Econometric Methods for Research

Module Code: ECO00044M
Credits: 20
Term: 1 - 2
Contact Hours: 18 two-hour Lectures, 8 Seminars (44 contact hours)
Module Organiser: Dr. F. Bravo

Overview:

Econometric Methods for Research (EMR) is intended to help students to understand econometric techniques that are widely used in modern economic research. These include the multiple linear regression, panel data model, multiple equation models, nonlinear models, instrumental variables, maximum likelihood, and generalised methods of moments. The understanding of these topics is very important for those who intend to do some applied research in economics. It is essential for those who want to fully understand either theoretical or applied econometrics papers.

Aims:

To understand some of the econometric techniques used in modern economic research

Objectives:

On completing the module a student will be able to:

- define and illustrate the concepts of multiple linear regression, multiple equations models, nonlinear models, maximum likelihood and generalised method of moments;
- explain why these concepts are important in econometrics;
- apply these concepts to some simple examples;
- define and illustrate the concept of statistical hypothesis;

Assessment:

There will be a three-hour unseen examination in the Summer Term.

Pre-requisites:

The prerequisites for the course include some basic calculus, linear algebra and statistics. It is strongly recommended that students have taken at least an undergraduate econometrics course of the level of Stock and Watson’s “Introduction to Econometrics”. The level of EMR is that of Wooldridge’s “Econometric Analysis of Cross Sections and Panel Data”.

Main References:


Additional references will be provided during the course.