Course of Study Technomathematics (Study Cohort w19)

Sample course plan A Bachelor Technomathematics (TMBS)

pecialisation I. Mathematics, Specialisation II. Informatics, Specialisation III. Engineering Science, Specialisation					Core Qualification Elective Compulsory Specialisation Elective Compulsory Focus Elective Compulsory Interdisciplinary complement				
	ject Specific Focus								
1 2 3	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 GÛ 2	Higher Analysis VL 4 Higher Analysis GÜ 2	Foundations of Management Introduction to Management Management Tutorial	nt VL 3 GÜ 2	Seminar Technomathematics Seminar: Technomathematics	SE 2	Numerical Algorithms in Structural Mechanics Numerical Algorithms in Structural Mechanics VL Numerical Algorithms in Structural Mechanics GÜ	
4 5 6 7	Analysis for Technomathematicians (part 1)			Approximation and Stability			VL 3 GÜ 1	Boundary Element Methods	
8 9 10	Analysis I for Technomathematicians VL 4 Analysis I for Technomathematicians GÜ 2	Linear Algebra for Technomathematicians (part 2)	Numerical Mathematics	Approximation and Stability Approximation and Stability	VL 3 GÜ 1				- 2) 2
11 12		Linear Algebra 2 for Technomathematicians VL 4 Linear Algebra 2 for Technomathematicians GŪ 2	Numerical Mathematics VL 4 Numerical Mathematics GÜ 2			Approximation Approximation Approximation	VL 4 GÜ 2		
13 14 15				Numerical Treatment of Orce Equations Numerical Treatment of Ordina Equations				Bachelor Thesis	
16 17 18	Linear Algebra for Technomathematicians VL 4 Linear Algebra 1 for Technomathematicians GÜ 2			Numerical Treatment of Ordina Equations	ry Differential GÜ 2				
19 20 21 22 23		Mechanics and object-oriented Programming for Technomathematicians (part 2) Object-oriented modelling of elastic mecanical PBL 6 structures in C++	Mathematical Stochastics VL 4 Mathematical Stochastics GŪ 2	Software Engineering Software Engineering Software Engineering	VL 2 GÜ 2	Functional Programming Functional Programming Functional Programming Functional Programming	VL 2 HÜ 2 GÜ 2		
24 25 26 27	Mechanics and object-oriented Programming for Technomathematicians (part 1) 4 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							
28 29 30			Proseminar Technomathematics Proseminar Mathematics SE 2						
	Non-technical Courses for Bachelors (from cat	talogue) - 6LP							
	Technical Complementary Course I for Techno	omathematics (according to Subject Specific Re	egulations) - 6LP						
	Technical Complementary Course II for Techn	nomathematics (according to Subject Specific R	egulations) - 6LP						

Core Qualification Compulsory

Specialisation Compulsory

Focus Compulsory

Thesis Compulsory

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.