Course of Study Computer Science (Study Cohort w22)

Sample course plan S Bachelor Computer Science (CSBS)
Specialisation I. Computer and Software Engineering, Specialisation II. Mathematics and Engineering Science,
Specialisation III. 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	**Discrete Algebraic Structures**	**Automata Theory and Formal Languages**	**Databases**	**Computability and Complexity Theory**	**Software Industrial Internship**	**Compiler Construction**
2	Discrete Algebraic Structures VL 2	Automata Theory and Formal Languages VL 2	Databases VL 3	Computability and Complexity Theory VL 2		Compiler Construction VL 2
3	Discrete Algebraic Structures GÜ 2	Automata Theory and Formal Languages GÜ 2	Databases - Exercise GÜ 2	Computability and Complexity Theory GÜ 2		Compiler Construction GÜ 2
4						
5						
6						
7	**Functional Programming**	**Foundations of Management**	**Computer Engineering**	**Stochastics**	**Seminars Computer Science**	**Algebra and Control**
8	Functional Programming VL 2	Introduction to Management VL 3	Computer Engineering VL 3	Stochastics VL 2	Introductory Seminar Computer Science II SE 2	Algebra and Control VL 2
9	Functional Programming HÜ 2	Management Tutorial GÜ 2	Computer Engineering GÜ 1	Stochastics GÜ 2	Introductory Seminar Computer Science I SE 2	Algebra and Control GÜ 2
10	Functional Programming GÜ 2					
11						
12						
13	**Procedural Programming for Computer Engineers**	**Programming Paradigms**	**Computernetworks and Internet Security**	**Software Engineering**	**Introduction to Information Security**	**Solvers for Sparse Linear Systems**
14	Procedural Programming for Computer Engineers VL 2	Programming Paradigms VL 2	Computer Networks and Internet Security VL 3	Software Engineering VL 2	Introduction to Information Security VL 2	Solvers for Sparse Linear Systems VL 2
15	Procedural Programming for Computer Engineers HÜ 1	Programming Paradigms HÜ 1	Computer Networks and Internet Security GÜ 1	Software Engineering GÜ 2	Introduction to Information Security GÜ 2	Solvers for Sparse Linear Systems GÜ 2
16	Procedural Programming for Computer Engineers PR 2	Programming Paradigms PR 2				
17						
18						
19	**Mathematics I (EN)**	**Mathematics II (EN)**	**Algorithms and Data Structures**	**Graph Theory and Optimization**	**Combinatorial Structures and Algorithms**	**Bachelor Thesis**
20	Mathematics I VL 4	Mathematics II VL 4	Algorithms and Data Structures VL 4	Graph Theory and Optimization VL 2	Combinatorial Structures and Algorithms VL 3	
21	Mathematics I HÜ 2	Mathematics II HÜ 2	Algorithms and Data Structures GÜ 1	Graph Theory and Optimization GÜ 2	Combinatorial Structures and Algorithms GÜ 1	
22	Mathematics I GÜ 2	Mathematics II GÜ 2				
23						
24						
25			**Mathematics III (EN)**			
26			Analysis III VL 2			
27			Analysis III HÜ 1			
28			Analysis III GÜ 1			
29			Differential Equations 1 VL 2			
30			Differential Equations 1 HÜ 1			
31			Differential Equations 1 GÜ 1			
32						

Non-technical Courses for Bachelors (from catalogue) - 6LP

Technical Complementary Course I for CSBS - 6LP

Technical Complementary Course II for CSBS - 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.