

3-day Intensive Workshop on
Econometrics and Machine Learning using Python
(October 30 – November 1, 2025)

Organised by

Institute of Development Studies Kolkata

*(A Centre of Excellence in Social Sciences funded by the Government of West Bengal and
recognised by the Indian Council of Social Science Research)*

DD 27/D, Sector I, Salt Lake, Kolkata 700064. URL: <http://idsk.edu.in/>

Objective of the workshop

This 3-day intensive workshop introduces the basics of Python and its applications in data analysis, visualisation, econometric and machine learning modelling, appropriate for students and researchers of Economics, Finance, Commerce or other social sciences who have a strong data and quantitative component in their research. The workshop covers a wide range of topics from data preprocessing, data description and visualisation to fitting econometric and machine learning models – all using Python. The basic knowledge of Python has become essential for students/researchers of economics and other social sciences because Python is a versatile, open-source, and user-friendly programming language that empowers students and researchers not only to analyse data but also to estimate and fit both basic and complex econometric and machine learning models. Through hands-on practice with real-world datasets, the participants of this workshop will learn how to prepare data, generate summary statistics, visualisations, fit econometric and machine learning models and how to analyse qualitative data using quantitative techniques. No prior programming knowledge is required.

Topics to be covered

- Basics of Python
- Data Preprocessing
- Summary Statistics
- Data Visualisation
- Multiple Regression and Diagnostics
- Logit/Probit Model and Model Evaluation
- Overview of Machine Learning Modelling Approach
- Classification And Regression Trees
- Random Forest Regression and Classification
- LASSO and Ridge Regression
- Text Analysis

Who can apply?

MA/MSc/MCom/PhD students and young faculty members in colleges, universities, and research institutions (belonging to Economics, Finance, Commerce or any discipline of social sciences) with a strong component of quantitative/statistical/econometric machine learning analysis in their ongoing research work. An applicant must possess essential knowledge of Statistics or Econometrics and have completed at least the first course on Statistics (or Econometrics), covering Probability and Distribution theories, classical linear regression, and basic limited dependent variable models.

How to apply

An application can be made online using the following link:

<https://forms.gle/nHJ3x81ggCUQUde6A>

What we provide

- All the sessions will be conducted through physical (offline) mode.
- Essential reading materials will be provided in soft versions.
- After the completion of the workshop, participants will be awarded certificates of participation.
- All participants will be provided with lunch and tea snacks for all three days.
- Outstation applicants need to arrange their own accommodation and transport.
- Participants are required to bring their own laptop for the workshop.

Workshop Fee

Rs. 3000/- (Rupees three thousand only). The workshop fee is payable online only after the applicant is selected to attend the workshop.

Intake Capacity

30 (maximum)

Important Dates

- Last day for application: **October 13, 2025**
- Communication to the selected candidates: **October 17, 2025**
- Confirmation of participation and payment of workshop fees: **October 17- October 24, 2025.**
- Workshop: **October 30 – November 1, 2025**

Contact: Any query can be addressed to: idsk@idskmail.com or workshop.idsk@gmail.com