

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.)*
 - *Additional discretionary waivers available 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.), **or**
- Submit a **self-declaration letter** to the Director, STAREBS explaining their financial constraints

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):** ₹ 2500/-
 - Must submit a **self-declaration letter**
 - **Payment should be made after uploading the self-declaration letter in the application form**
 - **STAREBS may refund up to ₹ 500/- after course completion, subject to approval by the Director, STAREBS**

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