

# Basic Mathematics and Statistics for Social Science Research

## with the Application of R

### Course Objectives

- To develop proficiency in mathematical and statistical tools relevant to social science research
- To apply econometric techniques to analyze real-world data
- To assess quantitative research methodologies and findings critically

### This Course is Designed For

Professionals, researchers, consultants, professionals or students, and anyone seeking to learn basic mathematics and statistical analytical tools for decision-making, research, or policy analysis

### Course Content

- Overview of Research Design; Problem Formulation and Data Collection Methods
- Basic Mathematics; Equations
- Calculus (Limits and Derivatives); Application of Differentiation
- Linear Algebra
- Basic Statistics; Graphical Representation
- Estimation & Sampling
- Probability Concepts; Probability Distribution
- Introduction to R Programming; Hypothesis Testing
- Econometric Modelling (Cross-Sectional Data and Time Series Analysis)
- Research Report Writing

### Course Details

**Training Duration:** January 11 to February 23, 2025

(7 weeks long course)

**Number of Sessions:** 19

**Class Time:** 6.00 PM - 7:30 PM

(Saturday, Sunday and Wednesday)

**Class Duration:** 1 hour 30 minutes

**Course Delivery Mode:** Online

### Course Fee

TK 6500

### Registration Link

<https://forms.gle/rBYHBPUdvzPJeh9R9>

### Registration Deadline

4th January, 2025

### For More Information

- 01788822455
  - 01712730621
  - 01675247069
- (10:00am - 03:00pm)

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