



S422 Advanced Microeconometrics

Syllabus (Summer Semester 2026)

Instructor: Prof. Dr. Martin Biewen

Learning Target

Students master the state of the art of microeconometric techniques. They understand derivations and proofs. Students are able to assess the applicability and the limitations of the methods in fields such as labor economics, industrial economics, finance, and marketing. Students to apply the different methods in practical applications using the statistical software Stata.

Topics

The module deals with a rigorous treatment of state-of-the art microeconometric methods with applications in different fields of economics. The topics include:

- 1) Conditional Expectations and Linear Projections
- 2) Basic Asymptotic Theory
- 3) Single Equation OLS estimation
- 4) Single Equation IV estimation
- 5) Systems of Equations OLS/GLS estimation
- 6) Systems of Equations IV estimation
- 7) Linear Unobserved Effects Panel Data Models
- 8) M-estimation, Nonlinear Regression, and Quantile Regression
- 9) Generalized Method of Moments and Maximum Likelihood Estimation
- 10) Discrete Response Models
- 11) Corner Solutions, Censoring, and Selection Models
- 12) Evaluation of Treatment Effects (Matching, RDD, DiD)
- 13) Duration Analysis

Structure

- Lecture: 90 Minuten

Enrollment information

No registration required.

Requirement

Basic knowledge of probability theory, linear algebra and econometric methods

Coursework

- 9 ECTS-Credits
- Written exam (60 Minutes), registration required.

Teaching methods

Study, literature study.

Course language

English.

Literature

Wooldridge, J.: Econometric Analysis of Cross Section and Panel Data

Cameron, A.C., P.K. Trivedi: Microeconometrics, Methods and Applications

Cameron, A.C., P.K. Trivedi: Microeconometrics Using Stata

Professor

Prof. Dr. Martin Biewen