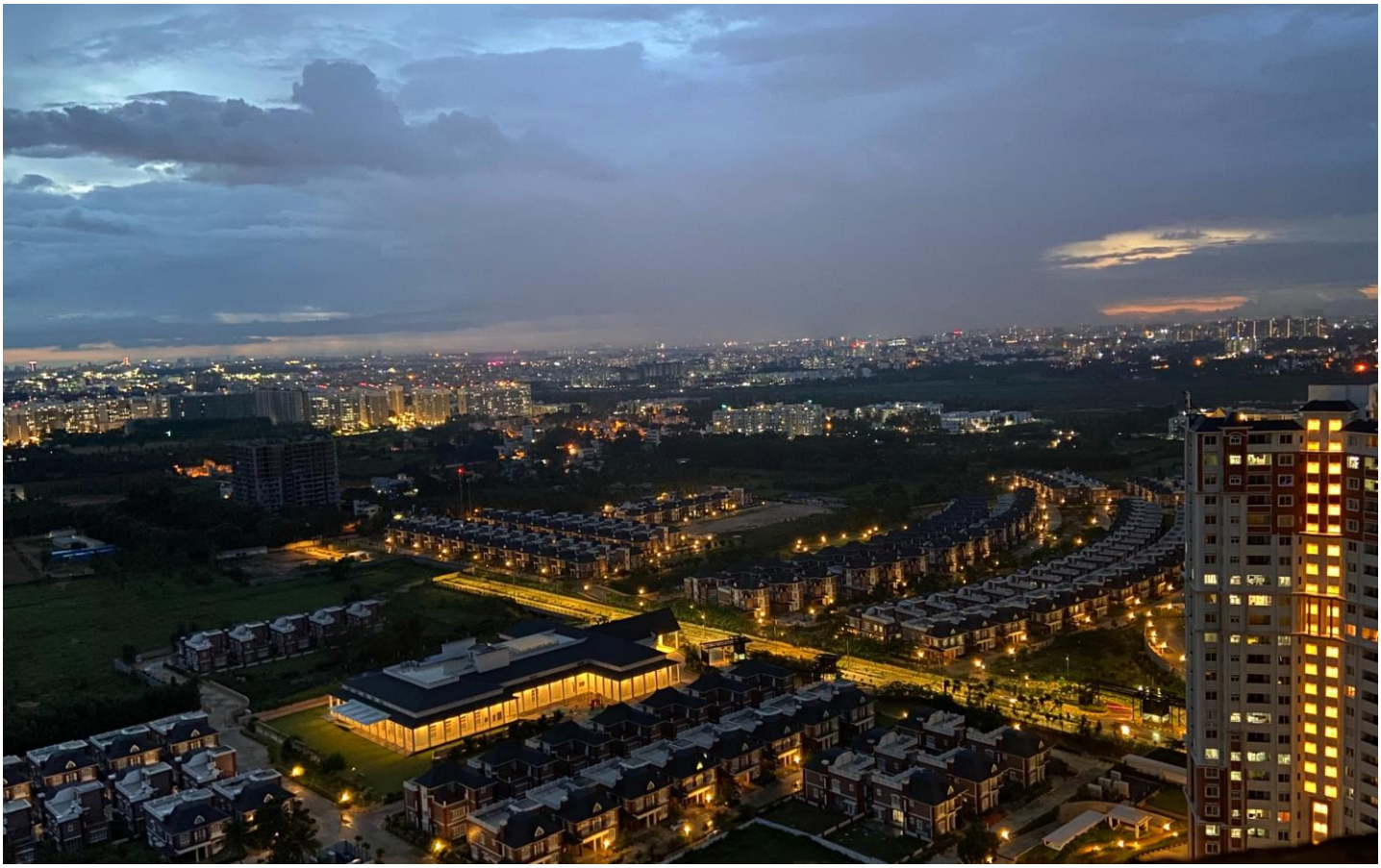
Climatic resilience and Building Energy



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Description of course

Aim:

To disseminate knowledge of Climatic resilience and Building Energy

Course Objectives:

To edify a group of professional about climatic Resilience

To bring together leading academicians, industrialists and researchers to exchange and share their experiences and knowledge related to Energy Efficient Building Technology

To provide a platform to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the field

To explore various simulations techniques regarding reverse engineering and rapid prototyping techniques

Learning Outcomes:

Upon successful completion of the course, the participants will be able to

Learners will be able to identify the various simulations techniques, regarding reverse engineering and rapid prototyping in buildings

Learners will be able to analyze architectural design and energy flow system in architectural buildings

Participants will acquire skills and challenges encounter during development of climatic responsive designs

Course Structure

Course Duration:

05 days

Course Frequency:

The course is designed for professionals in the field of architecture and planning and is a part of resilient dissemination series through five distinct conceptualized PDP's.

Course Format:

Day	Topic to be covered	Duration
Day 1	Lecture series and group discussions on hill regions	4 Hours
Day 2	Lecture series and group discussions on built form in relation to hill areas	4 Hours
Day 3	Lecture series and group discussions on response of built form(residential) to the socio-cultural aspects of hill regions	4 Hours
Day 4	Lecture series and group discussions on analysis and assessment of existing built form	4 Hours
Day 5	Lecture series and group discussions on skill development and role of stakeholders	4 Hours

Course Content

Prerequisites for Participation:

Professional, academicians and participants from the reputed institutes and industry. Members of govt. bodies and NGO's working in the field of capacity building, Disaster management and resilience.

Course Syllabus:

S. No.	Field of Interest/ Specialization	Proposed Topic to be delivered
1.	Architecture	Climatic responsive design

2.	Sustainability	Energy and building bye laws
3.	Energy	Renewable Energy
4.	Thermal engineering	Roof top solar panel
5.	Rapid Prototyping	Rapid Prototyping for architectural models
6.	Thermal engineering	Refrigeration and Air conditioning
7.	Architecture	Urban climate
8.	Thermal engineering	Recent development in solar receiver
9.	Energy and environment	Energy audit of buildings
10.	Urban Design	Passive design technology

***Course Assignments**:*

There are no assignments conceived for this course. Participation and active involvement in the lectures are sought.

Expected Time Spent on Course:

Time spent in hours: 25 hours

Time spent in ECTS (European Credit Transfer and Accumulation System): 1 ECTS

Course Grading

Assessment Criteria and Distribution of Marks:

This course will not be graded.

Course Evaluation

Evaluation Procedure & Criteria:

Based upon the common evaluation Performa prepared by WP4 leader institutes

Faculty Evaluation:

Feedback will be attached and submitted for the course to WP3 and WP4 leader institutes

Participant Evaluation:

There was no Participants Evaluation conducted as part of the PDP.