Course of Study Technomathematics (Study Cohort w20)

Sample course plan B Bachelor Technomathematics (TMBS)
Specialisation I. Mathematics, Specialisation II. Informatics, Specialisation III. Engineering Science, Specialisation IV. Subject Specific Focus

Legend:

Core qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
Core qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

LP	Semester 1	Form	Hrs/wk	Semester 2	Form	Hrs/wk	Semester 3	Form	Hrs/wk	Semester 4	Form	Hrs/wk	Semester 5	Form	Hrs/wk	Semester 6	Form	Hrs/wk
1	**Procedural Programming**			**Analysis for Technomathematicians (part 2)**			**Higher Analysis**			**Foundations of Management**			**Seminar Technomathematics**			**Computability and Complexity Theory**		
2	Procedural Programming	VL	1	Analysis II for Technomathematicians	VL	4	Higher Analysis	VL	4	Introduction to Management	VL	3	Seminar: Technomathematics	SE	2	Computability and Complexity Theory	VL	2
3	Procedural Programming	HÜ	1	Analysis II for Technomathematicians	UE	2	Higher Analysis	UE	2	Management Tutorial	UE	2				Computability and Complexity Theory	UE	2
4	Procedural Programming	PR	2															
5													**Combinatorial Structures and Algorithms**					
6													Combinatorial Structures and Algorithms	VL	3			
7	**Analysis for Technomathematicians (part 1)**									**Graph Theory and Optimization**			Combinatorial Structures and Algorithms	UE	1	**Bachelor Thesis**		
8	Analysis I for Technomathematicians	VL	4							Graph Theory and Optimization	VL	2						
9	Analysis I for Technomathematicians	UE	2							Graph Theory and Optimization	UE	2						
10				**Linear Algebra for Technomathematicians (part 2)**			**Numerical Mathematics**											
11				Linear Algebra 2 for Technomathematicians	VL	4	Numerical Mathematics	VL	4				**Combinatorial Optimization**					
12				Linear Algebra 2 for Technomathematicians	UE	2	Numerical Mathematics	UE	2				Combinatorial Optimization	VL	4			
13										**Measure Theory and Stochastics**			Combinatorial Optimization	UE	2			
14										Measure Theory and Stochastics	VL	3						
15										Measure Theory and Stochastics	UE	1						
16	**Linear Algebra for Technomathematicians (part 1)**																	
17	Linear Algebra 1 for Technomathematicians	VL	4															
18	Linear Algebra 1 for Technomathematicians	UE	2															
19				**Mechanics and object-oriented Programming for Technomathematicians (part 2)**			**Mathematical Stochastics**			**Signals and Systems**								
20				Object-oriented modelling of elastic mecanical structures in C++	PBL	6	Mathematical Stochastics	VL	4	Signals and Systems	VL	3	**Computernetworks and Internet Security**					
21							Mathematical Stochastics	UE	2	Signals and Systems	UE	2	Computer Networks and Internet Security	VL	3			
22													Computer Networks and Internet Security	UE	1			
23																		
24																		
25	**Mechanics and object-oriented Programming for Technomathematicians (part 1)**			**Introduction to Electrical Engineering (Technomathematics)**									**Electrical Engineering III: Circuit Theory and Transients**					
26	Mechanics for Technomathematicians	VL	3	Introduction to Electrical Engineering	VL	3							Circuit Theory	VL	3			
27	Mechanics for Technomathematicians	UE	3	Introduction to Electrical Engineering	UE	2							Circuit Theory	UE	2			
28							**Proseminar Technomathematics**											
29							Proseminar Mathematics	SE	2									
30																		
31																		

Non-technical Courses for Bachelors (from catalogue) - 6LP

Technical Complementary Course I for Technomathematics (according to Subject Specific Regulations) - 6LP

Technical Complementary Course II for Technomathematics (according to Subject Specific Regulations) - 6LP

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