



6.00 credits

45.0 h + 15.0 h

Q1

Teacher(s)	Claes Anouk ;
Language :	French
Place of the course	Bruxelles Saint-Louis
Prerequisites	<i>The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.</i>
Learning outcomes	<p>At the end of this learning unit, the student is able to :</p> <ul style="list-style-type: none"> • understand basic econometric theory (regression) : <ul style="list-style-type: none"> • identify, define and reproduce methods to estimate basic econometric models; • identify and explain basic econometric problems ; • apply basic econometric methods to economic problems and this using the Gretl software ; • analyze regression results, compare different models, criticize analyses, and model relationships between different variables (in Gretl)
Evaluation methods	<p>The evaluation of this course is based on :</p> <p>1) A written closed-book exam (80% of the final mark) based on theoretical concepts and practical econometric applications. Students will be asked to define, identify, and explain theoretical concepts, but also to analyse, interpret, comment and criticise regression results provided.</p> <p>2) A group assignment (20% of the final mark) during which students need to apply the theory and perform regression analyses and tests in Gretl. The use of artificial intelligence to search for information, write or improve the assignment must be specified. Sources of information must be systematically cited. Students remain responsible for the content of their work, regardless of the sources used.</p>
Teaching methods	<p>A) Lectures During the lectures the theoretical concepts and regression methods will be explained. Regression analyses will be demonstrated using Gretl and the interpretation and analysis of the results will be integrated in the lectures. Students are encouraged to participate to class, answering to questions that are raised.</p> <p>B) Exercise Classes During the exercise classes students have the opportunity to perform regression analyses using the Gretl software and interpreting the results under the supervision of a teaching assistant. We recommend the students to review their lecture notes before participating to the exercise sessions.</p>
Content	<p>Introduction :</p> <p>recap from statistique approfondie and statistique appliquée :</p> <p>Simple Regression</p> <p>Multiple regression :</p> <p>Estimation and properties of estimators; Statistical tests; Analysis of variance (ANOVA);</p> <p>Forecasting; Regression models with dummy variables;</p> <p>Relaxing the assumptions of the classical model : Multicollinearity, heteroscedasticity and autocorrelation; Generalized least squares (GLS)</p> <p>Introduction to qualitative variables in econometrics: the Probit, Logit and Tobit models.</p> <p>An introduction to panel regression</p>
Inline resources	<p>On the university's electronic platform the following additional information will be offered:</p> <ul style="list-style-type: none"> - a copy of the slides used in class - (summary) course videos - the exercises that will be solved during the exercise sessions.
Bibliography	<p>Jeffrey Wooldrige traduction de la 7ième édition américaine par Andre, Beine, Béreau, de la Rupelle, Durré, Gnabo, Heuchenne, Leturcq et Petitjean, 2023 troisième édition. ISBN : 978-2-8073-2977-5</p>
Faculty or entity in charge	ESPB

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Bachelor in Economics and Management	ECGB1BA	6	BECGE1232	
Bachelor in Economics and Management (French-English)	ECAB1BA	6	BECGE1232	
Bachelor in Economics and Management (French-Dutch-English)	ECTB1BA	6	BECGE1232	