



ABOUT SPAV

SPA Vijayawada, designated as an Institute of National Importance by the Ministry of Education, Government of India, specializes in Planning and Architecture education. Renowned for its academic excellence, it offers a wide range of Undergraduate, Postgraduate, and Doctoral Programs in these fields, emphasizing rigorous research. Recognized as one of the country's premiere technical institutions. The campus boasts green credentials and topnotch facilities, including modern infrastructure, hostels, libraries, laboratories, and sports amenities, fostering a conducive environment for innovation and scholarly pursuits among faculty and students.

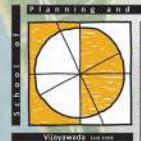
JOIN US

for **One day hands on workshop**
on

FLOOD RESILIENCE IN WATER SENSITIVE CITIES

April 4 , 2025

Venue - Conference Hall,
First Floor



Organised by :
Department of Planning

**School of Planning and Architecture,
Vijayawada**

Institute of National Importance, Ministry of Education,
Government of India

Subject Expert



Dr. Sathish Kumar D.

Associate Professor
Department of Civil Engineering, NIT Calicut

ABOUT THE WORKSHOP

This workshop provides an in-depth understanding of **flood resilience in water-sensitive cities**, emphasizing strategies for integrating flood management into urban planning. Through theoretical discussions, case studies, and hands-on modelling tools, students will explore innovative solutions for mitigating urban flooding while ensuring sustainable water resource management. Aligning with the academic exercise for **Water-Sensitive & Sustainable Environmental Master Plan for Jabalpur City 2040**. The workshop aims to equip students with the skills to develop flood-resilient and ecologically sustainable urban planning strategies.

PATRON



Dr. Ramesh Srikonda

(Professor & Director,
SPA Vijayawada)

Dr. Prasanth Vardhan

(Associate Professor & Head , Dept. of Planning,
SPA Vijayawada)

FACULTY COORDINATORS

Dr. Adinarayanane R

Dean (P&D) & Associate
Professor , DoP

Dr. Anurag Bagade

Assistant Professor , DoP

Ms. Lakshmi Pranathi

Assistant Professor , DoP

FORENOON SESSION

1. Concept

- a. Hydrological Systems & Urban Flooding
 - i. The science of urban hydrology
 - ii. Groundwater recharge and Watershed management
- b. Understanding Flood Resilience in Urban Planning
 - i. Role of climate change in increasing flood risks

2. Current Situation Assessment

- a. Flood Risk Assessment & Modelling
 - i. Hazard mapping and vulnerability assessment
 - ii. Identification of flood-prone zones using GIS-based analysis

3. Mitigation And Adaptation

- a. Sustainable Drainage Systems (SuDS) & Blue-Green Infrastructure
 - i. Designing effective drainage and stormwater management systems
 - ii. Rainwater harvesting and sustainable urban water cycles
 - iii. Case studies of blue-green infrastructure implementation.

STUDIO OVERVIEW

The studio, "Water Sensitive and Sustainable Environmental Master Plan 2040 for Jabalpur City", by SPA Vijayawada, aims to create a strategic urban framework that prioritizes sustainable water management, eco-friendly infrastructure, and inclusive growth, ensuring a resilient, livable, and future-ready city for generations. This project involves assessment, analysis, visioning, and proposals for Jabalpur's sustainable growth by 2040.

STUDY REGION

Jabalpur, a strategic city in Madhya Pradesh, contributes significantly to India's defense, economy, and environment. It's a major defense hub, trading center, and transport hub, with key establishments, industries, and natural attractions. Geographically, its location along the Narmada River makes it an essential water resource zone, influencing irrigation and drinking water supply.

AFTERNOON SESSION

Probable Hands-on Modelling tools which could be included in the workshop:

- GIS-Based Flood Mapping (ArcGIS, QGIS) – To analyse spatial flood risks and assess vulnerability zones.
- SWMM (Storm Water Management Model) – To simulate urban stormwater and drainage related modelling.

Expected Outcomes:

- Capacity building of students in hydrological modelling and flood risk assessment tools.
- Development of flood risk, Vulnerability Assessment and mapping.
- Decision-making towards water-centric urban development.