Zurich University
of Applied Sciences

School of
Management and Law

Valid for 2022.FS

Module Name: Statistics		
Module Code	w.BA.XX.2Stat-en.XX	
Module Description	Students understand the fundamental methodologies of descriptive and inductive statistics in the appraisal and analysis of statistical data and apply these methods to economic practice.	
Program and Specialization	Business Administration - Banking and Finance (PiE)	
Legal Framework	Academic Regulations BSc dated 29.01.2009, Appendix to the Academic Regulations for the degree programs in Business Administration, Business Information Technology, and Business Law, first adopted on 12.05.2009	
Module Category	**Module Type:** Compulsory	**Program Phase:** Main Study Period
ECTS	6	
Organizational Unit	W Institut für Wealth & Asset Management	
Module Coordinator	Armin Bänziger-Aiba (banz)	
Deputy Module Coordinator	Oliver Bachmann (bacl)	
Prerequisite Knowledge	• w.BA.XX.2Math1-en.XX • w.BA.XX.2Math2-en.XX	
Contribution to Program Learning Goals (Affected by Module)	§ Professional Competence § Methodological Competence § Social Competence § Self-Competence	
Contribution to Program Learning Objectives	Professional Competence § Knowing and Understanding Content of Theoretical and Practical Relevance § Apply, Analyze, and Synthesize Content of Theoretical and Practical Relevance § Evaluate Content of Theoretical and Practical Relevance Methodological Competence § Problem-Solving & Critical Thinking § Scientific Methodology § Work Methods, Techniques, and Procedures § Information Literacy § Creativity & Innovation Social Competence § Oral Communication § Teamwork & Conflict Management § Intercultural Insight & Ability to Change Perspective Self-Competence § Self-Management & Self-Reflection § Ethical & Social Responsibility § Learning & Change	
Module Learning Objectives	Students... § understand the concept of statistical figures. § explain the key terminology of probability theory. § understand the significance of confidence intervals and hypothesis test procedures. § describe linear relationships between two variables. § present data in appropriate diagrams. § calculate figures from empirical and theoretical distributions. § determine probabilities from elementary chance events. § apply case-related probability distributions. § construct confidence intervals for population mean values. § test hypotheses in terms of a population mean value. § analyze data using statistical evaluations. § evaluate hypotheses using sample data. § interpret results from linear simple regressions. § learn to use the statistics software gretl autonomously. § master the applied statistics exercises in the teaching material independently.	

Module Content	§ Processing and presenting data § Statistical measured values: location and dispersion measures § Probability calculation (incl. elementary combinatorial analysis) § Discrete probability distributions (esp. binomial distribution) § Continuous probability distributions (esp. uniform and normal distribution; normal approximation of discrete distributions) § Distribution of random sample statistics § Estimation procedure (point and interval estimation, esp. for mean values) § Hypothesis tests (esp. with regard to mean value of basic population) § Relationships between variables: cross tabulation and dispersion diagrams; covariance and correlation; linear regression models with an independent variable
Links to other modules	-
Methods of Instruction	§ Lecture § Interactive Instruction § Exercises **Social Settings Used:** Individual Work
Digital Resources	§ Teaching Materials § Multiple Choice Tests

Type of Instruction	**Classroom Instruction**	**Guided Self-Study**	**Autonomous Self-Study**
Large Class	28 h	-	
Small Class	28 h	56 h	
Group Instruction	-	-	
Practical Work	-	-	
Seminar	-	-	
Total	**56 h**	**56 h**	**68 h**

Performance Assessment

End-of-module exam	**Form**	**Length (min.)**	**Weighting**
Written exam	Specified documentation	60	100,00 %
Permitted Resources	Approved calculator according to "Guidelines on Supplementary Materials"	With dictionary	

Others	**Assessment**	**Length (min.)**	**Weighting**
-	-	-	-

Classroom Attendance Requirement	Mandatory Attendance: None
Language of Instruction/Examination	English
Compulsory Reading	Newbold, P., Carlson, W. & Thorne, B. (2019). Statistics for Business and Economics (Global Edition). 9th edition. Upper Saddle River N.J: Pearson Prentice Hall. ISBN 978-1292315034.
Recommended Reading	-
Comments	-