MV04: Econometrics					Study Programme	: M
Module Type:	ECTS Credits:	Workload:	Study semester:		Module Duration:	
Compulsory	6	180	1.		one semester	
Courses (HPW=hours per week):				Contact hours:	Indepen- dent study:	Planned Group Size:
Course 1: Econometrics (2 HPW)				30h	60h	80
Course 2: Econometrics - tutorial (2 HPW) Group event Several groups will be offered as tutorial.				30h	60h	40

Intended Learning Outcomes (ILOs):

By the end of the course, students will be able to

- find suitable econometric approaches and methods for content-related questions;
- construe econometric analyses, implement them self-reliant and evaluate them critically;
- classify methods and significance of present contributions;
- make self-reliant analyses from raw data till interpretation;
- adopt the standard software R.

Key competencies:

- academic research and writing
- critical thinking
- analytical skills
- willingness to learn and accomplish
- expressiveness (oral and written)

Description/Contents:

Course 1: Econometrics

- 1. Linear Regression
- 2. Asymptotic Analyses
- 3. Heteroscedasticity
- 4. Advanced Topics in Linear Regression
- 5. Instrumental Variables
- 6. Panel Data
- 7. Time Series

Course 2: Econometrics - tutorial

Cf. contents of course 1.

Language:

The language of the module is German or English. **Teaching Methods:** Lectures, group work, self-study. **Module Applicability:** M. Sc. Economics, M.Sc. FVM. **Pre-requisites/Requirements:** Admission to study Economics or Financial and Actuarial Mathematics for a Master's degree. Basic knowledge in statistics and econometrics from the Bachelor's programme are recommended. **Examination Types:** Comprehensive examination in the form of a written exam at the end of the semester (60 minutes). **Requirements for Award of Credit Points:** Successful participation in the exam. The exam will be passed if the grade is at least "sufficient" (4,0). **Availability:** The module will be offered each term, generally in the winter semester. Assessment: This course will be graded and is part of the calculation for the overall grade of your master degree. Particular information concerning the calculation of the overall grade can be gathered in the respective examination regulations. **Person Responsible and Main Lecturer:** Professor Dr. Florian Heiß and teaching/research assistants at the chair of statistics and econometrics. **Further Information:**

Current information can be found at http://www.statec.hhu.de/en.html.

Stand: 18.08.2023