Introduction to econometrics (ECON754_SOLEM)

ECTS
2 crédits

Composante
Polytech Annecy-Chambéry

En bref

> **Langues d'enseignement:** Anglais

> **Méthodes d'enseignement:** En présence

> **Forme d'enseignement :** Cours magistral

> **Ouvert aux étudiants en échange:** Oui

Présentation

Description

Semester 7 - Mandatory

- Student workload: Lecture (CM): 10,5 hours, Tutorials (TD): 10,5 hours + hours of self-study
- Module examination:1 written exam (100%)
- Teaching and learning method: seminar, practice, project

This course is an introduction to econometrics, the social science in which the tools of economic theory, mathematics, and statistical inference are applied to the analysis of economic phenomena related to environmental and energy topics. You will study and apply regression analysis to various data sets in order to familiarize students with the core concepts of estimation of economic parameters, prediction of economic outcomes, and statistical inference with continuous and qualitative data. Many exemples are treated using GRETL and STATA softwares.

Correspondence between major intended learning outcomes and assessment.

Responsible person for the module: Dorothée Charlier

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Heures d'enseignement

CM	Cours Magistral	19,5h
Introduction to econometrics - TD	Travaux Dirigés	10,5h
Introduction to econometrics - TP	Travaux Pratiques	

Pré-requis obligatoires

Pre-requisite for participation   Basics in statistics

Plan du cours

Teaching and learning method: seminar, practice and project.

Content of the module:

1. General Introduction

2. Linear regressions

3. Discrete variables

4. Truncation, censorship, and selection models

Practices on GretL and Stata

Compétences visées

By the end of this course, you should be able to:

- Understand the nature and scope of econometrics as a social science
- Use statistical analysis, including the classical regression model, to estimate relevant economic parameters, predict economic outcomes, and test economic hypotheses using quantitative data.
- Understand the basic assumptions of the classical linear regression model, and identify and correct (if possible) any violations of these assumptions, such as autocorrelation and heteroscedasticity.
- Develop and maintain a working knowledge of econometrics that will provide a basic foundation for future study in econometrics and statistical techniques.

Bibliographie

A. C. Cameron et P.K Trivedi, Microeconometrics using Stata– Revised Edition (2010), College Station, TX : Stata Press.

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Voir aussi : http://www.stata.com/bookstore/mus.html

G.S. Maddala 1992, Introduction to microeconomis, second edition, MacMillan Publishing Company

W. Greene, 2005, Econométrie, Pearson Editions,

G.S. Maddala, 1983, Limited-dependent and Qualitative Variables in Econometrics, Cambridge University Press.

A. Thomas, 2000, Econométrie des Variables Qualitatives, Dunod, 179p.

K. Train, 2002, Discrete Choice Methods with Simulation, Cambridge University Press.

C. F. Baum and S.Hurn, 2021, Environmental Economics Using Stata, Stata Press

Stata website: https://www.stata.com

Libellé court : ECON754_SOLEM

Nature : EC

Infos pratiques

Lieux

> Le Bourget-du-Lac (73)

Campus

> Le Bourget-du-Lac / campus Savoie Technolac

Contacts

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