



KAUTILYA SCHOOL OF PUBLIC POLICY

GITAM (Deemed to be University)
Rudraram, Patancheru Mandal
Hyderabad, Telangana 502329

Course Code: PPOL6421	Course Title: Making Data Actionable: Visualizing Information	
Trimester: 4	Course Type: Skills Shop	Credits: 1
Home Program(s): MPP	Batch/Academic Year: 2022-2024	
Course Lead: Mr. Rakesh Dubbudu	Assigned T/RA: Mr. Pritish	

Course Description

This skillshop dwells into understanding data and the types of data available. The course explores various forms of visualising data sets. The students will be exposed to relevant softwares to visualise and analyse data. In the present day where data is the biggest asset any individual or organisation can have, the students will be learning ways to make data actionable. Going through real time examples and referring various case studies is fused into this course. Interaction with stalwarts in the field of information visualisation will help students get an insight into ground realities.

Learning Objectives

1. Gather the right form of data
2. Observe and analyse datasets
3. Derive patterns
4. Convert data into visual forms
5. Create active dashboards to study datasets
6. Transition from numbers to maps, graphs, infographics etc
7. Setting narratives to convey the outcomes
8. Enable the process of change through modified datasets

Course Outcomes

On successful completion of this course, students will be able to:

1. Understanding the world of data and ways to process and analyse it
2. Analyse techniques of visualisation and converting data sets into visual form
3. Exposure to softwares to convert data into visual forms
4. Identifying and analysis of Geo spatial data sets
5. Forming narratives to present data sets, transition of data from numbers to a visual form and making it actionable

Textbooks and Course Materials

1. Tableau Your Data! - by Dan Murray
<https://www.amazon.in/Tableau-Your-Data-Analysis-Software/dp/1118612043>
2. Chapter 15- Bridging the gaps in development - Evidence led policy analysis, Book Chapter in Karnataka Economic Survey 2021-2022 - Mr. Sridhar Pabbisetty, Mr. Sreenivas Madenahally & Mr. Pratik Harish by Planning, Programme Monitoring and Statistics Department, Government of Karnataka.
<https://planning.karnataka.gov.in/info-4/Reports/Economic+Survey+2021-22/en>

Additional Reading materials will be shared in Moodle

Course Schedule

Unit 1	Sessions: 1	Introduction to data
Understanding data and types of data		
Unit 2	Sessions: 1	Visualisation
Why visualisation, various forms of visualisation and examples Handson with sample datasets		
Unit 3	Sessions: 5	Making sense of data
<p>Analyze gaps in the on developmental datasets for Karnataka on the following dimensions:</p> <ul style="list-style-type: none"> - Women, Children, Differently Abled, Transgender, Devadasis and Sex Workers. - Regional imbalances –based on regions historically at disadvantage - North Karnataka (includes Kalyana Karnataka / Hyderabad Karnataka and former Mumbai Karnataka); based on geographies like Karavali, Malnad and Bayalu Seeme. - Socio-Economic imbalances - Scheduled Castes, Scheduled Tribes, Nomadic Tribes and Backward Classes. Clustering of the backward socio-economic groups is predominantly in the Kalyana Karnataka, Northern and Eastern Districts adjacent to Kalyana Karnataka - Religious minorities <p>Using Tableau for narrative cartography, and identifying potential research topics Making Geo spatial data sets, converting data into GIS and visual form, Spatial analysis Making sense of numbers and data, forming narratives, presenting the final output and findings</p>		
Unit 4	Sessions: 1	Predicting & Visualising Impact
Predicting & Visualizing elections in a country of 1.3 billion people - Tools and Techniques Mr Pradeep Gupta, Chairman & MD, Axis My India		