EXECUTIVE TRAINING COURSE

PROGRAMME

Forecasting for Banking Using Time Series Methods

29 September - 31 October 2025

fbf.eui.eu

Introduction

This course provides an introduction to time series methods for modeling and forecasting economic and financial variables within a banking context. Forecasting plays a crucial role in decision-making for both the public and private sectors and is especially significant for banking institutions, whether in management or supervision. Banks' assets and liabilities are shaped by various factors, including economic and financial conditions, interest rates, and the prices of financial assets. These variables emerge from a vast, complex, dynamic, and stochastic system, making accurate forecasting a challenging task where errors are inevitable. However, by applying appropriate econometric models and methods, forecast errors can be minimised, and forecasting precision can be significantly improved.

Topics

- Module 1: Modelling economic and financial variables (ARMA) + Empirical application using simulated and actual economic and financial data

- Module 2: Forecasting economic and financial variables using the ARMA model + Empirical application using simulated and actual economic and financial data (focusing on forecasting and forecasting performance)

- Module 3: Modelling and forecasting economic and financial variables using VAR models + Empirical application using simulated and actual economic and financial data (focusing on forecasting and shock transmission)

- Module 4: Cointegration and error correction models + Empirical application using simulated and actual economic and financial data (focusing on cointegration analysis and forecasting)

Faculty

- Massimiliano Marcellino | Bocconi University

Level | Introductory - Intermediate

Approach | Quantitative

Learning Objectives

- Develop skills in specifying, estimating, and evaluating univariate ARIMA models and multivariate VAR models for macroeconomic and financial variables relevant to the banking sector

- Learn to construct point, interval, and density forecasts

- Understand shock identification and transmission mechanisms

- Explore the interaction between short-run and long-run dynamics through ECM modeling

Format

This course combines self-paced materials with live online activities to provide a flexible and engaging learning experience.

You will access course materials and interact with instructors, teaching assistants, and fellow participants directly from your own devices. The course includes video lectures for exploring theoretical concepts, complemented by small work assignments and lab sessions. During these live online sessions, you will engage in practical exercises using EViews and/or Python, guided by the course instructor and teaching associate.

The format ensures ample opportunities for Q&A and collaboration. You will benefit from close guidance throughout the course, with multiple chances to receive individual feedback and interact with both the instructor and teaching assistant.

Time required from participants: 20 hours

29 SEPTEMBER

Start of the course

Access to all course modules

2 OCTOBER

15:00 - 16:30   **Live 'Brush up' Session**

6 OCTOBER

15:00 - 17:00   **Teaching Assistant-led office hours**

9 OCTOBER

15:00 - 17:00   **First live class: recap of modules 1-2 + Q&A**

14 OCTOBER

15:00 - 17:00   **Teaching Assistant-led office hours**

15 OCTOBER

15:00 - 17:00   **Second live class: Lab 1**

17:00 - 18:30   **Office hours with Prof. Marcellino**

23 OCTOBER

15:00 - 17:00   **Third live class: recap modules 3-4 + Q&A**

30 OCTOBER

15:30 - 17:30   **Fourth live class: Lab 2**

17:30 - 19:00   **Office hours with Prof. Marcellino**

31 OCTOBER

16:00   **End of the course**

fbf.eui.eu