

Course of Study Computer Science (Study Cohort w21)

Sample course plan R 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

1	Discrete Algebraic Structures		Automata Theory and Formal Languages		Computer Engineering		Computability and Complexity Theory		Software Industrial Internship		Embedded Systems	
2	Discrete Algebraic Structures VL 2		Automata Theory and Formal Languages VL 2		Computer Engineering VL 3		Computability and Complexity Theory VL 2				Embedded Systems VL 3	
3	Discrete Algebraic Structures GÜ 2		Automata Theory and Formal Languages GÜ 2		Computer Engineering GÜ 1		Computability and Complexity Theory GÜ 2				Embedded Systems GÜ 1	
4											Embedded Systems PBL 1	
5												
6												
7	Functional Programming		Foundations of Management		Computernetworks and Internet Security		Stochastics		Seminars Computer Science		Introduction into Medical Technology and Systems	
8	Functional Programming VL 2		Introduction to Management VL 3		Computer Networks and Internet Security 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 Networks and Internet Security 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		Algorithms and Data Structures		Software Engineering		Computer Architecture		Signals and Systems	
14	Procedural Programming for Computer Engineers VL 1		Programming Paradigms VL 2		Algorithms and Data Structures VL 4		Software Engineering VL 2		Computer Architecture VL 2		Signals and Systems VL 3	
15	Procedural Programming for Computer Engineers HÜ 1		Programming Paradigms HÜ 1		Algorithms and Data Structures GÜ 1		Software Engineering GÜ 2		Computer Architecture PBL 2		Signals and Systems GÜ 2	
16	Procedural Programming for Computer Engineers PR 2		Programming Paradigms PR 2						Computer Architecture GÜ 1			
17												
18												
19	Mathematics I (EN)		Mathematics II (EN)		Mathematics III (EN)		Graph Theory and Optimization		Introduction to Quantum Computing		Bachelor Thesis	
20	Analysis I VL 2		Analysis II VL 2		Analysis III VL 2		Graph Theory and Optimization VL 2		Introduction to Quantum Computing VL 2			
21	Analysis I HÜ 1		Analysis II HÜ 1		Analysis III HÜ 1		Graph Theory and Optimization GÜ 2		Introduction to Quantum Computing HÜ 2			
22	Analysis I GÜ 1		Analysis II GÜ 1		Analysis III GÜ 1							
23	Linear Algebra I VL 2		Linear Algebra II VL 2		Differential Equations 1 VL 2							
24	Linear Algebra I HÜ 1		Linear Algebra II HÜ 1		Differential Equations 1 HÜ 1							
25	Linear Algebra I GÜ 1		Linear Algebra II GÜ 1		Differential Equations 1 GÜ 1							
26												
27												
28												
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30												
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.

