Advanced Econometrics - Advanced Macroeconometrics

Module Code: ECU44171

Module Name: Advanced Econometrics

- **ECTS weighting**: 10
- **Semester/term taught**: Semester 1
- **Contact Hours**: 22 hours of lectures and 4 hours of tutorials
- **Module Personnel**: Lecturer – Professor Martyna Marczak

Module Learning Aims

This module aims to provide students with a theoretical and practical understanding of macro-econometrics and guide them in using this toolbox for conducting applied macroeconomics research.

Learning Outcomes

Upon successful completion, students will be able to:

- Understand the properties of different econometric models
- Decide which approach is appropriate for a particular type of data and research question
- Estimate econometric models using STATA

Module Content

The module will cover the following topics:

- Univariate time series
    - Stationarity
    - Forecasting
    - Nonstationarity: trends and structural breaks
- Stationary Vector Autoregressions (VAR)
- Cointegration and error correction

- Autoregressive Conditional Heteroskedasticity (ARCH)
- Dynamic factor models

Recommended Reading List

- Stock, J.H., and Watson, M.W. (2003), *Introduction to Econometrics,* Pearson, Global Edition, 4th edition.

Module Pre-Requisite

JS Econometrics A/B

Assessment Details

- 40%: Assignment
- 60%: Exam

Module Website

Blackboard