STATA TRAINING COURSE   2021/22   **Dr. Mohan Bijapur**

Syllabus

Pre-sessional online course

Introduction to STATA and data management tools

- Stata interface and files
- Using do-files
- Variables, locals and globals
- Changing directory
- Opening, browsing, saving, sorting, importing and exporting datasets
- Stata Help
- Saving results output in a log file
- Renaming, labelling, ordering, creating and replacing variables
- Merging and appending datasets
- Manipulating datasets (*reshape; collapse*)
- Using loops (*foreach; forvalues*)
- Summary statistics (*sum; _pctile; by(varlist)*)
- Useful functions for creating summary variables (*egen*)
- Creating graphs (line plots; scatter plots)

Core programme

Session 1: Data Management & Introduction to Regressions

- Merging and appending datasets
- Generating and changing variables
- Running regressions, interpreting their output and analysing the residuals

Session 2: Extensions to Basic Regressions

- Fixed effects & interaction terms
- The outreg2 command and its main options
- Instrumental variable regressions and regression output

Sessions 3 & 4: Panel and Time Series Data

- Setting up a time series or panel dataset
- Reshaping and declaring time series and panel data
- Using and creating time-series variables
- Running time series and panel data regressions

Session 5: Programming

- Macros
- Matrices
- Accessing stored output
- Application: creating custom tables from matrices
- Application: plotting impulse response functions

Session 6: Dynamic panel data models

- Arellano–Bond difference estimator
- Choice of instruments: endogenous vs. pre-determined vs. exogenous variables
- Sargan test of overidentifying restrictions