

# Course of Study Computer Science in Engineering (Study Cohort w22)

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

