

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

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	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	
2	VL 2	Discrete Algebraic Structures		Electrical Engineering II: Alternating Current Networks and Basic Devices	VL 2	Numerical Mathematics I	VL 2	Signals and Systems	VL 3	Introduction to Communications and Random Processes	VL 2
3	GÜ 2	Discrete Algebraic Structures		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	GÜ 2
4				Electrical Engineering II: Alternating Current Networks and Basic Devices						Introduction to Communications and Random Processes	HÜ 1
5				Electrical Engineering II: Alternating Current Networks and Basic Devices						Introduction to Communications and Random Processes	GÜ 1
6											
7		Procedural Programming		Automata Theory and Formal Languages		Computer Engineering		Stochastics		Introduction to Control Systems	
8	VL 1	Procedural Programming		Automata Theory and Formal Languages	VL 2	Computer Engineering	VL 3	Stochastics	VL 2	Introduction to Control Systems	VL 2
9	HÜ 1	Procedural Programming		Automata Theory and Formal Languages	GÜ 2	Computer Engineering	GÜ 1	Stochastics	GÜ 2	Introduction to Control Systems	GÜ 2
10	PR 2	Procedural Programming									
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	VL 3	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		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	GÜ 2	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields									
17											
18											
19		Mathematics I		Mathematics II		Mathematics III		Seminars Computer Science		Electrical Power Systems I: Introduction to Electrical Power Systems	
20	VL 2	Linear Algebra I		Linear Algebra II	VL 2	Analysis III	VL 2	Introductory Seminar Computer Science II	SE 2	Electrical Power Systems I: Introduction to	VL 3
21	GÜ 1	Linear Algebra I		Linear Algebra II	GÜ 1	Analysis III	GÜ 1	Introductory Seminar Computer Science I	SE 2	Electrical Power Systems	
22	HÜ 1	Linear Algebra I		Linear Algebra II	HÜ 1	Analysis III	HÜ 1			Electrical Power Systems I: Introduction to	GÜ 2
23	VL 2	Analysis I		Analysis II	VL 2	Differential Equations 1	VL 2			Electrical Power Systems	
24	GÜ 1	Analysis I		Analysis II	HÜ 1	Differential Equations 1	GÜ 1				
25	HÜ 1	Analysis I		Analysis II	GÜ 1	Differential Equations 1	HÜ 1				
26											
27				Programming Paradigms		Algorithms and Data Structures					
28	VL 2			Programming Paradigms	VL 2	Algorithms and Data Structures	VL 4				
29	HÜ 1			Programming Paradigms	HÜ 1	Algorithms and Data Structures	GÜ 1				
30	PR 2			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.

