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

Sample course plan M Bachelor Computer Science in Engineering (IIWBS) Dual study program
Specialisation I. Computer Science, Specialisation II. Mathematics & Engineering Science, Specialisation III. Subject Specific Focus

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	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**			**Software Engineering**		
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	Software Engineering	VL	2
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	Software Engineering	GÜ	2
4													Introduction to Communications and Random Processes	GÜ	1			
5																		
6																		
7	**Electrical Engineering I: Direct Current Networks and Electromagnetic Fields**			**Automata Theory and Formal Languages**			**Computer Engineering**			**Stochastics**			**Introduction to Control Systems**			**Introduction into Medical Technology and Systems**		
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	Introduction into Medical Technology and 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	Introduction into Medical Technology and Systems	PS	2
10																Introduction into Medical Technology and Systems	HÜ	1
11																		
12																		
13	**Mathematics I**			**Foundations of Management**			**Computernetworks and Internet Security**			**Embedded Systems**			**Practical Course IIW**			**Bachelor thesis (dual study program)**		
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				**Mathematics II**			**Mathematics III**			**Seminars Computer Science**			**Practical module 5 (dual study program, Bachelor's degree)**					
20				Mathematics II	VL	4	Analysis III	VL	2	Introductory Seminar Computer Science II	SE	2	Practical term 5		0			
21	**Procedural Programming for Computer Engineers**			Mathematics II	HÜ	2	Analysis III	GÜ	1	Introductory Seminar Computer Science I	SE	2						
22	Procedural Programming for Computer Engineers	VL	1	Mathematics II	GÜ	2	Analysis III	HÜ	1									
23	Procedular 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	**Practical module 4 (dual study program, Bachelor's degree)**			**Computer Architecture**					
26										Practical term 4		0	Computer Architecture	VL	2			
27	**Practical module 1 (dual study program, Bachelor's degree)**			**Programming Paradigms**			**Algorithms and Data Structures**						Computer Architecture	PBL	2			
28	Practical term 1		0	Programming Paradigms	VL	2	Algorithms and Data Structures	VL	4				Computer Architecture	GÜ	1			
29				Programming Paradigms	HÜ	1	Algorithms and Data Structures	GÜ	1									
30				Programming Paradigms	PR	2												
31																		
32																		
33				**Practical module 2 (dual study program, Bachelor's degree)**			**Practical module 3 (dual study program, Bachelor's degree)**											
34				Practical term 2		0	Practical term 3		0									
35																		
36																		
37																		
38																		

Linking theory and practice (dual study program, Bachelor's degree) (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.