

Module title		Abbreviation
Descriptive Statistics and Introduction to Probability		12-Stat-G-152-m01
Module coordinator		Module offered by
holder of the Chair of Econometrics		Faculty of Business Management and Economics
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
<p>Description: This module deals with the basic terms and concepts of descriptive statistics, indices and probability calculus. It introduces students to common frequency distributions and fundamental distributional characteristics of one-dimensional data as well as basic concepts and methodology necessary for the description and interpretation of multi-dimensional data. In addition, interpretation and calculation with indices as well as fundamental terms of probability calculus are discussed in the second half of the course.</p> <p>Outline of syllabus: 1. Basic terms in statistics 2. Frequency distributions 3. Distributional characteristics 4. Multi-dimensional data 5. Index calculus 6. Fundamental probability calculus 7. Random variables and distributions</p> <p>Reading: Assenmacher, W.: Deskriptive Statistik, Springer. Bamberg, G., Baur, F.: Statistik, Oldenbourg. Bohley, P.: Statistik, Oldenbourg. Hartung, J., Elpelt, B., Klösner, K.-H.: Statistik, Oldenbourg. Hippmann, H.-D.: Statistik, Schäffer-Poeschel. Leiner, B.: Einführung in die Statistik. Litz, H.-P.: Statistische Methoden in den Wirtschafts- und Sozialwissenschaften, Oldenbourg. Mosler, K., Schmid, F.: Beschreibende Statistik und Wirtschaftsstatistik, Springer. Schaich, E., Köhle, B., Hartung, J.: Statistik I für Volkswirte, Betriebswirte und Soziologen, Verlag Franz Vahlen. Schira, J.: Statistische Methoden der VWL und BWL, Pearson Studium.</p>		
Intended learning outcomes		
<p>Students acquire knowledge of the fundamental terms and concepts of descriptive statistics. In particular, they become familiar with the application and interpretation of common visual and formal tools for descriptive data analysis while simultaneously learning how to competently deal with economic and/or statistical data. On the visual side, this includes knowledge of the construction and interpretation of histograms, bar plots, pie charts, and empirical distribution functions, while on the formal side students learn how to deal with basic distributional characteristics and correlation measures. Additionally, students are familiarized with index calculus and interpretation (in particular the Laspeyres and the Paasche price index) as well as with the most fundamental concepts and terms of probability calculus. The competences acquired in this course serve as a prerequisite for "Introductory Statistics II".</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
V (2) + T (2)		

Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 60 minutes) or b) written examination (approx. 90 minutes) or c) written examination (approx. 120 minutes)

Allocation of places

840 places. (1) No restrictions with regard to available places for Bachelor's students of Wirtschaftswissenschaft (Business Management and Economics) (BSc with 180 ECTS credits), Wirtschaftsmathematik (Mathematics for Economics) (BSc with 180 ECTS credits), Wirtschaftsinformatik (Business Information Systems) (BSc with 180 ECTS credits) as well as Bachelor's students with the minor Wirtschaftswissenschaft (Business Management and Economics) (60 ECTS credits). (2) Additional places will be allocated to students of other subjects. (3) When places are allocated in accordance with (2) and the number of applications exceeds the number of available places, places will be allocated by lot among all applicants irrespective of their subjects. (4) Places on all courses of the module with a restricted number of places will be allocated in the same procedure. (5) A waiting list will be maintained and places re-allocated by lot as they become available.

Additional information

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Bachelor' degree (1 major) Business Management and Economics (2015)
 Bachelor' degree (1 major) Business Information Systems (2015)
 Master's degree (1 major) China Business and Economics (2016)
 Bachelor' degree (1 major) Business Information Systems (2016)
 Master's degree (1 major) China Business and Economics (2019)
 Bachelor' degree (1 major) Business Information Systems (2019)
 Bachelor' degree (1 major) Business Management and Economics (2019)
 Bachelor' degree (1 major) Business Information Systems (2020)