

Course of Study Technomathematics (Study Cohort w20)

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	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	UE 2	Higher Analysis	UE 2	Management Tutorial	UE 2			Numerical Algorithms in Structural Mechanics	UE 2
4	Procedural Programming	PR 2										
5												
6												
7	Analysis for Technomathematicians (part 1)						Approximation and Stability		Mathematical Image Processing		Boundary Element Methods	
8	Analysis I for Technomathematicians	VL 4					Approximation and Stability	VL 3	Mathematical Image Processing	VL 3	Boundary Element Methods	VL 2
9	Analysis I for Technomathematicians	UE 2					Approximation and Stability	UE 1	Mathematical Image Processing	UE 1	Boundary Element Methods	HÜ 2
10			Linear Algebra for Technomathematicians (part 2)		Numerical Mathematics							
11			Linear Algebra 2 for Technomathematicians	VL 4	Numerical Mathematics	VL 4						
12			Linear Algebra 2 for Technomathematicians	UE 2	Numerical Mathematics	UE 2			Approximation			
13									Approximation	VL 4		
14									Approximation	UE 2		
15											Bachelor Thesis	
16	Linear Algebra for Technomathematicians (part 1)						Numerical Treatment of Ordinary Differential Equations					
17	Linear Algebra 1 for Technomathematicians	VL 4					Numerical Treatment of Ordinary Differential Equations	VL 2				
18	Linear Algebra 1 for Technomathematicians	UE 2					Numerical Treatment of Ordinary Differential Equations	UE 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			Distributed Systems	
21					Mathematical Stochastics	UE 2	Software Engineering	UE 2			Distributed Systems	VL 2
22											Distributed Systems	UE 2
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	UE 3	Introduction to Electrical Engineering	UE 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.

