Course of Study Technomathematics (Study Cohort w22)

Sample course plan A Bachelor Technomathematics (TMBS) Dual study program
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

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1	**Analysis for Technomathematicians (part 1)**	**Analysis for Technomathematicians (part 2)**	**Higher Analysis**	**Foundations of Management**	**Practical module 5 (dual study program, Bachelor's degree)**	**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		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	Practical term 5 0	Numerical Algorithms in Structural Mechanics GÜ 2
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7				**Practical module 4 (dual study program, Bachelor's degree)**	**Seminar Technomathematics**	**Bachelor thesis (dual study program)**
8					Seminar: Technomathematics SE 2	
9				Practical term 4 0		
10	**Linear Algebra for Technomathematicians (part 1)**	**Linear Algebra for Technomathematicians (part 2)**	**Numerical Mathematics**			
11	Linear Algebra 1 for Technomathematicians VL 4	Linear Algebra 2 for Technomathematicians VL 4	Numerical Mathematics VL 4		**Approximation**	
12	Linear Algebra 1 for Technomathematicians GÜ 2	Linear Algebra 2 for Technomathematicians GÜ 2	Numerical Mathematics GÜ 4		Approximation VL 4	
13			**Approximation and Stability**		Approximation GÜ 2	
14			Approximation and Stability VL 3			
15			Approximation and Stability GÜ 1			
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19	**Procedural Programming for Computer Engineers**	**Programming Paradigms**	**Mathematical Stochastics**	**Numerical Methods for Ordinary Differential Equations**		
20	Procedural Programming for Computer Engineers VL 2	Programming Paradigms VL 2	Mathematical Stochastics VL 4	Numerical Treatment of Ordinary Differential Equations VL 2	**Mathematical Image Processing**	
21	Procedural Programming for Computer Engineers HÜ 1	Programming Paradigms HÜ 1	Mathematical Stochastics GÜ 2		Mathematical Image Processing VL 3	
22	Procedural Programming for Computer Engineers PR 2	Programming Paradigms PR 2		Numerical Treatment of Ordinary Differential Equations GÜ 2	Mathematical Image Processing GÜ 1	
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25	**Practical module 1 (dual study program, Bachelor's degree)**	**Introduction to Electrical Engineering (Technomathematics)**		**Software Engineering**		
26				Software Engineering VL 2	**Functional Programming**	
27	Practical term 1 0	Introduction to Electrical Engineering VL 3		Software Engineering GÜ 2	Functional Programming VL 2	
28		Introduction to Electrical Engineering GÜ 2	**Proseminar Technomathematics**		Functional Programming HÜ 2	
29			Proseminar Mathematics SE 2		Functional Programming GÜ 2	
30			**Practical module 3 (dual study program, Bachelor's degree)**			
31	**Introduction to Mechanics (Technomathematics)**	**Practical module 2 (dual study program, Bachelor's degree)**	Practical term 3 0	**Engineering Mechanics II (Elastostatics)**		
32	Introduction to Mechanics VL 3			Engineering Mechanics II VL 2		
33	Introduction to Mechanics GÜ 2	Practical term 2 0		Engineering Mechanics II GÜ 2		
34				Engineering Mechanics II HÜ 2		
35						
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Linking theory and practice (dual study program, Bachelor's degree) (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.