

# Course of Study Technomathematics (Study Cohort w21)

Sample course plan F 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	<b>Analysis for Technomathematicians (part 1)</b>			<b>Analysis for Technomathematicians (part 2)</b>			<b>Higher Analysis</b>			<b>Foundations of Management</b>			<b>Seminar Technomathematics</b>			<b>Computability and Complexity Theory</b>		
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	Computability and Complexity Theory	VL	2
3	Analysis I for Technomathematicians	GÜ	2	Analysis II for Technomathematicians	GÜ	2	Higher Analysis	GÜ	2	Management Tutorial	GÜ	2				Computability and Complexity Theory	GÜ	2
4													<b>Introduction to Mathematical Modeling</b>					
5													Introduction in Mathematical Modeling	VL	4			
6													Introduction in Mathematical Modeling	GÜ	2			
7										<b>Functional Analysis</b>						<b>Compiler Construction</b>		
8										Functional Analysis	VL	4				Compiler Construction	VL	2
9										Functional Analysis	GÜ	2				Compiler Construction	GÜ	2
10	<b>Linear Algebra for Technomathematicians (part 1)</b>			<b>Linear Algebra for Technomathematicians (part 2)</b>			<b>Numerical Mathematics</b>											
11	Linear Algebra 1 for Technomathematicians	VL	4	Linear Algebra 2 for Technomathematicians	VL	4	Numerical Mathematics	VL	4									
12	Linear Algebra 1 for Technomathematicians	GÜ	2	Linear Algebra 2 for Technomathematicians	GÜ	2	Numerical Mathematics	GÜ	2									
13																		
14																		
15													<b>Electrical Engineering III: Circuit Theory and Transients</b>					
16													Circuit Theory	VL	3			
17										<b>Optimization</b>			Circuit Theory	GÜ	2			
18										Optimization	VL	4						
19										Optimization	GÜ	2						
19	<b>Mechanics I (Statics)</b>			<b>Programming Paradigms</b>			<b>Mathematical Stochastics</b>											
20	Mechanics I	VL	2	Programming Paradigms	VL	2	Mathematical Stochastics	VL	4									
21	Mechanics I	GÜ	2	Programming Paradigms	HÜ	1	Mathematical Stochastics	GÜ	2				<b>Mechanics III (Dynamics)</b>					
22	Mechanics I	HÜ	1	Programming Paradigms	PR	2							Mechanics III	VL	3			
23													Mechanics III	GÜ	2			
24													Mechanics III	HÜ	1			
25	<b>Procedural Programming for Computer Engineers</b>			<b>Introduction to Electrical Engineering (Technomathematics)</b>														
26	Procedural Programming for Computer Engineers	VL	1	Introduction to Electrical Engineering	VL	3												
27	Procedural Programming for Computer Engineers	HÜ	1	Introduction to Electrical Engineering	GÜ	2												
28	Procedural Programming for Computer Engineers	PR	2															
29							<b>Proseminar Technomathematics</b>											
30							Proseminar Mathematics	SE	2									

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.

