

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

Sample course plan I 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					
1	Discrete Algebraic Structures		Electrical Engineering II: Alternating Current Networks and Basic Devices	Numerical Mathematics I	Signals and Systems
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
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
4					
5					
6					
7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Automata Theory and Formal Languages	Computer Engineering	Stochastics
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
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
10					
11					
12					
13	Mathematics I		Foundations of Management	Computernetworks and Internet Security	Embedded Systems
14	Linear Algebra I VL 2		Introduction to Management VL 3	Computer Networks and Internet Security VL 3	Embedded Systems VL 3
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
21	Procedural Programming for Computer Engineers		Linear Algebra II VL 2	Analysis III VL 2	Introductory Seminar Computer Science II SE 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
23	Procedural Programming for Computer Engineers HÜ 1		Linear Algebra II HÜ 1	Analysis III HÜ 1	
24	Procedural Programming for Computer Engineers PR 2		Analysis II VL 2	Differential Equations 1 VL 2	Electrical Power Systems I: Introduction to Electrical Power Systems
25			Analysis II HÜ 1	Differential Equations 1 GÜ 1	Electrical Power Systems I: Introduction to VL 3
26			Analysis II GÜ 1	Differential Equations 1 HÜ 1	Electrical Power Systems I: Introduction to GÜ 2
27					
28			Programming Paradigms	Algorithms and Data Structures	
29			Programming Paradigms VL 2	Algorithms and Data Structures VL 4	
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.

