

Course of Study Technomathematics (Study Cohort w19)

Sample course plan B Bachelor Technomathematics (TMBS)

Specialisation I. Mathematics, Specialisation II. Informatics, Specialisation III. Engineering Science, Specialisation

Legend:

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

IV. Subject Specific Focus

LP	Course	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	GÜ 2	Higher Analysis	GÜ 2	Management Tutorial	GÜ 2			Computability and Complexity Theory	GÜ 2
4		PR 2										
5												
6									Combinatorial Structures and Algorithms			
7	Analysis for Technomathematicians (part 1)						Graph Theory and Optimization		Combinatorial Structures and Algorithms	VL 3		
8	Analysis I for Technomathematicians	VL 4					Graph Theory and Optimization	VL 2	Combinatorial Structures and Algorithms	GÜ 1		
9	Analysis I for Technomathematicians	GÜ 2					Graph Theory and Optimization	GÜ 2			Bachelor Thesis	
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	GÜ 2	Numerical Mathematics	GÜ 2			Combinatorial Optimization	VL 4		
13									Combinatorial Optimization	GÜ 2		
14												
15							Measure Theory and Stochastics					
16	Linear Algebra for Technomathematicians (part 1)						Measure Theory and Stochastics	VL 3				
17	Linear Algebra 1 for Technomathematicians	VL 4					Measure Theory and Stochastics	GÜ 1				
18	Linear Algebra 1 for Technomathematicians	GÜ 2										
19			Mechanics and object-oriented Programming for Technomathematicians (part 2)		Mathematical Stochastics		Signals and Systems					
20			Object-oriented modelling of elastic mechanical structures in C++	PBL 6	Mathematical Stochastics	VL 4	Signals and Systems	VL 3	Computernetworks and Internet Security			
21					Mathematical Stochastics	GÜ 2	Signals and Systems	GÜ 2	Computer Networks and Internet Security	VL 3		
22									Computer Networks and Internet Security	GÜ 1		
23												
24												
25	Mechanics and object-oriented Programming for Technomathematicians (part 1)		Introduction to Electrical Engineering (Technomathematics)									
26	Mechanics for Technomathematicians	VL 3	Introduction to Electrical Engineering	VL 3					Electrical Engineering III: Circuit Theory and Transients			
27	Mechanics for Technomathematicians	GÜ 3	Introduction to Electrical Engineering	GÜ 2					Circuit Theory	VL 3		
28					Proseminar Technomathematics				Circuit Theory	GÜ 2		
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.

