

Call for application for a Professional Training on Data Analysis by using STATA

Course Code: EPRN03/PT/23

Dates: from 25th to 27th August 2023

Venue: University of Rwanda, Gikondo Campus

1. Introduction

Data analysis is important as a practice of working with data to glean useful information, which can then be used to make informed decisions. STATA is a powerful statistical software that enables users to analyze, manage, and produce graphical visualizations of data. In addition to analytical commands, Stata also has powerful commands for manipulating data, extracting, formatting and exporting results. It is a full-featured statistical programming language for Windows, Mac OS X, Unix and Linux. Stata is available in several versions: Stata/IC (the standard version), Stata/SE (an extended version) and Stata/MP (for multiprocessing). The major difference between the versions is the number of variables allowed in memory, which is limited to 2,047 in standard Stata/IC, but can be much larger in Stata/SE or Stata/MP. EPRN wishes to invite interested trainees to attend this four-days training.

2. Course content

This course will include the following content:

- Basic syntax building in Stata
- Importing data to Stata and saving Stata files
- Exploring your data: addressing missing values and working with different variable types
- Working with multiple Stata files: merge and append
- Tricks on automation in Stata: using macro and loops
- Introduction to regression analysis using Stata
- Descriptive analysis (univariate, bivariate and multivariate)
- Inferential statistics and regression analysis
- Overview of basic concepts in panel data
- Random-effects model
- Fixed-effects mode
- Cross-sectional estimation under endogeneity
- Panel-data estimation under endogeneity
- Dynamic models
- Probit models for panel data
- Logit models for panel data
- Poisson models for panel data
- Explain how to loop over the variables in a data set using given parameters.

- Identify the command used to examine all the coefficients returned by a regression output.
- Summarize the effect of using a numerical multiplier to change the marker size in a scatterplot.
- Recall how to properly express a standard normal probability density function.
- Recognize what information the regression offers in a given situation.
- Define “continuous polynomial interaction.”
- Explain the importance of using the reshape command for wide-form data when setting up panel data.
- Identify the variable that will have the largest standard deviation after running summary statistics for a data set of panel data.
- Name the linear panel estimator that assumes regression may be correlated to error terms.
- Explain the purpose of the Hausman test.

3. Training methods

The training course will be run in a workshop style with a high degree of participants’ involvement. Adult learning methodologies will be employed, and participants will not be passive. Debate and open discussions will be encouraged. The trainer will use a mix of presentations to define and explain key concepts and practical exercises. Trainees are encouraged to bring their own laptops. EPRN will provide STATA software (training version).

4. Certificate

EPRN will issue completion certificates to participants who will successfully attend the course and pass the course test.

Note: At the end of the course, the trainer will deliver a test, and ONLY participants who will get at least 60% will get the certificates. Others will be advised to wait until another training opportunity on the same topic becomes available which they will attend free of charge (this chance is provided only once).

5. Training fees, venue, date and refreshments

- **Members:** 60,000 Rwf
- **Non-members:** 100,000 Rwf

This training will be held at University of Rwanda, Gikondo Campus (former SFB building) from 25th to 27th August 2023. EPRN will provide lunch and STATA software (training version) free-of-charge.

6. Payment process

Interested applicants are encouraged to pay the registration fees through the following bank details:

- Bank Account: **00040 06945750 07** RWF (Bank of Kigali)
- Title of the Account: Economic Policy Research Network

Scan the bank slip and send it to: info@epnrwanda.org OR bring the hard copy of bank slip to EPRN office at University of Rwanda- Gikondo Campus (former SFB).

You can also pay through MTN MOMO PAY (*182*8*1*030683#) or through PayPal on our website (www.eprnrwanda.org) and notify us through info@eprnrwanda.org

NB: Tailor-Made Course

We can also do this as tailor-made course to meet organization-wide needs.

If you need further clarifications, call us through: 0788357648 or write to us: info@eprnrwanda.org

Kigali, 11/08/2023

Mr. Seth KWIZERA
Executive Director

