

STATA PROGRAMMING “A LITTLE BIT OF PROGRAMMING GOES AN AWFULLY LONG WAY...”

GENERAL DESCRIPTION

This course aims to provide participants with the fundamental Stata programming toolkit in order to facilitate, automate, replicate and personalize both data analysis, management and presentation. As such, session 1 reviews some general Stata commands, illustrating how they can be combined with some powerful Stata programming constructs for looping and branching. The course then moves on to focus on how the programming concepts of Macros, Loops, and Branching, can be implemented to effectively write, modify and develop do files (user written Stata programs).

TARGET AUDIENCE

Researchers or professionals with previous programming skills in other software wishing to work effectively in Stata. Existing Stata users wishing to acquire the “standard” Stata programming toolkit in order to implement basic programming techniques to effectively automate a substantial part of their empirical data analysis.

PREREQUISITES

It is expected that individuals wishing to follow this course have a sound working knowledge of Stata. Participants are not however, required to have any programming experience in Stata or in other statistical packages.

PROGRAM

SESSION I: ORGANISING, MANIPULATING AND VISUALIZING YOUR DATASETS WITHIN A DO-FILE - A REVIEW

1. Saving the dataset
 - **save, preserve, restore**
2. Advanced data management commands
 - **keep** and **drop**
 - **sort** and **gsort**
 - **by-processing**
 - **append**
 - **merge** and **joinby**
 - **collapse** and **contract**
 - **order, aorder, move, reshape** (for panel data)

SESSION II: STATA CONSTRUCTS FOR DO-FILES PROGRAMMING

1. Stata **syntax**
2. Global and local macros
 - Global macros
 - Local macros
 - Recalling macros
3. Scalars and matrices
4. Extended macro functions
5. Macro increment and decrement functions
6. Advanced local macro manipulation
7. Temporary objects
 - Temporary variables: **tempvar**
 - Temporary Matrices and vectors: **tempname**
 - Temporary Files: **tempfile**
8. Looping in Stata
 - Looping using **foreach**
 - Looping using **forvalues**
 - Looping using **while**
9. Branching in Stata with: **if** and **else**
10. Writing and modifying a Stata program
 - Programs *without arguments*
 - Programs with *positional arguments*
 - Programs with *named positional arguments*
 - Storing and retrieving program results
11. Programs with arguments using the **syntax** construct

SESSION III: AUTOMATION DO-FILE PROGRAMMING IN PRACTICE - MAKING LIFE EASIER!

1. A DO-file template
2. Master and Using DO-files
3. Speeding-up your workflow within a DO-file: real examples
 - Running estimations under alternative model specifications
 - Building, modifying and automating tables of estimation output

- Returning estimation (**return**, **ereturn**)
- Building, modifying and automating graphs
- Stata graphic capabilities
 - The syntax of the graph command
- Customizing graphs

COURSE REFERENCES

- An Introduction to Stata Programming, Christopher F. Baum, Second Edition, StataPress 2016

DATE AND LOCATION

Due to the current COVID-19 situation, the 2020 edition of this Training Course will now be offered **ONLINE**, on a part-time basis on the **14th – 16th December 2020**. To this end, this year's programme has been transformed into a series of modules based on 3 sessions from 9.00 am to 1.00 pm Central European Summer Time (CEST).

REGISTRATION FEES

Full-time students*: € 535.00

Academic: € 760.00

Commercial: € 880.00

To be eligible for student prices, participants must provide proof of their **full-time student status for the current academic year.

Fees are subject to VAT (applied at the current Italian rate of 22%). Under current EU fiscal regulations, VAT will not however be 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 routines used during the course; ii) a temporary licence of Stata valid for 30 days from the day before the beginning of the course.

Individuals interested in attending the training course, must return their completed registration forms to TStat by the **4th December 2020**.

Further details regarding our registration procedures, including our commercial terms and conditions, can be found at www.tstattraining.eu/training/stata_programming-ol/.



CONTACT INFORMATION:

Monica Gianni

TStat Training | Kleebergstraße, 8

D-60322 Frankfurt am Main

TStat S.r.l. | Via Rettangolo, 12-14 I-67039 Sulmona (AQ)T. +39 0864 210101

www.tstattraining.eu | www.tstat.eu | training@tstat.eu