



HANDLING LARGE-SCALE UNIT LEVEL DATA

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PRE-REQUISITES : Basics of Statistics

INTENDED AUDIENCE : Economics, Management, Sociology, Engineering, Science, Interdisciplinary

INDUSTRIES APPLICABLE TO : Consultancy, training and capacity building, Research and Business Analytics, professionals both teaching as research

COURSE OUTLINE :

The primary objective of this module is to enable learners in handling various large-scale complex database for detailed analysis. The latest statistical software like STATA will be employed in explaining these concepts as stated in the module. This will be practically oriented. The module covers the topics from basics of data, their collection, tabulation and analysis. The data analysis will be performed on various real life data (both quantitative and qualitative) which is crucial to any research. Topics include familiarization with unit-level data, collection, prerequisites, descriptive and inferential statistics, analysis of data using STATA, analysis of qualitative variables, and handling longitudinal (panel) data, etc.

ABOUT INSTRUCTOR :

Prof. Pratap Mohanty is presently an Associate Professor in Economics at IIT Roorkee. He has over 16 years of experience in teaching, research, training, and administration. Previously, he worked with Delhi University (CVS and Stephens College), IIFT, New Delhi and IIM, Indore. He graduated (Masters, M.Phil. and Ph.D.) from Jawaharlal Nehru University (JNU) in the domain of Economics information diffusion. He has been working on various socio-economic issues in India such as challenges of healthcare, medical pluralism, gender justice, tribal knowledge, informal enterprises, and inequalities. One of his projects on 'traditional medicine' sponsored by Govt of India, is declared a unique study. He is a columnist in various national dailies like the Hindu, Indian Express, Times of India and Pioneer, etc. He has been also involved in disseminating his research knowledge and teaching to the larger masses through YouTube and social media through NPTEL MOOC module of the IITs and Ministry of Education. His two popular courses running on this platform are 'Handling Large Scale Data with STATA' and 'Exploring Survey Data on Healthcare'. He was invited by JNU, South Asia University, Delhi University, IIT, IMM, NEHU ICSSR, BITS Pilani etc., to deliver a number of sessions on handling large-scale survey data. During his tenure at IIFT, he used to train the IFS probationers, senior IPS officers and senior ITS officers. He is also among the expert instructors to train the IAS probationers of LBSNAA, Mussoorie.

COURSE PLAN :

WEEK 1: Familiarization with Unit Level Data

WEEK 2: Collection of Unit Level data

WEEK 3: Getting Started with statistical package

WEEK 4: Prerequisites of Unit level Data

WEEK 5: Hand Holding of Unit Level Data

WEEK 6: Analysis of Unit level Data

WEEK 7: Analysis of Qualitative Variables

WEEK 8: Analysis of Unit level Longitudinal Data