Course of Study Electrical Engineering (Study Cohort w22)

Legend:

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

Sample course plan X Bachelor Electrical Engineering (ETBS) Dual study program

1	**Physics for Engineers (part 1)** Physics for Engineers VL 2 Physics for Engineers GÜ 1	**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	**Electrical Engineering III: Circuit Theory and Transients** Circuit Theory VL 3 Circuit Theory GÜ 2	**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
2						
3						
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5	**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	**Materials in Electrical Engineering** Materials in Electrical Engineering VL 2 Materials in Electrical Engineering GÜ 2 Electrotechnical Experiments VL 1	**Computer Engineering** Computer Engineering VL 3 Computer Engineering GÜ 1	**Signals and Systems** Signals and Systems VL 3 Signals and Systems GÜ 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	**Introduction into Medical Technology and Systems** Introduction into Medical Technology and Systems VL 2 Introduction into Medical Technology and Systems PS 2 Introduction into Medical Technology and Systems HÜ 1
6						
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11	**Foundations of Management** Introduction to Management VL 3 Management Tutorial GÜ 2	**Mathematics II** Mathematics II VL 4 Mathematics II HÜ 2 Mathematics II GÜ 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	**Electrical Engineering Project Laboratory** Electrical Engineering Project Laboratory PBL 8	**Electronic Devices** Electronic Devices VL 3 Electronic Devices PBL 2	**Embedded Systems** Embedded Systems VL 3 Embedded Systems GÜ 1 Embedded Systems PBL 1
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17	**Mathematics I** Mathematics I VL 4 Mathematics I HÜ 2 Mathematics I GÜ 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	**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	**Introduction to Control Systems** Introduction to Control Systems VL 2 Introduction to Control Systems GÜ 2	**Bachelor thesis (dual study program)**
18						
19						
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21		**Computer Science for Engineers - Programming Concepts, Data Handling & Communication** Computer Science for Engineers - Programming Concepts, Data Handling & Communication VL 3 Computer Science for Engineers - Programming Concepts, Data Handling & Communication GÜ 2				
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25	**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			**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	
26						
27						
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29		**Practical module 2 (dual study program, Bachelor's degree)** Practical term 2 0	**Practical module 3 (dual study program, Bachelor's degree)** Practical term 3 0			
30						
31	**Practical module 1 (dual study program, Bachelor's degree)** Practical term 1 0			**Introduction to Waveguides, Antennas, and Electromagnetic Compatibility** Introduction to Waveguides, Antennas, and Electromagnetic Compatibility VL 3 Introduction to Waveguides, Antennas, and Electromagnetic Compatibility GÜ 2	**Electrical Power Systems I: Introduction to Electrical Power Systems** Electrical Power Systems I: Introduction to Electrical Power Systems VL 3 Electrical Power Systems I: Introduction to Electrical Power Systems GÜ 2	
32						
33						
34						
35						
36		**Physics for Engineers (part 2)** Physics-Lab for ET PR 1				

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.