

Course of Study Technomathematics (Study Cohort w17)

Sample course plan A 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	Subject	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		Objectoriented Programming, Algorithms and Data Structures		Higher Analysis		Foundations of Management		Seminar Technomathematics		Numerical Algorithms in Structural Mechanics	
2	Procedural Programming	VL 1	Objectoriented Programming, Algorithms and Data Structures	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	Objectoriented Programming, Algorithms and Data Structures	VL 4	Higher Analysis	GÜ 2	Management Tutorial	HÜ 2			Numerical Algorithms in Structural Mechanics	GÜ 2
4	Procedural Programming	PR 2	Objectoriented Programming, Algorithms and Data Structures	GÜ 1								
5												
6												
7	Analysis for Technomathematicians (part 1)		Analysis for Technomathematicians (part 2)				Approximation and Stability		Mathematical Image Processing		Boundary Element Methods	
8	Analysis I for Technomathematicians	VL 4	Analysis II for Technomathematicians	VL 4			Approximation and Stability	VL 3	Mathematical Image Processing	VL 3	Boundary Element Methods	VL 2
9	Analysis I for Technomathematicians	GÜ 2	Analysis II for Technomathematicians	GÜ 2			Approximation and Stability	GÜ 1	Mathematical Image Processing	GÜ 1	Boundary Element Methods	HÜ 2
10												
11					Numerical Mathematics							
12					Numerical Mathematics	VL 4						
13					Numerical Mathematics	GÜ 2						
14												
15	Linear Algebra for Technomathematicians (part 1)		Linear Algebra for Technomathematicians (part 2)				Numerical Treatment of Ordinary Differential Equations		Approximation		Bachelor Thesis	
16	Linear Algebra 1 for Technomathematicians	VL 4	Linear Algebra 2 for Technomathematicians	VL 4			Numerical Treatment of Ordinary Differential Equations	VL 2	Approximation	VL 4		
17	Linear Algebra 1 for Technomathematicians	GÜ 2	Linear Algebra 2 for Technomathematicians	GÜ 2			Numerical Treatment of Ordinary Differential Equations	GÜ 2	Approximation	GÜ 2		
18												
19												
20					Mathematical Stochastics		Software Engineering					
21					Mathematical Stochastics	VL 4	Software Engineering	VL 2				
22					Mathematical Stochastics	GÜ 2	Software Engineering	GÜ 2	Distributed Systems			
23	Electrical Engineering for Technomathematicians (part 1)		Electrical Engineering for Technomathematicians (part 2)						Distributed Systems	VL 2		
24	Electrical Engineering I for Technomathematicians	VL 2	Electrical Engineering II for Technomathematicians	VL 2					Distributed Systems	GÜ 2		
25	Electrical Engineering I for Technomathematicians	GÜ 1	Electrical Engineering II for Technomathematicians	GÜ 1								
26	Electrical Engineering I for Technomathematicians		Electrical Engineering II for Technomathematicians									
27	Mechanics for Technomathematicians (part 1)		Mechanics for Technomathematicians (part 2)									
28	Mechanics I for Technomathematicians	VL 2	Mechanics II for Technomathematicians	VL 2								
29	Mechanics I for Technomathematicians	GÜ 2	Mechanics II for Technomathematicians	GÜ 2								
30					Proseminar Technomathematics							
					Proseminar Mathematics	SE 2						

Nontechnical Complementary 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.

