Course of Study General Engineering Science (German program) (Study Cohort w14)

Sample course plan - Bachelor General Engineering Science (German program) (AIWBS) Specialisation Electrical Engineering

Legend:

Core qualification Compulsory

Core qualification Elective

Specialisation Compulsory

Specialisation Elective

Specialisation Elective

Compulsory

Compulsory

Focus Compulsory

Interdisciplinary complement

Compulsory

| LP | Semester 1 | FormHrs/w | k Semester 2 FormHrs/ | vk Semester 3 | FormHrs/w | k Semester 4 | FormHrs/w | Semester 5 FormHrs/v | vk Semester 6 | FormHrs/wk |
|----|--|--------------|---|---|--------------|---|--------------|---|------------------------------|------------|
| 1 | Physics for Engineers (part 1) | | Electrical Engineering II: Alternating Current | Technical Thermodynamics II | | Theoretical Electrical Engineering I: Time- | | Introduction to Control Systems | Foundations of Management | |
| 2 | Physics for Engineers | VL 2 | Networks and Basic Devices | Technical Thermodynamics II | VL 2 | Independent Fields | | Introduction to Control Systems VL 2 | Introduction to Management | VL 4 |
| 3 | Physics for Engineers | UE 1 | Electrical Engineering II: Alternating VL 3 | Technical Thermodynamics II | HÜ 1 | Theoretical Electrical Engineering I: | VL 3 | Introduction to Control Systems UE 2 | Project Entrepreneurship | POL 2 |
| | | | Current Networks and Basic Devices Electrical Engineering II: Alternating UE 2 | Technical Thermodynamics II | UE 1 | Time-Independent Fields Theoretical Electrical Engineering I: | LIE 2 | | | |
| 4 | | | Current Networks and Basic Devices | | | Time-Independent Fields | OL Z | | | |
| 5 | Chemistry | | | | | | | | | |
| 6 | Chemistry I | VL 2 | | | | | | | | |
| 7 | Chemistry II Chemistry I | VL 2 HÜ 1 | Fundamentals of Mechanical Engineering | Computer Engineering | | Signals and Systems | | Theoretical Electrical Engineering II: Time- | Semiconductor Circuit Design | |
| 8 | Chemistry II | HÜ 1 | Design | Computer Engineering | VL 3 | Signals and Systems | VL 3 | Dependent Fields | Semiconductor Circuit Design | VL 3 |
| 9 | | | Fundamentals of Mechanical VL 2 | Computer Engineering | UE 1 | Signals and Systems | HÜ 1 | Theoretical Electrical Engineering II: VL 3 | Semiconductor Circuit Design | UE 1 |
| - | | | Engineering Design Fundamentals of Mechanical HÜ 2 | | | | | Time-Dependent Fields Theoretical Electrical Engineering II: UE 2 | | |
| 10 | | | Engineering Design | | | | | Time-Dependent Fields | | |
| 11 | Electrical Engineering I: Direct Current | | | | | | | | | |
| 12 | Networks and Electromagnetic Fields Electrical Engineering I: Direct Curren | | | | | | | | | |
| 13 | Networks and Electromagnetic Fields | | Technical Thermodynamics I | Mathematics III | | Electrical Engineering IV: Transmis | sion Lines | Introduction to Communications and Random | Bachelor Thesis | |
| 14 | Electrical Engineering I: Direct Curren | nt UE 2 | Technical Thermodynamics I VL 2 | Analysis III VL 2 | | and Research Seminar | | Processes | | |
| 15 | Networks and Electromagnetic Fields | | Technical Thermodynamics I HÜ 1 | Analysis III | UE 1 | Transmission Line Theory | VL 2 | Introduction to Communications and VL 3 | | |
| | | | Technical Thermodynamics I UE 1 | Analysis III | HÜ 1 | Research Seminar Electrical Engineering, Computer Science, | SE 2 | Random Processes Introduction to Communications and HÜ 1 | | |
| 16 | | | | Differential Equations 1 Differential Equations 1 | VL 2 UE 1 | Mathematics | | Random Processes | | |
| 17 | Mathematics I | | | Differential Equations 1 | HÜ 1 | Transmission Line Theory | HÜ 2 | | | |
| 18 | Linear Algebra I Linear Algebra I | VL 2 UE 1 | | | | | | | | |
| 19 | Linear Algebra I | HÜ 1 | Mechanics II: Mechanics of Materials | | | Electrical Engineering Project Labor | ratory | Electronic Devices | | |
| 20 | Analysis I | VL 2 | Mechanics II VL 2 | | | Electrical Engineering Project | PR 5 | Electronic Devices VL 3 | | |
| 21 | Analysis I | UE 1 | Mechanics II UE 2 | Mechanics III (Hydrostatics, Kinema | itics | Laboratory | | Electronic Devices POL 2 | | |
| | Analysis I | HÜ 1 | | Kinetics I) | , | | | | | |
| 22 | | | | Mechanics III | VL 3 | | | | | |
| 23 | | | | Mechanics III | UE 2 | | | | | |
| 24 | | | | Mechanics III | HÜ 1 | | | | | |
| 25 | Mechanics I (Statics) | | Mathematics II | | | Materials in Electrical Engineering | | Measurements: Methods and Data Processing | | |
| 26 | Mechanics I | VL 2 | Linear Algebra II VL 2 | | | Materials in Electrical Engineering | VL 2 | Measurements: Methods and Data VL 2 | | |
| 27 | Mechanics I | UE 2 | Linear Algebra II UE 1 | Electrical Engineering III: Circuit The | eory and | Materials in Electrical Engineering | UE 2 | Processing Measurements: Methods and Data UE 1 | | |
| 28 | Mechanics I | HÜ 1 | Linear Algebra II HÜ 1 Analysis II VL 2 | Transients | | Electrotechnical Experiments | VL 1 | Processing | | |
| | | | Analysis II HÜ 1 | Circuit Theory | VL 3 | | | EE Experimental Lab PR 2 | | |
| 29 | | | Analysis II UE 1 | Circuit Theory | UE 2 | | | | | |
| 30 | | | | | | | | | | |
| 31 | | | | | | Mathematics IV | | | | |
| 32 | | | | | | Complex Functions | VL 2 | | | |
| 33 | | | Programming in C | | | Complex Functions | UE 1 | | | |
| 34 | - | | Programming in C VL 1 | | | Complex Functions Differential Equations 2 | HÜ 1 VL 2 | | | |
| 34 | | | Programming in C VL 1 | | | Differential Equations 2 | 115 4 | l | | |

| Physics for Engineers (part 2) Physics-Lab for ET/IIW-Engineers PR 1 | | Programming in C | PH I |
|--|----|----------------------------------|------|
| Physics-Lab for ET/IIW-Engineers PR 1 | 35 | Physics for Engineers (part 2) | |
| | | Physics-Lab for ET/IIW-Engineers | PR 1 |

Nontechnical Complementary Courses for Bachelors (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.