

FOUNDATION OF ECONOMICS WITH DATA SCIENCE ()
(M.Sc. ECONOMICS WITH DATA SCIENCE)
WINTER TERM 2025/26

Course description:

This is the compulsory introductory course for students entering the MSc Economics with Data Science program. It provides students with the essential quantitative tools required for the study of economics. It is divided into three main components:

- Basic Statistics – a review of key statistical concepts and methods relevant for empirical work in economics and data science.
- Mathematics for Economics – an introduction and refresher of the mathematical skills necessary for the program, with a focus on their application to economic analysis and data science.
- Introduction to Programming with R – a hands-on introduction to the R software environment for data analysis and visualization, integrated with the mathematical and statistical topics.

By the end of the course, students will be able to apply fundamental statistical and mathematical techniques, use R for basic data handling and analysis, and possess the quantitative foundation required for advanced coursework in economics.

Meeting times and locations:

This is an intensive course that takes place during the first three weeks of the semester. Sessions are held daily from 8:30 a.m. to 12:00 noon in person. In the afternoons, assignments and exercises for self-study will be provided.

First meeting: Monday, 13. October 2025, 08:30 - 12:00, in presence only (HS 34)
Further meeting locations are provided on HohCampus and on Ilias!

Instructors:

Prof. Dr. Thomas Dimpfl
e-mail: datascience@uni-hohenheim.de
Office hour: by appointment in person or via zoom

Prof. Dr. Robert Jung
e-mail: econometrics@uni-hohenheim.de
Office hour: by appointment in person or via zoom

Assessment:

The course will be assessed through a 60 minutes computer-based exam, graded on a pass/fail basis. Planned date: November 28, 2025. Exact date and location will be provided.

Course materials:

Lecture slides, data sets, assignments and reading additional material will be available via ILIAS <https://ilias.uni-hohenheim.de/goto.php/crs/1749459>.

Course outline:

Will be provided in the first meeting.