FME3543 Econometrics 7.5 credits

Ekonometri

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for FME3543 valid from Spring 2017

Grading scale

G

Education cycle

Third cycle

Specific prerequisites

University studies of at least 180 higher education credits of which at least 30 credits in mathematics / statistics / qualitative analysis or equivalent and documented proficiency in English B or equivalent.

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

After completing the course, participants will be able to:

- Demonstrate the ability to handle various categories of data and combining theoretical approaches with data-driven decision making.
- Show a basic understanding of statistical characteristics of linear and nonlinear regressions
- Show the ability to distinguish between correlation and causality
- Demonstrate the ability to use appropriate quantitative methods to analyse different types of data.
- Demonstrate the ability to conduct and in a pedagogical way present quantitative analysis

Course contents

This is a course in practical application of quantitative analysis methods for doctoral students. The course assumes that students have a basic knowledge of statistics and mathematics as well as the use of advanced statistical software (STATA, E-views, Matlab, R etc). The course is designed to provide students with practical knowledge and insight in modern research in the form of linear and non-linear estimation methods for large data sets.

Course main elements are:

- Linear regression
- Generalized Least Square (GLS) regressions
- Linear Instruments variable estimates
- Basic and advanced panel data models
- Binomial and Multinominal models
- Selection Models
- Models based on normal and non-nomal distribution.

Course literature

Cameron, A.A., Trivedi, P.K. (2010) Mikroeconometrics Using Sata, revised Edition, Stata Press

Baltagi, B. (2013) Econometric Analysis of Panel Data, Fifth edition. Wiley

Green, WH (2012) Econometric Analysis, Seventh Edition. Pearson

Examination

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

TEN1 - Exam, 4.0 hp, grade scale: Pass/Fail

ÖVN1 – Term paper, 3,5 hp, grade scale: P/ F

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.