



**07TH – 11TH
DECEMBER 2026**



CALL FOR PARTICIPATION

**5 DAYS | 10 SESSIONS | HANDS-ON
40 CONTACT HOURS | 2.5 CREDITS EQUIVALENT**
Venue: SPA Vijayawada Campus



COMPLEX ADAPTIVE SYSTEMS (CAS) AND SYSTEM DYNAMICS (SD) IN URBAN & REGIONAL PLANNING

Cities are complex, dynamic systems where interventions in transport, housing, infrastructure, environment, and governance can produce interconnected and often unintended outcomes.

This programme introduces Complex Adaptive Systems (CAS) and System Dynamics (SD) as powerful approaches for understanding urban complexity, feedback loops, policy impacts, and future uncertainties.

It equips urban planners, policymakers, researchers, consultants, and ULB professionals with systems-thinking and analytical tools to identify leverage points, anticipate long-term consequences, strengthen climate and urban resilience, and support integrated, adaptive, and evidence-based urban planning and decision-making.



**CITY-SPECIFIC
SYSTEMS MAPPING
PACKAGE**



**INTERACTIVE POLICY
SIMULATION MODELS**



**URBAN GROWTH &
LAND-USE MODELLING**



**SOFTWARE TOOLS
& PRACTICAL SESSIONS**

SOFTWARE TOOLS



• System Dynamics
Simulation Tools



• Agent-Based & Complex
Adaptive Systems
Modelling Tools

Day-wise Programme

01

**FOUNDATIONS OF
URBAN COMPLEXITY**

Inter-linkages between
subsystems like
infrastructure, housing
& transport.



02

**SYSTEM DYNAMICS
METHODOLOGY**

Causal Loop Diagrams |
Stock and Flow
Diagrams



03

**ADVANCED MODELLING
& SIMULATION**

Land-use Prediction •
Cellular Automata &
Agent-Based Models
(NetLogo)



04

**MANAGING UNCERTAINTY
IN PLANNING**

Scenario Planning &
Fuzzy Data



05

**CAPSTONE
APPLICATION**

Real-world Case Studies
& Policy Roadmap



Coordinated by

Prof. Dr. Adinarayanane R
Principal Instructor

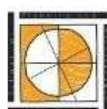
Dr. Faiz Ahmed Chundeli
Co-Principal Instructor

Patron

Prof. Dr. Ayon K Tarafdar
HEAD, A-CUPCB-SPAV

Chief Patron

Prof. Dr. Ramesh Srikonda
Director SPAV



योजना तथा वास्तुकला विद्यालय, विजयवाड़ा
School of Planning and Architecture, Vijayawada
An Institute of National Importance, Ministry of Education Gov. of India



REGISTRATION OPEN NOW!
For registration, fees, more details, visit
https://acupcb.spav.ac.in/cbp_26_01.php
Registration Deadline: 5th December, 2026, 5PM

