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

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

Specialisation Electrical Engineering

Legend:

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

LP							
1	**Chemistry** Chemistry I+II VL 4 Chemistry I+II HÜ 2	**Electrical Engineering II: Alternating Current Networks and Basic Devices** Electrical Engineering II: Alternating Current Networks and Basic Devices VL 3 Electrical Engineering II: Alternating Current Networks and Basic Devices GÜ 2	**Technical Thermodynamics II** Technical Thermodynamics II VL 2 Technical Thermodynamics II HÜ 1 Technical Thermodynamics II GÜ 1	**Signals and Systems** Signals and Systems VL 3 Signals and Systems GÜ 2	**Introduction to Control Systems** Introduction to Control Systems VL 2 Introduction to Control Systems GÜ 2	**Foundations of Management** Introduction to Management VL 3 Management Tutorial GÜ 2	**Advanced Internship AIW/ ES**
2							
3							
4							
5							
6							
7	**Electrical Engineering I: Direct Current Networks and Electromagnetic Fields** Electrical Engineering I: Direct Current Networks and Electromagnetic Fields VL 3 Electrical Engineering I: Direct Current Networks and Electromagnetic Fields GÜ 2	**Fundamentals of Mechanical Engineering Design** Fundamentals of Mechanical Engineering Design VL 2 Fundamentals of Mechanical Engineering Design HÜ 2	**Mathematics III** Analysis III VL 2 Analysis III GÜ 1 Analysis III HÜ 1 Differential Equations 1 VL 2 Differential Equations 1 GÜ 1 Differential Equations 1 HÜ 1	**Practical module 4 (dual study program, Bachelor's degree)** Practical term 4 0	**Practical module 5 (dual study program, Bachelor's degree)** Practical term 5 0	**Electrical Engineering Project Laboratory** Electrical Engineering Project Laboratory PBL 8	
8							
9							
10							
11							
12							
13	**Mathematics I** Mathematics I VL 4 Mathematics I HÜ 2 Mathematics I GÜ 2	**Technical Thermodynamics I** Technical Thermodynamics I VL 2 Technical Thermodynamics I HÜ 1 Technical Thermodynamics I GÜ 1		**Theoretical Electrical Engineering I: Time-Independent Fields** Theoretical Electrical Engineering I: Time-Independent Fields VL 3 Theoretical Electrical Engineering I: Time-Independent Fields GÜ 2	**Theoretical Electrical Engineering II: Time-Dependent Fields** Theoretical Electrical Engineering II: Time-Dependent Fields VL 3 Theoretical Electrical Engineering II: Time-Dependent Fields GÜ 2	**Semiconductor Circuit Design** Semiconductor Circuit Design VL 3 Semiconductor Circuit Design GÜ 1	
14							
15			**Practical module 3 (dual study program, Bachelor's degree)** Practical term 3 0				
16							
17							
18							
19		**Mathematics II** Mathematics II VL 4 Mathematics II HÜ 2 Mathematics II GÜ 2		**Materials in Electrical Engineering** Materials in Electrical Engineering VL 2 Materials in Electrical Engineering GÜ 2 Electrotechnical Experiments VL 2	**Introduction to Communications and Random Processes** Introduction to Communications and Random Processes VL 3 Introduction to Communications and Random Processes HÜ 1 Introduction to Communications and Random Processes GÜ 1		**Bachelor thesis (dual study program)**
20							
21	**Computer Science for Engineers - Introduction and Overview** Computer Science for Engineers - Introduction and Overview VL 3 Computer Science for Engineers - Introduction and Overview GÜ 2		**Engineering Mechanics III (Dynamics)** Engineering Mechanics III VL 3 Engineering Mechanics III GÜ 2 Engineering Mechanics III HÜ 1				
22							
23							
24							
25				**Mathematics IV** Complex Functions VL 2 Complex Functions GÜ 1 Complex Functions HÜ 1 Differential Equations 2 VL 2 Differential Equations 2 GÜ 1 Differential Equations 2 HÜ 1	**Electronic Devices** Electronic Devices VL 3 Electronic Devices PBL 2		
26							
27	**Practical module 1 (dual study program, Bachelor's degree)** Practical term 1 0	**Practical module 2 (dual study program, Bachelor's degree)** Practical term 2 0	**Electrical Engineering III: Circuit Theory and Transients** Circuit Theory VL 3 Circuit Theory GÜ 2				
28							
29							
30							
31				**Electrical Machines and Actuators** Electrical Machines and Actuators VL 3 Electrical Machines and Actuators HÜ 2	**Measurements: Methods and Data Processing** Measurements: Methods and Data Processing VL 2 Measurements: Methods and Data Processing GÜ 1 EE Experimental Lab PR 2		
32							
33	**Engineering Mechanics I (Stereostatics)** Engineering Mechanics I VL 2 Engineering Mechanics I GÜ 2 Engineering Mechanics I HÜ 1	**Engineering Mechanics II (Elastostatics)** Engineering Mechanics II VL 2 Engineering Mechanics II GÜ 2 Engineering Mechanics II HÜ 2	**Computer Engineering** Computer Engineering VL 3 Computer Engineering GÜ 1				
34							
35							
36							
37							
38							

Linking theory and practice (dual study program, Bachelor's degree) (from catalogue) - 6LP

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