

Course of Study Computational Science and Engineering (Study Cohort w15)

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

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

