

Course of Study Computational Science and Engineering (Study Cohort w17)

Sample course plan S Bachelor Computational Science and Engineering (IIWBS)
Specialisation Computer Science

Legend:

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

LP	Semester 1	FormHrs/wk	Semester 2	FormHrs/wk	Semester 3	FormHrs/wk	Semester 4	FormHrs/wk	Semester 5	FormHrs/wk	Semester 6	FormHrs/wk
1	Discrete Algebraic Structures	VL 2	Electrical Engineering II: Alternating Current Networks and Basic Devices		Engineering Mechanics I		Engineering Mechanics II		Seminars Computer Science and Mathematics		Stochastics	
2	Discrete Algebraic Structures				Engineering Mechanics I	VL 3	Engineering Mechanics II	VL 3			Stochastics	VL 2
3					Engineering Mechanics I	UE 2	Engineering Mechanics II	UE 2	Seminar Computational Engineering Science	SE 2	Stochastics	UE 2
4	Discrete Algebraic Structures	UE 2	Electrical Engineering II: Alternating Current Networks and Basic Devices	VL 3					Seminar Computational Mathematics/Computer Science	SE 2		
5			Electrical Engineering II: Alternating Current Networks and Basic Devices	UE 2					Seminar Engineering Mathematics/Computer Science	SE 2		
6												
7	Procedural Programming		Objectoriented Programming, Algorithms and Data Structures		Numerical Mathematics I		Signals and Systems		Introduction to Control Systems		Compiler Construction	
8	Procedural Programming	VL 1			Numerical Mathematics I	VL 2	Signals and Systems	VL 3	Introduction to Control Systems	VL 2	Compiler Construction	VL 2
9	Procedural Programming	HÜ 1	Objectoriented Programming, Algorithms and Data Structures	VL 4	Numerical Mathematics I	UE 2	Signals and Systems	UE 2	Introduction to Control Systems	UE 2	Compiler Construction	UE 2
10	Procedural Programming	PR 2	Objectoriented Programming, Algorithms and Data Structures	UE 1								
11												
12												
13	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Automata Theory and Formal Languages		Computer Engineering		Embedded Systems		Computer Architecture		Software Development	
14			Automata Theory and Formal Languages	VL 2	Computer Engineering	VL 3	Embedded Systems	VL 3	Computer Architecture	VL 2	Software Development	VL 1
15	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	VL 3	Automata Theory and Formal Languages	UE 2	Computer Engineering	UE 1	Embedded Systems	UE 1	Computer Architecture	PBL 2	Software Development	PBL 2
16									Computer Architecture	UE 1		
17	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	UE 2										
18												
19	Mathematics I		Foundations of Management		Computernetworks and Internet Security		Graph Theory and Optimization		Distributed Systems		Bachelor Thesis	
20	Linear Algebra I	VL 2	Introduction to Management	VL 3	Computer Networks and Internet Security	VL 3	Graph Theory and Optimization	VL 2	Distributed Systems	VL 2		
21	Linear Algebra I	UE 1	Project Entrepreneurship	PBL 2	Computer Networks and Internet Security	UE 1	Graph Theory and Optimization	UE 2	Distributed Systems	UE 2		
22	Linear Algebra I	HÜ 1										
23	Analysis I	VL 2										
24	Analysis I	UE 1										
25	Analysis I	HÜ 1	Mathematics II		Mathematics III		Software Engineering					
26			Linear Algebra II	VL 2	Analysis III	VL 2	Software Engineering	VL 2				
27			Linear Algebra II	UE 1	Analysis III	UE 1	Software Engineering	UE 2				
28			Linear Algebra II	HÜ 1	Analysis III	HÜ 1						
29			Analysis II	VL 2	Differential Equations 1	VL 2						

Analysis II	HÜ 1	Differential Equations 1	UE 1		
Analysis II	UE 1	Differential Equations 1	HÜ 1		

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