

Course of Study Technomathematics (Study Cohort w19)

Sample course plan D 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		Numerical Algorithms in Structural Mechanics	
2	Procedural Programming	VL 1	Analysis II for Technomathematicians	VL 4	Higher Analysis	VL 4	Introduction to Management	VL 3	Seminar: Technomathematics	SE 2	Numerical Algorithms in Structural Mechanics	VL 2
3	Procedural Programming	HÜ 1	Analysis II for Technomathematicians	GÜ 2	Higher Analysis	GÜ 2	Management Tutorial	GÜ 2			Numerical Algorithms in Structural Mechanics	GÜ 2
4	Procedural Programming	PR 2										
5												
6									Hierarchical Algorithms			
7	Analysis for Technomathematicians (part 1)						Solvers for Sparse Linear Systems		Hierarchical Algorithms	VL 2		
8	Analysis I for Technomathematicians	VL 4					Solvers for Sparse Linear Systems	VL 2	Hierarchical Algorithms	GÜ 2	Boundary Element Methods	
9	Analysis I for Technomathematicians	GÜ 2					Solvers for Sparse Linear Systems	GÜ 2			Boundary Element Methods	VL 2
10			Linear Algebra for Technomathematicians (part 2)		Numerical Mathematics						Boundary Element Methods	HÜ 2
11			Linear Algebra 2 for Technomathematicians	VL 4	Numerical Mathematics	VL 4			Matrix Algorithms			
12			Linear Algebra 2 for Technomathematicians	GÜ 2	Numerical Mathematics	GÜ 2			Matrix Algorithms	VL 2		
13							Automata Theory and Formal Languages		Matrix Algorithms	GÜ 2		
14							Automata Theory and Formal Languages	VL 2			Bachelor Thesis	
15							Automata Theory and Formal Languages	GÜ 2				
16	Linear Algebra for Technomathematicians (part 1)								Complex Analysis			
17	Linear Algebra 1 for Technomathematicians	VL 4							Complex Analysis	VL 4		
18	Linear Algebra 1 for Technomathematicians	GÜ 2							Complex Analysis	GÜ 2		
19			Mechanics and object-oriented Programming for Technomathematicians (part 2)		Mathematical Stochastics		Software Engineering					
20			Object-oriented modelling of elastic mechanical structures in C++	PBL 6	Mathematical Stochastics	VL 4	Software Engineering	VL 2				
21					Mathematical Stochastics	GÜ 2	Software Engineering	GÜ 2				
22												
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								
27	Mechanics for Technomathematicians	GÜ 3	Introduction to Electrical Engineering	GÜ 2								
28					Proseminar Technomathematics							
29					Proseminar Mathematics	SE 2						
30												

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.

