Modul-Nr./ Module-Code	**BMSIB2600**
Modulbezeichnung / Module title	**Analytical Statistics**
Semester or Trimester	3rd
Dauer des Moduls / Duration of the module	1 semester
Art des Moduls (Pflicht, Wahl, etc.) / Module type (Compulsory, Elective etc.)	Compulsory subject
Ggfs. Lehrveranstaltungen des Moduls / If applicable: Sub-modules	-
Häufigkeit des Angebots des Moduls / The module is offered …	Annually (winter semester)
Zugangsvoraussetzungen / Prerequisites for attending	None
Verwendbarkeit des Moduls für andere Module und Studiengänge / Applicability of the module for other modules and degree courses	Preparatory course for further mathematically oriented subjects in the degree course
Modulverantwortliche/r Lecturer in charge	Prof. Dr. Gero Szepannek
Name der/des Hochschullehrer/s / Name oft he lecturer	Prof. Dr. Gero Szepannek
Lehrsprache / Language of Instruction	English
Zahl der zugeteilten ECTS credits / Number of ECTS credits	5
Gesamtworkload und ihre Zusammen-setzung / Workload and its composition	150 hours (86 h self-study; 64 h contact time)
SWS / Semester periods per week	4
Art der Prüfung / Assessment methods	Written examination (2 hours)
Gewichtung der Note in der Gesamtnote / Weight in final grade	2 %
Qualifikationsziele des Moduls / Learning outcomes of the module	<u>Knowledge & Understanding</u>: Students gain essential insights about the following topics: analysing a single statistical variable_ / Probability and distributions / measures of location and variability / multidimensional data: correlation and regression / confidence interval / testing statistical hypothesis <u>Applying knowledge and understanding</u> All theory acquired has to be applied to presenting and analysing statistical aspects of current national and international business situations. <u>Making judgements</u> The discussion of current national and international business situations results in interpreting of statistical parameters. <u>Communication:</u>

	Results obtained are discussed in class. Learning skills: The work carried out in this module prepares students for the more complex discussion in the Project-course and encourages them to individually pursue further statistical analysis of economic situations.
Inhalte des Moduls / Syllabus	The student is able to describe and interpret the data for a given observed situation with the help of statistical measures using appropriate software. He is also able to formulate a statistical hypothesis and test it using statistical software.
Lehr- und Lernmethoden des Moduls / Teaching Methods of the Module	2 hours/week lecture (seminar form) + 2 hours/week PC practical exercise
Besonderes / Special Features	Practical application of the methodology in PC labs.
Literatur / Literature	• D. Diez, C. Barr and M. C¸ etinkaya-Rundel: OpenIntro Statistics. 3rd Edition, 2016. • https://www.openintro.org/stat/textbook.php?stat_book=os, • J. Bleymüller and R. Weißbach: Statistik für Wirtschaftswissenschaftler. 17th Edition, Vahlen, Munich, 2014. • U. Genschel und C. Becker: Schließende Statistik, Springer, 2005. • D. Kahneman: Thinking Fast and Slow. Penguin, 2012. • J. Hedderich und L. Sachs: Angewandte Statistik, 14. Auflage, Springer, 2012