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

Executive Development Programme
On
APPLICATION OF STATISTICS IN SPATIAL PLANNING
28.06.2023 – 04.07.2023; 5.00pm onwards

Programme Objective:
The objective of this programme is to equip the participants with the knowledge and technical skillsets for identification, evaluation and solving of spatial planning issues in our cities using spatial statistics

Programme details:
Mode: Online with hands on exposure
Fees: ₹1000 (General Participant); **₹500** (OBC(NCL)/EWS/SC/ST/PwD participants)
Last date of registration: 27.06.2023, 11pm
Certificates will be provided on successful completion of the programme

Target Participants:
The programme is designed for Professionals working in the field of Urban Planning, Researchers and Students pursuing higher education.

Benefits:
The Department of Planning is conducting a 6 day online "Executive Development Programme" to impart advanced skills and expertise on spatial planning. Realising the present need for capacity building this online executive development programme will help in development of key technical skills and gain advance knowledge, and increase the productivity of working professionals in the field of spatial planning

Programme Coordinator:
Prof. Dr. Ramesh Srikonda
Director, SPA Vijayawada
Professor,
Department of Architecture

Co-coordinator 1:
Dr. Solanki Ghosh
Assistant Professor
Department of Planning
SPA Vijayawada

Co-coordinator 2:
Dr. Adinarayanane R
HoD,
Department of Planning,
SPA Vijayawada

About SPA Vijayawada:
SPA Vijayawada is one of the three institutes of national importance, under the Ministry of Education (MoE), Government of India, offering education in the fields of Planning and Architecture. The School has distinguished itself and has grown as a role model in the professional education offering undergraduate, post graduate and doctoral programs in the fields of planning and architecture, while at the same time fostering quality research in these domains.

Department of Planning:
The Department of Planning at SPAV envisions the furthering of existing knowledge and creation of new frontiers in the field of 'Development and Planning' through providing enabling education and training, cutting edge research and professional consultancy in the region. Since 2008, the Department of Planning is involved in shaping young minds through quality education towards making them technically equipped, socially responsible and ethical professionals in the field of Planning.

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Registration link: https://forms.gle/ERSe3MLwzXT2aMVr8

Executive Development Programme on

APPLICATION OF STATISTICS IN SPATIAL PLANNING

Organised by

School of Planning and Architecture, Vijayawada

An Institute of National Importance, Ministry of Education Govt. of India

Course Objective:

The overall objective of this course is to equip the participants with the knowledge and technical skillsets for identification, evaluation and solving of spatial planning issues in our cities using spatial statistics with hands-on exposure.

Target participants of the course:

The course is designed for officials working in Urban Local Bodies, Planning organizations and Institutes.

Course Description

This course begins with a discussion on the need for statistical techniques in urban planning research and exercises. This course deals in details with spatial statistics (descriptive and inferential), corelation, auto corelation and spatial regression, spatial weights, spatial clustering, growth prediction modelling, network analysis, etc. This course is covered through a series of lectures scheduled with each lecture for 120 - 150 minutes duration. The list of the reference material (that contains the journal articles, names of the books, and links to online tutorials) for each lecture will be shared.

Course Modules

28.06.2023: Introduction to spatial statistics, spatial data and sampling techniques

Need and relevance of spatial statistics in urban planning, types of spatial data, scale and resolution of spatial data, spatial patterns, data collection methods, sampling techniques,

29.06.2023: Spatial statistics – descriptive and inferential

Centrality measures, dispersion measures, distribution measures, measure of variation, spatial random function, variogram, semivariogram, covariogram, Correlogram, Spatial clustering, hot spot analysis, krigging.

30.06.2023: Normal distribution function and hypothesis testing

Probability distribution functions, relevance and application of normal distribution function in urban planning, hypothesis formulation and testing, etc.

01.07.2023: Spatial Regression

Corelation, causation, regression and its various types, auto corelation (Moron's I and LISA), spatial weights, spatial regression (lag and error models), Lagrange Multiplier Test

03.07.2023: Network Analysis and predictive growth modelling

Optimisation techniques, network characteristics analysis through space syntax, entropy, Cellular Automata, etc.

04.07.2023: Assessment and Discussion

Softwares to be used: QGIS, ArcGIS, GEODA and SPSS