

Engineering and Management Curriculum (part-time)

Valid from Autumn Semester 2023/2024 / 16.02.2023

Semester	Context Modules	Project Modules	Subject-Specific Modules				Mathematics and Natural Science Modules			
Semester 8		Bachelor Thesis: Engineering and Management DE/EN 12	Specialisation Module 8 4	Specialisation Module 10 4	Specialisation Module 12 4					
Semester 7		Project Thesis: Engineering and Management DE/EN 6	Specialisation Module 7 4	Specialisation Module 9 4	Specialisation Module 11 4	Elective Module Cross-Curricular 4				
Semester 6	Elective Module Context 2	Case Studies zu Operations Management und Datenanalysen DE 4	Specialisation Module 6 4	Specialisation Modul 2 4	Specialisation Module 4 4	Statistical Data Mining DE 4				
Semester 5	Elective Module Context 2	Elective Module Context 2	Case Studies on Operations Management and Data Analysis DE 4	Specialisation Module 5 4	Specialisation Module 1 4	Specialisation Module 3 4			Physik 3: Factory Physics DE 4	
Semester 4	Digitisation of Economic Systems DE 2	Case Studies Stock and Flow - Systems 2 DE 4				Stochastic Processes DE 4	Statistical Modelling DE	Numerics DE 4	Physics 2 DE	
Semester 3	Communication Competence 3 DE/EN 2	Case Studies on Process Automation DE 4				Basics of Statistics DE 4	Financial Enterprise Modeling DE 4	Analysis 3 DE 4	Physics 1 DE 4	
Semester 2	Communication Competence 2 DE/EN 2		Computer Science Programming 2 DE 4	Business Processes 2 DE 4		Probability Calculations DE 4		Linear Algebra 2 DE 4	Analysis 2 DE 4	
Semester 1	Communication Competence 1 DE/EN 2		Computer Science Programming 1 DE 4	Business Processes 1 DE 4		Explorative Data Analysis DE 4		Linear Algebra 1 DE 4	Analysis 1 DE 4	

Module Name
Language of Instruction
Credits

Overview of Engineering and Management specialisations

From your third year of study, you will specialise in one of the following three areas:

Industrial Engineering			
Semester 8	Advanced Operations Management DE	Quality Control - Methods and Instruments DE	Enterprise Resource Planning - Production and Logistics DE
Semester 7	Simulation of Business Processes DE/EN	Smart Factory DE	Logistics and Supply Chain Management DE
Semester 6	Production Planning and Control DE	Service Operations Management DE	
Semester 5	Operations Management Grundlagen DE	Operations Research DE	

Data and Service Engineering			
Semester 8	Data-Driven Decision Support Systems DE	Methods of Quantitative Marketing DE	Service Engineering Labor DE
Semester 7	Simulation of Business Processes DE/EN	Advanced Regression Modelling DE/EN	Service Engineering Basics EN
Semester 6	Production Planning and Control DE	Service Operations Management DE	
Semester 5	Operations Management Fundamentals DE	Operations Research DE	

Business Mathematics			
Semester 8	Survey Design and Analysis DE	Risk Engineering DE	Empirical Modelling of Financial Markets and Financial Products DE
Semester 7	Adaptive Modelle DE	Mathematics of Financial Markets 2 DE	Advanced Regression Modelling DE/EN
Semester 6	Time Series DE	Mathematics of Financial Markets 1 DE	
Semester 5	Economics DE	Actuarial Mathematics DE	