# 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 a faculty member in the Economics discipline of Dept. of Humanities and Social Sciences, IIT Roorkee. He has thirteen years of teaching and research experience from reputed universities and institutions. He has been teaching the paper 'Research Methodology' at IIT Roorkee for over four years to Masters' and PhD students. He has also organized a Quality Improvement Program as a coordinator on 'Quantitative Analysis of Qualitative Data using Large-Scale Database at IIT Roorkee. He has expertise in the NPTEL-MOOCs on large scale data handling.

**COURSE PLAN :**

**Week 1:** Familiarization with Unit Level Data

**Week 2:** Collection of Unit Level data

**Week 3:** Getting Started With STATA

**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