

### Advanced Econometrics | ECU44171/ECU44173

Year	Senior Sophister
ECTS Credits	10/5
Contact Hours	22 hours of lectures and 6 hours of tutorials
Pre-Requisite	JS Econometrics A/B
Semester	1
Module Leader and Lecturer	Professor Martyna Marczak
Contact Email	mmarczak@tcd.ie

#### Module Outline:

The module aim is to provide students with a theoretical understanding of macro-econometrics and guide them in how to use this toolbox for conducting applied macroeconomics research.

#### Topics Covered Include:

- Frisch Lovell Theorem
- Properties of OLS
- Non-spherical disturbances
- Instrumental variables
- Univariate time-series
- Stationary VAR
- Cointegration (single equation and VAR)

#### Module Learning Outcomes:

Upon successful completion, students will be able to:

- Understand properties of different econometric models



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

### **Assessment:**

For students on 10 ECTS:

- Project: 40% of the overall grade.
- Exam: 60% of the overall grade.

For students on 5 ECTS:

- Exam: 100% of the overall grade.

### **Recommended Reading List:**

Throughout the term we will follow several textbooks:

- Davidson, Russell and James MacKinnon (2003), *Econometric Theory and Methods*, Oxford University Press.