

Course of Study Technomathematics (Study Cohort w18)

Sample course plan B 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	FormHrs/Week	Semester 2	FormHrs/Week	Semester 3	FormHrs/Week	Semester 4	FormHrs/Week	Semester 5	FormHrs/Week	Semester 6	FormHrs/Week															
1	Procedural Programming		Objectoriented Programming, Algorithms and Data Structures		Higher Analysis		Foundations of Management		Seminar Technomathematics		Computability and Complexity Theory																
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	Computability and Complexity Theory	VL 2															
3	Procedural Programming	HÜ 1			Higher Analysis	UE 2	Management Tutorial	HÜ 2			Computability and Complexity Theory	UE 2															
4	Procedural Programming	PR 2			Objectoriented Programming, Algorithms and Data Structures	UE 1	Numerical Mathematics	VL 4			Graph Theory and Optimization	VL 2	Combinatorial Structures and Algorithms	UE 1	Application Security	VL 3											
5																	Numerical Mathematics	UE 2	Graph Theory and Optimization	UE 2	Combinatorial Optimization	VL 4	Application Security	UE 2			
6																			Measure Theory and Stochastics	VL 3	Combinatorial Optimization	UE 2					
7							Measure Theory and Stochastics	UE 1																			
8	Analysis for Technomathematicians (part 1)		Analysis for Technomathematicians (part 2)		Mathematical Stochastics	VL 4	Signals and Systems	VL 3	Electrical Engineering III: Circuit Theory and Transients	VL 3	Bachelor Thesis																
9	Analysis I for Technomathematicians	VL 4	Analysis II for Technomathematicians	VL 4									Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Circuit Theory	UE 2									
10	Analysis I for Technomathematicians	UE 2	Analysis II for Technomathematicians	UE 2									Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Circuit Theory	UE 2									
11			Linear Algebra for Technomathematicians (part 1)	VL 4							Mathematical Stochastics		VL 4	Signals and Systems	VL 3	Electrical Engineering III: Circuit Theory and Transients	VL 3	Bachelor Thesis									
12	Linear Algebra 1 for Technomathematicians	VL 4																		Linear Algebra 2 for Technomathematicians	VL 4	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Circuit Theory	UE 2
13	Linear Algebra 1 for Technomathematicians	UE 2																		Linear Algebra 2 for Technomathematicians	UE 2	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Circuit Theory	UE 2
14			Linear Algebra for Technomathematicians (part 2)	VL 4	Mathematical Stochastics	VL 4	Signals and Systems	VL 3	Electrical Engineering III: Circuit Theory and Transients	VL 3	Bachelor Thesis																
15	Linear Algebra 1 for Technomathematicians	VL 4											Linear Algebra 2 for Technomathematicians	VL 4	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Circuit Theory	UE 2							
16	Linear Algebra 1 for Technomathematicians	UE 2											Linear Algebra 2 for Technomathematicians	UE 2	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Circuit Theory	UE 2							
17			Linear Algebra for Technomathematicians (part 2)	UE 2	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Electrical Engineering III: Circuit Theory and Transients	UE 2	Bachelor Thesis																
18	Linear Algebra 1 for Technomathematicians	UE 2											Linear Algebra 2 for Technomathematicians	UE 2	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Circuit Theory	UE 2							
19	Linear Algebra 1 for Technomathematicians	UE 2											Linear Algebra 2 for Technomathematicians	UE 2	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Circuit Theory	UE 2							
20			Electrical Engineering for Technomathematicians (part 1)	VL 2	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Electrical Engineering III: Circuit Theory and Transients	UE 2	Bachelor Thesis																
21	Electrical Engineering I for Technomathematicians	VL 2											Electrical Engineering II for Technomathematicians	VL 2	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Circuit Theory	UE 2							
22	Electrical Engineering I for Technomathematicians	UE 1											Electrical Engineering II for Technomathematicians	UE 1	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Circuit Theory	UE 2							
23			Electrical Engineering for Technomathematicians (part 2)	UE 1	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Electrical Engineering III: Circuit Theory and Transients	UE 2	Bachelor Thesis																
24	Electrical Engineering I for Technomathematicians	UE 1											Electrical Engineering II for Technomathematicians	UE 1	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Circuit Theory	UE 2							
25	Electrical Engineering I for Technomathematicians	UE 1											Electrical Engineering II for Technomathematicians	UE 1	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Circuit Theory	UE 2							
26			Mechanics for Technomathematicians (part 1)	VL 2	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Electrical Engineering III: Circuit Theory and Transients	UE 2	Bachelor Thesis																
27	Mechanics I for Technomathematicians	VL 2											Mechanics II for Technomathematicians	VL 2	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Circuit Theory	UE 2							
28	Mechanics I for Technomathematicians	UE 2											Mechanics II for Technomathematicians	UE 2	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Circuit Theory	UE 2							
29			Mechanics for Technomathematicians (part 2)	UE 2	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Electrical Engineering III: Circuit Theory and Transients	UE 2	Bachelor Thesis																
30	Mechanics I for Technomathematicians	UE 2											Mechanics II for Technomathematicians	UE 2	Mathematical Stochastics	UE 2	Signals and Systems	UE 2	Circuit Theory	UE 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.