Einführung in die Ökonometrie

ECTS : 6

Volume horaire : 45

Description du contenu de l'enseignement :

The aim of the course is to provide students with basic knowledge and skills of econometric analysis. The material will cover simple and multiple regression analysis with cross sectional data. Basic time series models will be introduced at the end of the module. The considered methods and models will be accompanied by theoretical exercises and will be practiced on real economic data using modern econometric software (STATA). Individual work will be encouraged - selected exercises will be discussed in class. **Provisional Outline**

- Introduction
- Review of Probability and Statistics

Part 1 - Linear Regression Model

- Linear Regression with Single Regressors
- Inference in the Linear Regression Model
- Multiple Regressions
- Statistical Inferences in the multiple regression model

Part 2 - Binary Response Models and Endogeneity

- Regression with a binary dependent variable
- Instrumental variable regressions

Part 3 - Time Series Analysis

- Time series regression and forecasting

Compétence à acquérir :

After successfully attending the course, students will be able to apply the knowledge to the investigation of economic relations and processes. They will develop a global understanding of econometric methods, used in most economic books and articles. In particular, students will understand essential differences between time series and cross sectional data, get to know the specific econometric problems met when working with such data, and learn methods to deal with these problems.

This course contributes to develop several skills in accordance to the global learning objectives of the Bachelor of Science in Economics and Business Administration :

- Master quantitative methods.
- Have basic IT knowledge and intermediate proficiency in operating software and data tools.
- Have soft skills, in particular, in oral and written expression of their knowledge and ideas.

Mode de contrôle des connaissances :

Successful completion of a written exam of 90 minutes duration.

Bibliographie, lectures recommandées :

Main Textbook

- Introduction to Econometrics, 3rd rev. (2014) James H. Stock Mark W. Watson ISBN: 9781292071312, Pearson

Other related Textbook

- Introductory Econometrics: A Modern Approach, 5th Edition, Jeffrey M. Wooldridge, Michigan State University Published by Cengage Learning.