Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w22)

Sample course plan T Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7)) Dual study program

Specialisation Computer Science

#							
1	**Chemistry**	**Electrical Engineering II: Alternating Current Networks and Basic Devices**	**Technical Thermodynamics II**	**Signals and Systems**	**Introduction to Control Systems**	**Foundations of Management**	**Advanced Internship AIW/ ES**
2	Chemistry I+II VL 4	Electrical Engineering II: Alternating VL 3 Current Networks and Basic Devices	Technical Thermodynamics II VL 2	Signals and Systems VL 3	Introduction to Control Systems VL 2	Introduction to Management VL 3	
3	Chemistry I+II HÜ 2		Technical Thermodynamics II HÜ 1	Signals and Systems GÜ 2	Introduction to Control Systems GÜ 2	Management Tutorial GÜ 2	
4		Electrical Engineering II: Alternating GÜ 2 Current Networks and Basic Devices	Technical Thermodynamics II GÜ 1				
5							
6							
7	**Electrical Engineering I: Direct Current Networks and Electromagnetic Fields**	**Fundamentals of Mechanical Engineering Design**	**Mathematics III**	**Practical module 4 (dual study program, Bachelor's degree)**	**Practical module 5 (dual study program, Bachelor's degree)**	**Software Engineering**	
8	Electrical Engineering I: Direct Current VL 3 Networks and Electromagnetic Fields	Fundamentals of Mechanical Engineering VL 2 Design	Analysis III VL 2	Practical term 4 0	Practical term 5 0	Software Engineering VL 2	
9			Analysis III GÜ 1			Software Engineering GÜ 2	
10	Electrical Engineering I: Direct Current GÜ 2 Networks and Electromagnetic Fields	Fundamentals of Mechanical Engineering HÜ 2 Design	Analysis III HÜ 1				
11			Differential Equations 1 VL 2				
			Differential Equations 1 GÜ 1				
12			Differential Equations 1 HÜ 1				
13	**Mathematics I**	**Technical Thermodynamics I**		**Automata Theory and Formal Languages**	**Numerical Mathematics I**	**Lab Cyber-Physical Systems**	
14	Mathematics I VL 4	Technical Thermodynamics I VL 2		Automata Theory and Formal Languages VL 2	Numerical Mathematics I VL 2	Lab Cyber-Physical Systems PBL 4	
	Mathematics I HÜ 2	Technical Thermodynamics I HÜ 1		Automata Theory and Formal Languages GÜ 2	Numerical Mathematics I GÜ 2		
15	Mathematics I GÜ 2	Technical Thermodynamics I GÜ 1	**Practical module 3 (dual study program, Bachelor's degree)**				
16			Practical term 3 0				
17							
18							
19		**Mathematics II**		**Stochastics**	**Computer Architecture**		**Bachelor thesis (dual study program)**
20		Mathematics II VL 4		Stochastics VL 2	Computer Architecture VL 2		
		Mathematics II HÜ 2		Stochastics GÜ 2	Computer Architecture PBL 2		
21	**Computer Science for Engineers - Introduction and Overview**	Mathematics II GÜ 2	**Engineering Mechanics III (Dynamics)**		Computer Architecture GÜ 1		
22	Computer Science for Engineers - VL 3 Introduction and Overview		Engineering Mechanics III VL 3				
23			Engineering Mechanics III GÜ 2				
24	Computer Science for Engineers - GÜ 2 Introduction and Overview		Engineering Mechanics III HÜ 1				
25				**Embedded Systems**	**Computernetworks and Internet Security**		
26				Embedded Systems VL 3	Computer Networks and Internet Security VL 3		
27	**Practical module 1 (dual study program, Bachelor's degree)**	**Practical module 2 (dual study program, Bachelor's degree)**	**Computer Engineering**	Embedded Systems GÜ 1	Computer Networks and Internet Security GÜ 1		
28	Practical term 1 0	Practical term 2 0	Computer Engineering VL 3	Embedded Systems PBL 1			
29			Computer Engineering GÜ 1				
30							
31				**Graph Theory and Optimization**	**Seminars Computer Science**		
32				Graph Theory and Optimization VL 2	Introductory Seminar Computer Science II SE 2		
33	**Engineering Mechanics I (Stereostatics)**	**Engineering Mechanics II (Elastostatics)**	**Algorithms and Data Structures**	Graph Theory and Optimization GÜ 2			
34	Engineering Mechanics I VL 2	Engineering Mechanics II VL 2	Algorithms and Data Structures VL 4		Introductory Seminar Computer Science I SE 2		
35	Engineering Mechanics I GÜ 2	Engineering Mechanics II GÜ 2	Algorithms and Data Structures GÜ 1				
36	Engineering Mechanics I HÜ 1	Engineering Mechanics II HÜ 2					
37							
38							

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