



SIMULATION AND VISUALIZATION TOOLS FOR BUILT ENVIRONMENT STUDY

EXECUTIVE DEVELOPMENT PROGRAMME

Date: 10th July 2023 to 14th July 2023 | Time: 2:00PM- 5:00PM

ABOUT SPA

SPA Vijayawada, one of India's three institutes of national significance, falls under the Ministry of Education (MoE) and provides education in the areas of Planning and Architecture. The institution has established itself as a leading example in professional education by offering undergraduate, postgraduate, and doctoral programs in these fields. Additionally, it promotes high-quality research in the realms of planning and architecture.

PREAMBLE

Built Environment Simulation is a part of any design development. Which can be used for informed decision making at any level. You are invited to attend a five-day Executive Development Programme on "SIMULATION AND VISUALIZATION TOOLS FOR BUILT ENVIRONMENT STUDY" conducted by School of Planning and Architecture, Vijayawada demonstrating the use of various digital tools used in the field of research. The programme is aimed to add a skill to the following users but not limited to, Architects, Engineers, Planners, Builders, Students and Researchers, as a part of self financing programmes / Govt. sponsored short term courses of SPA Vijayawada.



PROF. DR. RAMESH SRIKONDA
Director and Chief Patron



DR. UMA SHANKAR BASINA
HoD-Architecture and Patron

MODE OF ATTENDANCE

The programme will be conducted through Online Mode, and the link will be shared via email.

DETAILS

REGISTRATION FEE

Pay nominal payment of Rs. 500/-

REGISTRATION LINK:

<https://forms.gle/iW7y5tVtyB1wwKb66>

PAYMENT LINK

<https://www.onlinesbi.sbi/sbicollect/icollecthome.htm> . :



SCAN FOR
REGISTRATION



SCAN FOR
PAYMENT

LAST DATE OF REGISTRATION

09TH JULY 2023, 2:00 P.M.

COORDINATORS

DR. PRASHANTI RAO **AR VIJESH KUMAR V**
PH. +91 99267 04045 PH. +91 948700 5023

CO-COORDINATORS

DR LILLY ROSE **DR JANMEJOY GUPTA** **DR FAIZ AHMED**

Visit us at: www.spav.ac.in

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1
DAY
10th July'23
MONDAY

SESSION Time: 2 P.M-5 P.M

Ar. VIJESH KUMAR V

Assistant Professor in Department of Architecture, SPA Vijayawada



Introduction to Built Environment Analysis using Rhino3D – Grasshopper Tools

1. Introduction to Rhino3D – Grasshopper (GH)
2. Demonstration of the following cases using GH: Site Slope, Water Flow, Isovisits

2
DAY
11th July'23
TUESDAY

SESSION Time: 2 P.M-5 P.M

DR FAIZ AHMED CHUNDELI

Assistant Professor in Department of Architecture, SPA Vijayawada



Introduction to Neighborhood Scale Climate Study using ENVI-Met - Environment Evaluation Tool

1. Brief overview of the Tool/Data
2. Demonstration of ENVI-Met to - Modeling, Simulation and Visualization of results

3
DAY
12th July'23
WEDNESDAY

SESSION Time: 2 P.M-5 P.M

DR JANMEJOY GUPTA

Associate Professor in Department of Architecture, SPA Vijayawada



Design Solutions for Climate Responsive Architecture by Using Climate Consultant and Autodesk Ecotect.

1. Climate Consultant based Discussion on Basics of Uploading Climate Files, Wind Rose Analysis, Analyzing Psychrometric Chart (Building Bioclimatic Chart Based Analysis) for achieving Appropriate Building design Solutions.
2. Autodesk-Ecotect: Environmental Parameters based Concepts of Energy Modelling, Overview of Solar and Weather tools, Daylighting Analysis and Basic Thermal Comfort Analysis.

4
DAY
13th July'23
THURSDAY

SESSION Time: 2 P.M-5 P.M

DR LILLY ROSE

Associate Professor in Department of Architecture, SPA Vijayawada



Introduction to solar analysis using Andrew Marsh tools

1. Sun Path diagrams and computation of solar azimuth and solar altitude angles
2. Shading mask diagrams of the built environment and mutual shading analysis.

5
DAY
14th July'23
FRIDAY

SESSION Time: 2 P.M-5 P.M

DR PRASHANTI RAO

Assistant Professor in Architecture, SPA Vijayawada



Introduction to Microsoft Power BI and Data Wrapper as Visualization tool

1. What is the tool about, where and how to use it?
2. Demonstration of Representation of Climate change related data, per capita emissions and impact on different Regions of the world
3. Generation of choropleth maps and others through Data Wrapper.

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