

B.Sc. Course (Elective Module Bachelor Study Phase 2)**Statistics 3****Course number BWL_BSc-WM-10V1 (Tutorial BWL_BSc-WM-10V2)****Examiner** Prof. Dr. Daniel Rösch / Dr. Rainer Jobst**Instructor** Dr. Rainer Jobst**Tutorial** Dr. Rainer Jobst

Course Objectives The primary objectives of this course are to provide statistical literacy as well as an in-depth understanding of modeling issues, techniques, and methods in random phenomena and statistical data analysis to real life situations. The course extends upon and complements the methodologies from Statistics 1 and Statistics 2 and will prepare for the complex issues of data exploration as well as for the more advanced statistical methods in multivariate data analysis in the Masters studies. A main emphasis is on a balanced implementation to a practical applicability in the fields of economic and human sciences.

Specifically, the course covers important areas including an introduction into probability, estimation and test theory.

In short, the topics covered in the course include:

- Probability theory
- Estimation theory
- Test theory

Primary Learning Outcomes The students acquire the ability to think probabilistically as well as the skills and tools necessary to independently model and analyze statistical data and make informed decisions.

In an accompanying tutorial lecture contents are complemented by examples, case studies and IT based applications combining theoretical foundations with conceptual understanding, practical aspects and real-life situations.

Prerequisites Statistics 1 (recommended)
Statistics 2 (recommended)

Applicability of the BSc Module WiWi – BSc – Wahlbereich W in Studienphase 2

Frequency Winter term

Recommended Semester 6

Examination Written exam, 90 minutes

Workload Overall: 180h (6 ECTS * 30h):
1. Hours of presence: 60h
2. Selfstudy: 120h

Credit Points 6 ECTS