UCLouvain

lbira2110b

2026

Statistical analysis of multivariate data - Applied Econometrics

3.00 credits	27.5 h + 7.5 h	Q1

Language :	French > English-friendly
Place of the course	Louvain-la-Neuve
Learning outcomes	
Evaluation methods	homework in group
Teaching methods	lectures in class / on Teams homeworks
Content	Introduction to the different data types (cross-sections, time series, panel data) and to the small-sample and large-sample justifications of the OLS estimators Cross-sections : typical exceptions to the Gauss-Markov assumptions, sources of endogeneity, IV estimators Time series : the problem of non-stationarity, unit root tests, a few typical econometric specification for time series (Koyck, ECM,...) Panel data : fixed effect model vs random effect model, the unifying Mundlak approach
Inline resources	partim B (Applied Econometrics): Documents used during the lectures (plans, tables, graphs,...) are available for the students on Teams.
Faculty or entity in charge	AGRO

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Biomedical Engineering	GBIO2M	3		
Master [120] in Forests and Natural Areas Engineering	BIRF2M	3		
Master [120] in Environmental Bioengineering	BIRE2M	3		
Master [120] in Mathematical Engineering	MAP2M	3		
Master [120] in Agriculture and Bio-industries	SAIV2M	5		