Course of Study Technomathematics (Study Cohort w21)

Sample course plan D 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	**Analysis for Technomathematicians (part 1)**			**Analysis for Technomathematicians (part 2)**			**Higher Analysis**			**Foundations of Management**			**Seminar Technomathematics**			**Numerical Algorithms in Structural Mechanics**		
2	Analysis I for Technomathematicians	VL	4	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	Analysis I for Technomathematicians	GÜ	2	Analysis II for Technomathematicians	GÜ	2	Higher Analysis	GÜ	2	Management Tutorial	GÜ	2				Numerical Algorithms in Structural Mechanics	GÜ	2
4													**Hierarchical Algorithms**					
5													Hierarchical Algorithms	VL	2			
6													Hierarchical Algorithms	GÜ	2			
7										**Solvers for Sparse Linear Systems**						**Boundary Element Methods**		
8										Solvers for Sparse Linear Systems	VL	2				Boundary Element Methods	VL	2
9										Solvers for Sparse Linear Systems	GÜ	2				Boundary Element Methods	HÜ	2
10	**Linear Algebra for Technomathematicians (part 1)**			**Linear Algebra for Technomathematicians (part 2)**			**Numerical Mathematics**						**Matrix Algorithms**					
11	Linear Algebra 1 for Technomathematicians	VL	4	Linear Algebra 2 for Technomathematicians	VL	4	Numerical Mathematics	VL	4				Matrix Algorithms	VL	2			
12	Linear Algebra 1 for Technomathematicians	GÜ	2	Linear Algebra 2 for Technomathematicians	GÜ	2	Numerical Mathematics	GÜ	2				Matrix Algorithms	GÜ	2			
13										**Automata Theory and Formal Languages**						**Bachelor Thesis**		
14										Automata Theory and Formal Languages	VL	2						
15										Automata Theory and Formal Languages	GÜ	2						
16																		
17													**Complex Analysis**					
18													Complex Analysis	VL	4			
19	**Mechanics I (Statics)**			**Programming Paradigms**			**Mathematical Stochastics**			**Software Engineering**			Complex Analysis	GÜ	2			
20	Mechanics I	VL	2	Programming Paradigms	VL	2	Mathematical Stochastics	VL	4	Software Engineering	VL	2						
21	Mechanics I	GÜ	2	Programming Paradigms	HÜ	1	Mathematical Stochastics	GÜ	2	Software Engineering	GÜ	2						
22	Mechanics I	HÜ	1	Programming Paradigms	PR	2												
23																		
24																		
25	**Procedural Programming for Computer Engineers**			**Introduction to Electrical Engineering (Technomathematics)**														
26	Procedural Programming for Computer Engineers	VL	1	Introduction to Electrical Engineering	VL	3												
27	Procedular Programming for Computer Engineers	HÜ	1	Introduction to Electrical Engineering	GÜ	2												
28	Procedural Programming for Computer Engineers	PR	2				**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.