

# UP AND RUNNING IN STATA

### **GENERAL DESCRIPTION**

Up and Running in *Stata* provides participants with the necessary introductory toolset to enable them to carry out efficient data analysis and data management in *Stata* in a reproducible manner. The course covers everything from the very basics, in order to get one up and running in *Stata*, to an overview of the available *Stata* commands for preliminary data analysis, data management, importing and exporting data formats, merging of databases and the creation of graphs in *Stata*.

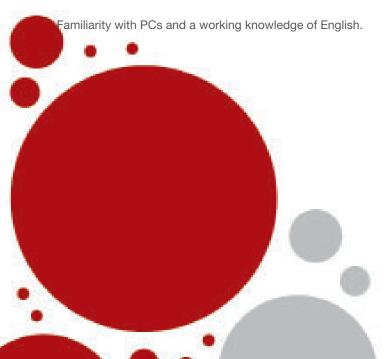
# **COURSE STRUCTURE**

In common with TStat's training philosophy, Up and Running in *Stata* is by its very nature to be considered very much a hands on approach to learning *Stata* course. Each individual session is composed of both a theoretical component and an applied segment, during which participants have the opportunity to implement the techniques illustrated under the watchful eye of the course tutor.

# **TARGET AUDIENCE**

This course is invaluable to both professionals and researchers (working in Epidemiology, Business Studies, Marketing and Management, Biostatistics, Economics, Epidemiology, Medicine, Public Health, Social and Political Sciences and Statistics), wishing to use *Stata* for applied statistical analysis, data management or data visualization.

### **PREREQUISITES**



# **PROGRAM**

### **SESSION I: GETTING STARTED**

- 1. Stata's GUI
- 2. Stata File formats
- 3. Interacting with your Operating System from within Stata
- 4. Working interactively in Stata
  - Help
  - Web resources
  - Updates
  - Downloading user written commands in Stata
- 5. Interrupting Stata Sessions
- 6. Loading Stata databases
- 7. Saving databases in Stata
- 8. Saving output: the log file
- 9. Exiting the software

### SESSION II: STATA FUNDAMENTALS

- 1. Visualizing the data
- 2. Stata's Syntax
- 3. Abbreviations in Stata
- 4. Constrained commands
- Data Types
- 6. Format command
- 7. Labels
- 8. Value Labels
- 9. Summarizing the data:
  - Summary Statistics
  - Statistical Tables
- 10. The by prefix
- 11. Selecting / eliminating variables drop, keep
- 12. The commands count and sort
- 13. Renaming variables rename
- 14. display
- 15. assert
- 16. Missing Values
- 17. Create, eliminate, transform data
  - generate, egen, replace, recode, keep, drop, rename

# SESSION III: CREATING SIMPLE *STATA* ROUTINES: DO FILES

### SESSION IV: IMPORTING DATA FROM SPREADSHEETS

- 1. Importing an Excel file using drop down menus
- 2. Importing an Excel directly in Stata: import excel
- 3. Importing a text file created from a spreadsheet: insheet
- 4. Importing a text file: import delimited
- 5. Importing SPSS databases
- 6. Verifying the Data
- 7. Likely Issues:
  - Missing values
  - Strings: encode, decode, destring, tostring

- Handling dates
- 8. Exporting data to ASCII/txt files to be read in spreadsheets: *outsheet*

### SESSION V: MERGING DATA BASES

- 1. The concepts *master* and *using* databases
- 2. append command
- Merging data
  - *merge* command
  - Merging one to one by observations
  - Merging one to one using one or more unique identifying variables
  - How do we make sure the identifying variables are unique
  - The system variables \_merge
- 4. updates command
- 5. Use the *append* and *merge* commands
- 6. The concepts of wide and long data format

### SESSION VI: GRAPHICS - AN INTRODUCTION

- 1. Stata graphics
- 2. *Graph* command syntax
- 3. Reading, saving and exporting graphs
- 4. Useful commands
- 5. Overview of various graph types
- 6. Personalizing a graph
- 7. The Graph Editor
- 8. Combining and overlaying graphs

# SUGGESTED READINGS

- Acock, A. (2023). <u>A Gentle Introduction to Stata</u>. Revised Sixth Edition. Stata Press Publication.
- Kohler, U. & Kreuter, F. (2012). <u>Data Analysis Using</u> Stata. Third Edition. Stata Press Publication.
- Mitchell, M. N. (2020). <u>Data Management Using</u> <u>Stata: A Practical Handbook</u>. Second Edition. Stata Press Publication.

# TStat

# DATE AND LOCATION

The 2024 edition of this training course will be offered online on a part-time basis on the 24th-25th, 28th-29th from 10:00 am to 1:30 pm and 31st of October from 10:00 am to 12:00 am. Central European Summer Time (CEST).

### **REGISTRATION FEES**

Full-Time Students\*: € 910.00 Ph.D. Students: € 1170.00 Academic: € 1295.00 Commercial: € 1505.00

\*To be eligible for student prices, participants must provide proof of their **full-time** student status for the current academic year. Our standard policy is to provide all **full-time students**, be they Undergraduates or Masters students, access to student participation rates. Part-time master and doctoral students who are also currently employed will however, be allocated academic status.

Fees are subject to VAT (applied at the current Italian rate of 22%). Under current EU fiscal regulations, VAT will not however applied to companies, Institutions or Universities providing a valid tax registration number.

The number of participants is limited to 8. Places will be allocated on a first come, first serve basis. The course will be officially confirmed, when at least 5 individuals are enrolled.

Course fees cover: I) teaching materials - copies of lecture slides, databases and *Stata* programs specifically developed for the course; ii) a temporary licence of Stata valid for 30 days from the day before the course commences.

Individuals interested in attending this training course, must return their completed registration forms by email (<u>training@tstat.eu</u>) to TStat by the 14th October 2024.

Further details regarding our registration procedures, including our commercial terms and conditions, can be found at <a href="https://www.tstattraining.eu/training/up-and-running-stata-ol/">https://www.tstattraining.eu/training/up-and-running-stata-ol/</a>.

### **CONTACT INFORMATION:**

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