

<b>Module title</b>		<b>Abbreviation</b>
Econometrics 3		12-M-OE3-111-m01
<b>Module coordinator</b>		<b>Module offered by</b>
holder of the Chair of Econometrics		Faculty of Business Management and Economics
<b>ECTS</b>	<b>Method of grading</b>	<b>Only after succ. compl. of module(s)</b>
5	numerical grade	--
<b>Duration</b>	<b>Module level</b>	<b>Other prerequisites</b>
1 semester	graduate	--
<b>Contents</b>		
<p>Description:</p> <p>This module deals with advanced econometric methods and concepts based on the classical and the generalised least squares estimator discussed in Ökonometrie I and II (Econometrics I and II). In particular, this includes the instrumental variable (IV) estimator, the generalised method of moments (GMM) estimator, distributed lag models as well as basic methods and concepts used in uni and multivariate econometric times series analysis, including (non)stationarity, integration, cointegration.</p> <p>Linear algebra is used as formal aid.</p> <p>Outline of syllabus:</p> <ol style="list-style-type: none"> <li>1. Error-in-variables</li> <li>2. IV estimation</li> <li>3. Generalised least squares estimation</li> <li>4. Distributed lag models</li> <li>5. Stationary uni and multivariate processes</li> <li>6. Deterministic and stochastic trends</li> <li>7. Integrated and cointegrated processes</li> </ol>		
<b>Intended learning outcomes</b>		
<p>The students acquire thorough understanding of advanced methods and concepts in econometrics. They are familiarized with diverse error-in-variables issues and capable of handling them appropriately. After the course, students understand the generalized methods of moment (GMM) and the instrumental variable (IV) estimator to an 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.</p>		
<b>Courses</b> (type, number of weekly contact hours, language – if other than German)		
V + Ü (no information on SWS (weekly contact hours) and course language available)		
<b>Method of assessment</b> (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)		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
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<b>Teaching cycle</b>		
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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) Econometrics (2011)  
Master's degree (1 major) Business Management (2011)  
Master's degree (1 major) Economics (2011)  
Master's degree (1 major) China Business and Economics (2014)  
Master's degree (1 major) China Business and Economics (2012)  
Master's degree (1 major) Chinese and Economics (2014)  
Master's degree (1 major) Chinese and Economics (2012)