Course of Study Technomathematics (Study Cohort w20)

Sample course plan D 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						
1	**Procedural Programming** Procedural Programming VL 1 Procedural Programming HÜ 1 Procedural Programming PR 2	**Analysis for Technomathematicians (part 2)** Analysis II for Technomathematicians VL 4 Analysis II for Technomathematicians GÜ 2	**Higher Analysis** Higher Analysis VL 4 Higher Analysis GÜ 2	**Foundations of Management** Introduction to Management VL 3 Management Tutorial GÜ 2	**Seminar Technomathematics** Seminar: Technomathematics SE 2	**Numerical Algorithms in Structural Mechanics** Numerical Algorithms in Structural Mechanics VL 2 Numerical Algorithms in Structural Mechanics GÜ 2
2						
3						
4						
5					**Hierarchical Algorithms** Hierarchical Algorithms VL 2 Hierarchical Algorithms GÜ 2	
6						
7	**Analysis for Technomathematicians (part 1)** Analysis I for Technomathematicians VL 4 Analysis I for Technomathematicians GÜ 2			**Solvers for Sparse Linear Systems** Solvers for Sparse Linear Systems VL 2 Solvers for Sparse Linear Systems GÜ 2		**Boundary Element Methods** Boundary Element Methods VL 2 Boundary Element Methods HÜ 2
8						
9						
10		**Linear Algebra for Technomathematicians (part 2)** Linear Algebra 2 for Technomathematicians VL 4 Linear Algebra 2 for Technomathematicians GÜ 2	**Numerical Mathematics** Numerical Mathematics VL 4 Numerical Mathematics GÜ 2			
11					**Matrix Algorithms** Matrix Algorithms VL 2 Matrix Algorithms GÜ 2	
12						
13				**Automata Theory and Formal Languages** Automata Theory and Formal Languages VL 2 Automata Theory and Formal Languages GÜ 2		**Bachelor Thesis**
14						
15						
16	**Linear Algebra for Technomathematicians (part 1)** Linear Algebra 1 for Technomathematicians VL 4 Linear Algebra 1 for Technomathematicians GÜ 2					
17						
18					**Complex Analysis** Complex Analysis VL 4 Complex Analysis GÜ 2	
19		**Mechanics and object-oriented Programming for Technomathematicians (part 2)** Object-oriented modelling of elastic mecanical structures in C++ PBL 6	**Mathematical Stochastics** Mathematical Stochastics VL 4 Mathematical Stochastics GÜ 2	**Software Engineering** Software Engineering VL 2 Software Engineering GÜ 2		
20						
21						
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25	**Mechanics and object-oriented Programming for Technomathematicians (part 1)** Mechanics for Technomathematicians VL 3 Mechanics for Technomathematicians GÜ 3	**Introduction to Electrical Engineering (Technomathematics)** Introduction to Electrical Engineering VL 3 Introduction to Electrical Engineering GÜ 2				
26						
27						
28			**Proseminar Technomathematics** Proseminar Mathematics SE 2			
29						
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.