

# Course of Study Computer Science (Study Cohort w18)

Legend:	Core Qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
	Core Qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

Sample course plan T Bachelor Computer Science (CSBS)

Specialisation: Computer and Software Engineering

	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	Form Hrs/wk	Form Hrs/wk				
1	<b>Discrete Algebraic Structures</b>		<b>Objectoriented Programming, Algorithms and Data Structures</b>		<b>Computer Engineering</b>		<b>Computability and Complexity Theory</b>		<b>Seminars Computer Science and Mathematics</b>		<b>Graph Theory and Optimization</b>	
2	Discrete Algebraic Structures	VL 2	Computer Engineering	VL 3	Computability and Complexity Theory	VL 2	Seminar Computational Engineering Science	SE 2	Graph Theory and Optimization	VL 2		
3	Discrete Algebraic Structures	GÜ 2	Computer Engineering	GÜ 1	Computability and Complexity Theory	GÜ 2	Seminar Computer Science/Mathematics	SE 2	Graph Theory and Optimization	GÜ 2		
4			Objectoriented Programming, Algorithms and Data Structures	VL 4			Seminar Computer Science/Engineering Mathematics	SE 2				
5			Objectoriented Programming, Algorithms and Data Structures	GÜ 1								
6												
7	<b>Procedural Programming</b>		<b>Automata Theory and Formal Languages</b>		<b>Computernetworks and Internet Security</b>		<b>Signals and Systems</b>		<b>Software Industrial Internship</b>		<b>Introduction into Medical Technology and Systems</b>	
8	Procedural Programming	VL 1	Computer Networks and Internet Security	VL 3	Signals and Systems	VL 3	Software Industrial Internship		Introduction into Medical Technology and Systems	VL 2		
9	Procedural Programming	HÜ 1	Computer Networks and Internet Security	GÜ 1	Signals and Systems	GÜ 2			Introduction into Medical Technology and Systems	PS 2		
10	Procedural Programming	PR 2	Automata Theory and Formal Languages	GÜ 2					Introduction into Medical Technology and Systems	HÜ 1		
11												
12												
13	<b>Functional Programming</b>		<b>Software Engineering</b>		<b>Mathematics III</b>		<b>Stochastics</b>		<b>Introduction to Communications and Random Processes</b>		<b>Embedded Systems</b>	
14	Functional Programming	VL 2	Analysis III	VL 2	Stochastics	VL 2	Introduction to Communications and Random Processes	VL 3	Embedded Systems	VL 3		
15	Functional Programming	HÜ 2	Analysis III	GÜ 1	Stochastics	GÜ 2	Introduction to Communications and Random Processes	HÜ 1	Embedded Systems	GÜ 1		
16	Functional Programming	GÜ 2	Analysis III	HÜ 1			Introduction to Communications and Random Processes	GÜ 1				
17			Differential Equations 1	VL 2								
18			Differential Equations 1	GÜ 1								
19			Differential Equations 1	HÜ 1								
19	<b>Linear Algebra</b>		<b>Mathematical Analysis</b>		<b>Operating Systems</b>		<b>Computer Architecture</b>		<b>Lab Cyber-Physical Systems</b>			
20	Linear Algebra	VL 4	Mathematical Analysis	VL 4	Operating Systems	VL 2	Computer Architecture	VL 2	Lab Cyber-Physical Systems	PBL 4		
21	Linear Algebra	HÜ 2	Mathematical Analysis	HÜ 2	Operating Systems	GÜ 2	Computer Architecture	PBL 2				
22	Linear Algebra	GÜ 2	Mathematical Analysis	GÜ 2			Computer Architecture	GÜ 1				
23					<b>Introduction to Information Security</b>							
24					Introduction to Information Security	VL 3						
25					Introduction to Information Security	GÜ 2						
26							<b>Quantum Mechanics for Engineers</b>		<b>Bachelor Thesis</b>			
27							Quantum Mechanics for Engineers	VL 2				
28			<b>Foundations of Management</b>				Quantum Mechanics for Engineers	GÜ 2				
29			Introduction to Management	VL 3								
30			Management Tutorial	HÜ 2								
31												
32												
33												
34												
35												
36												

Nontechnical Complementary Courses for Bachelors (from catalogue) - 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.

