

Internship on Data Science for Social Sciences: Tools, Techniques, and Applications

(A Multi-Disciplinary Internship Program [Teaching and Project] under NEP 2020 for Undergraduate Social Science Students with No Prior Knowledge of Mathematics and Statistics; Students will be exposed to hands on training with Excel, STATA and Basic techniques / tools of Artificial Intelligence)

Course Duration:

- Total Duration: **60 Hours (2 Credits)**
- Teaching Component: **30 Hours**
- Project Component: **30 Hours**

Teaching Structure:

- **Number of Lectures:** 20 (Online Mode)
- **Duration per Lecture:** 1 hour 30 minutes

Project Component:

- Duration: **30 Hours**
- Mode: **Group-Based Projects**

Students will work in groups on real-world datasets relevant to social science research
Emphasis on application of tools learned during the course (Excel and introductory statistical software)

Who can apply:

- Undergraduate (UG) / Post Graduate (PG) students / Researchers / Faculty Members of Social Science with ***no prior background in Mathematics or Statistics.***

Course Fee for UG Students:

- ₹ 2500/-
- **Fee Waiver for UG Students:**
 - Up to ₹ 500 waiver for students recommended by the Principal/Head of the Institution (for College) / Head of the Department (for University with UG Dept.)
 - An additional ₹500 fee waiver may be considered for students facing financial constraints.

Course Fee for PG Students and Faculty Members / Researchers:

- ₹ 3000/-

How to Apply

To apply for the internship, please visit the official application page:
<https://starebs.com/data-science-for-social-sciences/>

Follow these steps:

- Carefully read the instructions and access the application form
- Fill in all required details in the form
- Submit the completed application online

Applicants seeking a **fee waiver** by UG Students must:

- Upload a **recommendation letter from the** Principal/Head of the Institution (for College) / Head of the Department (for University with UG Dept.)
- Students seeking a fee waiver under the EWS category are required to upload a recommendation letter issued by the Principal/Head of the Institution (in case of colleges) or the Head of the Department (in case of universities having UG departments), certifying the financial condition of the student.

Course Fee Structure

- **PG Students / Faculty Members / Researchers:** ₹ 3000/-
- **UG Students (without recommendation / financial constraint):** ₹ 2500/-
- **UG Students (with recommendation):** ₹ 2000/-
 - With a **recommendation letter from:**
 - Principal / Head of the Institution (for Colleges), or
 - Head of the Department (for Universities with UG Departments)
 - Letter must be on **official letterhead**
 - **Payment of ₹ 2000/- should be made after uploading the recommendation letter in the application form**
- **UG Students (with financial constraints):** ₹ 1500/-
 - Must upload a **letter of recommendation by the Principal / HoI mentioning the financial condition of the students**

To Commence from 24th May, 2026

Last Date of Application: 20th May, 2026

Detailed Course Structure

Module 1: Introduction to Data and Types

- Nature and importance of data in social sciences
- Types of data: Cross-sectional data, Time-series data, Panel data

Module 2: Data Visualization and Interpretation

- Visual representation of data, Choosing appropriate visual tools for different types of data
- Use AI tools to generate charts from raw data, AI-assisted interpretation of trends and patterns

Module 3: Data Handling Using Excel

- Data cleaning and validation techniques, Basic Excel operations: Pivot tables, Conditional formatting
- Excel Copilot / AI formulas, Using AI for cleaning messy survey data, Detecting duplicate or missing entries using AI

Module 4: Frequency Distribution and Measures of Dispersion

- Concept of Frequency Distribution, Standard Deviation and Variance

Module 5: Correlation and Regression

- Concept of correlation, Simple linear regression
- Use AI to explain regression output in simple language, Compare human interpretation vs AI interpretation

Module 6: Fixed Effect Panel Data Regression – Method, Analysis and Statistical Hypothesis Testing

- Fixed Effect Regression method, Interpretation of results
- Hypothesis testing and applications: Statistical Analysis

Module 7: Introduction to STATA

- Basic commands and operations, Running regression and basic statistical tests
- Using AI to generate STATA code from plain English prompts

Module 8: Basic Time Series Regression

- Nature of time-series data, Trend and seasonal movement
- Basic time-series regression, Applications in economics and social sciences

Module 9: Sampling and Survey Techniques

- Census vs sampling, Probability sampling methods, Non-probability sampling methods
- Survey design and questionnaire basics, Sample size determination
- Enumeration techniques, AI-assisted questionnaire design

Module 10: Introduction to AI and ML

Module 11: How to do a Research Project in Social Science