Course of Study Technomathematics (Study Cohort w22)

Sample course plan B Bachelor Technomathematics (TMBS)

Specia	lisation I. Mathematics, Specialisatio	n II. Informatics, Specialisation III. En	gineering Science, Specialisation	Core Qualification Elective C	Compulsory Specialisation Elective Compulsory Focus Elective	e Compulsory Interdisciplinary complement
lV _L ₽Sub	ject Specific Focus					
1 2 3 4	Analysis for Technomathematicians (part 1) Analysis I for Technomathematicians VL 4 Analysis I for Technomathematicians GÜ 2	Analysis for Technomathematicians (part 2) Analysis II for Technomathematicians VL 4 Analysis II for Technomathematicians GÜ 2	Higher Analysis VL 4 Higher Analysis GÜ 2	Foundations of Management VL 3 Introduction to Management VL 3 Management Tutorial GÜ 2	Seminar Technomathematics Seminar: Technomathematics SE 2	Computability and Complexity Theory VL 2 Computability and Complexity Theory VL 2 Computability and Complexity Theory GŨ 2
5 6					Combinatorial Structures and Algorithms Combinatorial Structures and Algorithms VL 3 Combinatorial Structures and Algorithms GŪ 1	
7 8 9				Graph Theory and Optimization VL 2 Graph Theory and Optimization VL 2 Graph Theory and Optimization GÜ 2		Bachelor Thesis
10 11 12	Linear Algebra 1 for Technomathematicians (part 1) Linear Algebra 1 for Technomathematicians VL 4 Linear Algebra 1 for Technomathematicians GŪ 2	Linear Algebra for Technomathematicians (part 2) Linear Algebra 2 for Technomathematicians VL 4 Linear Algebra 2 for Technomathematicians GÜ 2	Numerical Mathematics VL 4 Numerical Mathematics GO 2		Combinatorial Optimization Combinatorial Optimization VL 4	
13 14 15				Measure Theory and Stochastics VL 3 Measure Theory and Stochastics GŪ 1	Combinatorial Optimization GÜ 2	
16 17 18						
19	Procedural Programming for Computer Engineers	Programming Paradigms	Mathematical Stochastics	Signals and Systems	-	
20 21 22 23 24	Procedural Programming for Computer Engineers Procedural Programming for Computer Engineers VL 2 Procedural Programming for Computer Engineers PR 2	Programming Paradigms VL 2 Programming Paradigms HÜ 1 Programming Paradigms PR 2	Mathematical Stochastics VL 4 Mathematical Stochastics GÜ 2	Signals and Systems VL 3 Signals and Systems GÜ 2	Computernetworks and Internet Security VL 3 Computer Networks and Internet Security GÜ 1	
25 26 27	Introduction to Mechanics (Technomathematics) Introduction to Mechanics VL 3 Introduction to Mechanics GÜ 2	Introduction to Electrical Engineering (Technomathematics) Introduction to Electrical Engineering VL 3 Introduction to Electrical Engineering GÜ 2			Electrical Engineering III: Circuit Theory and Transients Circuit Theory VL 3	
28 29 30			Proseminar Technomathematics Proseminar Mathematics SE 2		Circuit Theory GÜ 2	
31			1			
31	Non-technical Courses for Bachelors (from catalogue) - 6LP					
	Technical Complementary Course I for Technomathematics (according to Subject Specific Regulations) - 6LP					
	Fechnical Complementary Course II for Technomathematics (according to Subject Specific Regulations) - 6LP					

Core Qualification Compulsory

Specialisation Compulsory

Focus Compulsory

Thesis Compulsory

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.