Professor Dr. Robert Jung

Institute of Economics
Department of Econometrics and Statistics
University of Hohenheim

Summer 2025

Advanced Topics in Econometrics II

Summer 2025

Description:

This course covers core topics in modern time series econometrics, with a focus on both theoretical foundations and empirical applications in economics and finance. Key topics include stationarity, cointegration, autoregressive models, and volatility modeling.

Students are expected to apply these methods in their own empirical work using the statistical software R.

Prerequisites:

Minimum: Introductory Econometrics at the level of *Introductory Econometrics* by Jeffrey Wooldridge.

Grading:

Course grading is based on a graded individual homework assignment and a presentation. The assignment is due on June 1, 2025, and individual presentations will take place on July 11, 2025.

Course Timetable:

- Course registration via Ilias opens 28.3.25.
- KICK-OFF meeting: 4.4.25 13:00 via zoom (zoom-link on Ilias)
- Lecture Friday 11.4.2025 13:00 to 17:00 via zoom
- Lecture Friday 25.4.2025 13:00 to 17:00 via zoom
- Lecture Friday 09.5.2025 13:00 to 17:00 via zoom
- Lecture Friday 23.5.2025 13:00 to 17:00 via zoom
- **Submission deadline assignment: 1.6.25 12:00 noon**
- Lecture Friday 06.6.2025 13:00 to 17:00 via zoom
- Lecture Friday 20.6.2025 13:00 to 17:00 via zoom
- **Final presentation: 11.7.2025 13:00 to 17:00 via zoom**

References are provided throughout the course.

List of Topics:

- Introduction
- Univariate Linear Time Series Models
- Regression Models for Time Series Data
- Nonstationary Time Series Model
- Multivariate Time Series Models
- Volatility Models