

Course of Study Computer Science (Study Cohort w22)

Sample course plan S Bachelor Computer Science (CSBS) Dual study program
 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

	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk
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	Software Industrial Internship	Compiler Construction VL 2
3	Discrete Algebraic Structures GÜ 2	Automata Theory and Formal Languages GÜ 2	Databases GÜ 1	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
8	Functional Programming VL 2	Introduction to Management VL 3	Computer Engineering VL 3	Stochastics VL 2	Introductory Seminar Computer Science II SE 2	Introduction into Medical Technology and Systems 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	Introduction into Medical Technology and Systems PS 2
10	Functional Programming GÜ 2					Introduction into Medical Technology and Systems HÜ 1
11						
12						
13	Procedural Programming for Computer Engineers	Programming Paradigms	Computernetworks and Internet Security	Software Engineering	Practical module 5 (dual study program, Bachelor's degree)	Solvers for Sparse Linear Systems
14	Procedural Programming for Computer Engineers VL 1	Programming Paradigms VL 2	Computer Networks and Internet Security VL 3	Software Engineering VL 2	Practical term 5 0	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		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	Introduction to Information Security	Bachelor thesis (dual study program)
20	Mathematics I VL 4	Mathematics II VL 4	Algorithms and Data Structures VL 4	Graph Theory and Optimization VL 2	Introduction to Information Security VL 2	Bachelor thesis (dual study program)
21	Mathematics I HÜ 2	Mathematics II HÜ 2	Algorithms and Data Structures GÜ 1	Graph Theory and Optimization GÜ 2	Introduction to Information Security GÜ 2	
22	Mathematics I GÜ 2	Mathematics II GÜ 2				
23						
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26			Mathematics III (EN)	Practical module 4 (dual study program, Bachelor's degree)	Combinatorial Structures and Algorithms	
27	Practical module 1 (dual study program, Bachelor's degree)	Practical module 2 (dual study program, Bachelor's degree)	Analysis III VL 2	Practical term 4 0	Combinatorial Structures and Algorithms VL 3	
28			Analysis III HÜ 1		Combinatorial Structures and Algorithms GÜ 1	
29			Differential Equations 1 VL 2			
30			Differential Equations 1 HÜ 1			
31			Differential Equations 1 GÜ 1			
32			Practical module 3 (dual study program, Bachelor's degree)			
33			Practical term 3 0			
34						
35						
36						
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38						
Linking theory and practice (dual study program, Bachelor's degree) (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.

