Module title		Abbreviation
Econometrics 3		12-M-OE3-242-m01

Module coordinator		Module offered by
Holder of the Chair of Econometrics		Faculty of Business Management and Economics

ECTS	Method of grading	Only after succ. compl. of module(s)	
5	numerical grade	--	

Duration	Module level	Other prerequisites	
1 semester	graduate	--	

Contents

Description:
This module deals with advanced econometric methods and concepts based on the classical and the generalized least squares estimator discussed in Ökonometrie I and II (Econometrics I and II). In particular, this includes the instrumental variable (IV) estimator, the generalized method of moments (GMM) estimator, distributed lag models as well as basic methods and concepts used in uni- and multivariate econometric time series analysis, including (non)stationarity, integration and cointegration.
Linear algebra is used as formal aid.

Syllabus:
1. Error-in-variables
2. IV estimation
3. Generalized least squares estimation
4. Distributed lag models
5. Stationary uni- and multivariate processes
6. Deterministic and stochastic trends
7. Integrated and cointegrated processes

Intended learning outcomes

The students acquire thorough understanding of advanced methods and concepts in econometrics. They get familiarized with diverse error-in-variables issues and will be capable of handling them appropriately. After the course, students understand the generalized method of moments (GMM) and the instrumental variable (IV) estimator to the extent that they can discuss their pros and cons, apply these to selected questions in quantitative economics and understand scientific papers using these methods. Furthermore, they become acquainted with selected time series issues, such as distributed lag models, non-stationarity, spurious correlation and cointegrated processes, enabling them to conduct a comprehensive time series analysis. In brief, the course enables students to apply the above mentioned methods and concepts to real life questions, assess their appropriateness and address their theoretical and practical benefits and shortcomings

Courses (type, number of weekly contact hours, language — if other than German)

V (2) + Ü (2)
Module taught in: English

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or
b) term paper (approx. 15 pages)
Language of assessment: English
creditable for bonus

Allocation of places

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Additional information

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Module description

Workload
150 h
Teaching cycle
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Referred to in LPO I (examination regulations for teaching-degree programmes)
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Module appears in
Master's degree (1 major) Management (2024)
Master's degree (1 major) International Economic Policy (2024)
Master's degree (1 major) Economathematics (2024)