

Module Manual

Bachelor IBE

Module name	Statistics
Responsible instructor	M. Sc. Petra Clauß
Learning objectives	Students will be able to, - recognize whether the application requirements of the learned methods are fulfilled, - model problems in a statistical sense, - interpret the calculated results in relation to the problem, - check the applicability of the statistical methods, - design the analysis of data and perform it on the computer using the statistical program R.
Module content	1 Basics 1.1 Statistical terms 1.2 Introduction to a statistical computer program 2 Descriptive statistic 2.1 Univariate data analysis 2.2 Bivariate data analysis 3 Special probability distributions 3.1 Discrete distributions 3.2 Continuous distributions 4 Estimation and testing methods 4.1 Parameter estimation 4.2 Interval estimation 4.3 Statistical hypothesis testing
Teaching/learning methods	- Lectures - Supervised exercises (on PC) - Supervised exercises (without PC) - Self-study
Prerequisites	none
Literature/multimedia teaching and learning programmes	• Rumsey, D.J. : Statistics Essentials for Dummies, John Wiley & Sons, 2019 • Heumann, C., Schomaker M. and Shalabh: Introduction to Statistics and Analysis, Springer, 2022 • Härdle, W. K., Klinke, S. and Rönz, B.: Introduction to Statistics, Springer, 2015
Teaching letter author	not necessary
Applicability	This module is particularly closely related to the following modules of the same degree program: - Marketing - Bachelor Thesis This module is also useful for other business-oriented courses at Schmalkalden University of Applied Sciences.
Workload/ Total workload	Total workload: 150 hours, thereof: 1) synchronous teaching: 60 (classroom study) 2) asynchronous teaching: 90, thereof: - preparation for the course (especially literature study): 20 - follow-up of the course: 20 - preparation of the exercises: 25 - preparation of the exam: 25
ECTS and weighting of the grade in the overall grade	5 ECTS-Punkte; Course: International Business and Economics: 5/180
Performance assessment	Exam (60 Minutes (100 %))
Semester	2. Semester
Frequency	Each academic year
Duration	One Semester
Type of course (compulsory, elective, etc.)	Compulsory module
Remarks	