Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w20)

Sample course plan A Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))

Specialisation Process Engineering

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
- Advanced Internship AIW/ ES: Preparation — SE 1
- Advanced Intenship AIW/ ES: Internship-accompanying Seminar — SE 1

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

Fundamentals of Fluid Mechanics
- Fundamentals of Fluid Mechanics — VL 2
- Fluid Mechanics for Process Engineering — HÜ 2

Heat and Mass Transfer
- Heat and Mass Transfer — VL 2
- Heat and Mass Transfer — GÜ 1
- Heat and Mass Transfer — HÜ 1

Process and Plant Engineering I
- Process and Plant Engineering I — VL 2
- Process and Plant Engineering I — HÜ 1
- Process and Plant Engineering I — GÜ 1

Mathematics I
- Linear Algebra I — VL 4
- Linear Algebra I — GÜ 1
- Linear Algebra I — HÜ 1
- Analysis I — VL 2
- Analysis I — GÜ 1
- Analysis I — HÜ 1

Technical Thermodynamics I
- Technical Thermodynamics I — VL 2
- Technical Thermodynamics I — HÜ 1
- Technical Thermodynamics I — GÜ 1

Mechanics III (Dynamics)
- Mechanics III — VL 3
- Mechanics III — GÜ 2
- Mechanics III — HÜ 1

Phase Equilibria Thermodynamics
- Phase Equilibria Thermodynamics — VL 2
- Phase Equilibria Thermodynamics — GÜ 1
- Phase Equilibria Thermodynamics — HÜ 1

Thermal Separation Processes
- Thermal Separation Processes — VL 2
- Thermal Separation Processes — GÜ 2
- Thermal Separation Processes — HÜ 1
- Separation Processes — PR 1

Particle Technology and Solids Process Engineering
- Particle Technology I — VL 2
- Particle Technology I — GÜ 1
- Particle Technology I — PR 2

Mechanics II: Mechanics of Materials
- Mechanics II — VL 2
- Mechanics II — GÜ 2
- Mechanics II — HÜ 2

Mechanics I (Statics)
- Mechanics I — VL 2
- Mechanics I — GÜ 2
- Mechanics I — HÜ 1

Computer Engineering
- Computer Engineering — VL 3
- Computer Engineering — GÜ 1

Renewables Energy Systems
- Renewable Energy — VL 2
- Energy Systems and Energy Industry — VL 2
- Power Industry — VL 1
- Renewable Energy — GÜ 1

Chemical Reaction Engineering (part 1)
- Chemical Reaction Engineering — VL 2
- Chemical Reaction Engineering — HÜ 2

Chemical Reaction Engineering (part 2)
- Experimental Course Chemical Engineering — PR 2

Bachelor Thesis

Mathematics II
- Linear Algebra II — VL 2
- Linear Algebra II — GÜ 1
- Linear Algebra II — HÜ 1
- Analysis II — VL 2
- Analysis II — HÜ 1
- Analysis II — GÜ 1

Fundamentals of Process Engineering and Material Engineering
- Introduction into Process Engineering/Bioprocess Engineering — VL 2
- Fundamentals of material engineering — VL 2

Bioprocess Engineering - Fundamentals
- Bioprocess Engineering - Fundamentals — VL 2
- Bioprocess Engineering- Fundamentals — HÜ 2
- Bioprocess Engineering - Fundamental Practical Course — PR 2

Measurement Technology for Chemical and Bioprocess Engineering
- Measurement Technology — VL 2
- Physical Fundamentals of Measurement Technology — VL 2
- Practical Course Measurement Technology — PR 2

Programming in C
- Programming in C — VL 1
- Programming in C — PR 1

Physics for Engineers (AIW)
- Physics for Engineers — VL 2
- Physics for Engineers — GÜ 1

Environmental Technology
- Environmental Assessment — VL 2
- Case studies project assessment — GÜ 1

Non-technical 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.