

Course of Study Computational Science and Engineering (Study Cohort w21)

Sample course plan E Bachelor Computational Science and Engineering (IIWBS)
Specialisation I. Computer Science, Specialisation II. Mathematics & Engineering Science, Specialisation III.

Legend:

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

Subject Specific Focus	Form Hrs/wk	Semester 2	Form Hrs/wk	Semester 3	Form Hrs/wk	Semester 4	Form Hrs/wk	Semester 5	Form Hrs/wk	Semester 6	Form Hrs/wk
1		Discrete Algebraic Structures		Electrical Engineering II: Alternating Current Networks and Basic Devices		Numerical Mathematics I		Signals and Systems		Introduction to Communications and Random Processes	Bachelor Thesis
2	Discrete Algebraic Structures VL 2		Electrical Engineering II: Alternating Current Networks and Basic Devices VL 3	Numerical Mathematics I VL 2		Signals and Systems VL 3		Introduction to Communications and Random Processes VL 3			
3	Discrete Algebraic Structures GÜ 2		Electrical Engineering II: Alternating Current Networks and Basic Devices GÜ 2	Numerical Mathematics I GÜ 2		Signals and Systems GÜ 2		Introduction to Communications and Random Processes HÜ 1			
4			Electrical Engineering II: Alternating Current Networks and Basic Devices GÜ 2					Introduction to Communications and Random Processes GÜ 1			
5											
6											
7		Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Automata Theory and Formal Languages		Computer Engineering		Stochastics		Introduction to Control Systems	
8	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields VL 3		Automata Theory and Formal Languages VL 2	Computer Engineering VL 3		Stochastics VL 2		Introduction to Control Systems VL 2			
9	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields GÜ 2		Automata Theory and Formal Languages GÜ 2	Computer Engineering GÜ 1		Stochastics GÜ 2		Introduction to Control Systems GÜ 2			
10											
11											
12											
13		Mathematics I		Foundations of Management		Computernetworks and Internet Security		Embedded Systems		Practical Course IIW	
14	Linear Algebra I VL 2		Introduction to Management VL 3	Computer Networks and Internet Security VL 3		Embedded Systems VL 3		Practical Course IIW PBL 8			
15	Linear Algebra I GÜ 1		Management Tutorial GÜ 2	Computer Networks and Internet Security GÜ 1		Embedded Systems GÜ 1					
16	Linear Algebra I HÜ 1					Embedded Systems PBL 1					
17	Analysis I VL 2										
18	Analysis I GÜ 1										
19	Analysis I HÜ 1										
20		Mathematics II		Mathematics III		Seminars Computer Science		Computer Architecture			
21		Linear Algebra II VL 2		Analysis III VL 2		Introductory Seminar Computer Science II SE 2		Computer Architecture VL 2			
22	Procedural Programming for Computer Engineers VL 1	Linear Algebra II GÜ 1		Analysis III GÜ 1		Introductory Seminar Computer Science I SE 2		Computer Architecture PBL 2			
23	Procedural Programming for Computer Engineers HÜ 1	Linear Algebra II HÜ 1		Analysis III HÜ 1				Computer Architecture GÜ 1			
24	Procedural Programming for Computer Engineers PR 2	Analysis II VL 2		Differential Equations 1 VL 2							
25		Analysis II HÜ 1		Differential Equations 1 GÜ 1							
26		Analysis II GÜ 1		Differential Equations 1 HÜ 1							
27								Electronic Devices			
28		Programming Paradigms		Algorithms and Data Structures				Electronic Devices VL 3			
29		Programming Paradigms VL 2		Algorithms and Data Structures VL 4				Electronic Devices PBL 2			
30		Programming Paradigms HÜ 1		Algorithms and Data Structures GÜ 1							
31		Programming Paradigms PR 2									
32											
Non-technical Courses for Bachelors (from catalogue) - 6LP											
Technical Complementary Course for Computational Science and Engineering Bachelor - 12LP											

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

