

Course of Study Computational Science and Engineering (Study Cohort w20)

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		Operating 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	Introduction to Communications and Random Processes	VL 3	Operating Systems	VL 2
3	Discrete Algebraic Structures	GÜ 2	Electrical Engineering II: Alternating Current Networks and Basic Devices		Numerical Mathematics I	GÜ 2	Signals and Systems	GÜ 2	Introduction to Communications and Random Processes		Operating Systems	GÜ 2
4			Electrical Engineering II: Alternating Current Networks and Basic Devices	GÜ 2					Introduction to Communications and Random Processes	HÜ 1		
5									Introduction to Communications and Random Processes	GÜ 1		
6												
7	Procedural Programming		Automata Theory and Formal Languages		Computer Engineering		Stochastics		Introduction to Control Systems		Bachelor Thesis	
8	Procedural Programming	VL 1	Automata Theory and Formal Languages	VL 2	Computer Engineering	VL 3	Stochastics	VL 2	Introduction to Control Systems	VL 2		
9	Procedural Programming	HÜ 1	Automata Theory and Formal Languages	GÜ 2	Computer Engineering	GÜ 1	Stochastics	GÜ 2	Introduction to Control Systems	GÜ 2		
10	Procedural Programming	PR 2										
11												
12												
13	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Foundations of Management		Computernetworks and Internet Security		Embedded Systems		Practical Course IIW			
14	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	VL 3	Introduction to Management	VL 3	Computer Networks and Internet Security	VL 3	Embedded Systems	VL 3	Practical Course IIW	PBL 8		
15	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Management Tutorial	GÜ 2	Computer Networks and Internet Security	GÜ 1	Embedded Systems	GÜ 1				
16	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	GÜ 2										
17												
18												
19	Mathematics I		Mathematics II		Mathematics III		Seminars Computer Science		Computer Architecture			
20	Linear Algebra I	VL 2	Linear Algebra II	VL 2	Analysis III	VL 2	Introductory Seminar Computer Science II	SE 2	Computer Architecture	VL 2		
21	Linear Algebra I	GÜ 1	Linear Algebra II	GÜ 1	Analysis III	GÜ 1	Introductory Seminar Computer Science I	SE 2	Computer Architecture	PBL 2		
22	Linear Algebra I	HÜ 1	Linear Algebra II	HÜ 1	Analysis III	HÜ 1			Computer Architecture	GÜ 1		
23	Analysis I	VL 2	Analysis II	VL 2	Differential Equations 1	VL 2						
24	Analysis I	GÜ 1	Analysis II	HÜ 1	Differential Equations 1	GÜ 1						
25	Analysis I	HÜ 1	Analysis II	GÜ 1	Differential Equations 1	HÜ 1						
26									Electronic Devices			
27			Programming Paradigms		Algorithms and Data Structures				Electronic Devices	VL 3		
28			Programming Paradigms	VL 2	Algorithms and Data Structures	VL 4			Electronic Devices	PBL 2		
29			Programming Paradigms	HÜ 1	Algorithms and Data Structures	GÜ 1						
30			Programming Paradigms	PR 2								
31												
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.

