

# APPLIED TIME SERIES ECONOMETRICS MODELLING

**COURSE CODE:** ECM 9001

## COURSE OVERVIEW

This course is of an applied nature and focuses on hands-on experience in estimation, interpretation and evaluation of economic relationships. The workshop reconciles economic theory with practice, thereby empowering delegates with analytical skills and practical approach to decision making processes.

The course begins with a basic introduction to the concepts of regression and statistical inference. Thereafter, attention is given to the violations of the classical linear regression model that are often encountered in applied econometric work – the consequences of these violations are discussed, as well as practical ways of detecting (diagnostic testing) and solving these problems. Various applications of regression analysis, such as forecasting and policy simulation are discussed and applied. This course also includes the discussion of the practical implications of employing non-stationary data in estimation, the detection of unit-roots in the underlying data-generating processes and concepts of cointegration and error-correction modelling.

## BENEFITS OF ATTENDING

At the end of the course, you will:

- ✓ Apply regression analysis
- ✓ Use dummy variables
- ✓ Deal with structural breaks
- ✓ Deal with violations of the basic assumptions of regression analysis.
- ✓ You should also be able to apply the techniques of cointegration and error-correction modelling in the case where time-series data contain unit roots.

## COURSE OUTLINE

- Principle & methodology of econometric analysis
- Introductory statistics
- Basics of regression analysis
- Single equation estimation
- Multiple regression analysis
- Violations of the classical assumptions
- Regression on dummy variables
- Stationarity
- Unit root testing
- Introduction to Cointegration & error-correction modelling
- Practical modelling sessions

## APPLICATION SOFTWARE

Econometric Views (EViews version 8)

## PRERESQUITE

Basic knowledge of economic theory and exposure to empirical economic analysis

## WHO SHOULD ENROL?

Delegates are expected from research and policy department of Central Banks, Commercial Banks, Mortgage Banks, Multinational donor agencies and other government departments such as National Planning & Finance.

## COURSE STRUCTURE

Delegates will attend this 1 week course between 09:00 and 17:00 daily. London, UK