B.Sc. Course (Elective Module Bachelor Study Phase 1)
Statistik 1 (Statistics 1)
Course number 22013 (Tutorial 22014)

Examiner	Prof. Dr. Daniel Rösch
Instructor	Prof. Dr. Daniel Rösch
Tutorial	Student Assistants
Course Objectives	The primary objective of this course is to get basic knowledge in descriptive statistics and probability theory. After this course, students should have a deeper understanding how to analyze and describe data and should be aware of basic probability concepts and their applications.

In short, the topics covered in the course include:

- Descriptive statistics
- Uni- and multivariate frequency distributions
- Measures for central tendency
- Measures for variation
- Measures for higher moments
- Measures for concentration
- Correlation
- Dependence
- Probability theory
- Univariate random numbers

Primary Learning Outcomes	Students acquire basic knowledge in descriptive statistics which is used to analyze data in depth. Furthermore, an introduction in probability theory is given, while students exemplary learn first applications of probability theory in finance. Contents are complemented by examples in an accompanying tutorial.
Prerequisites	None
Applicability of the BSc Module	WiWi - BSc - Quantitative Grundlagen BWL/VWL/IVWL WiWi - BSc - Quantitative Grundlagen WI
Frequency	Winter term
Recommended Semester	1
Examination	Written exam, 90 minutes

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

Credit Points	6 ECTS

Last updated	September 29, 2025