Course of Study Energy and Environmental Engineering (Study Cohort w20)

Legend:
Core Qualification Elective Compulsory | Specialisation Elective Compulsory | Focus Elective Compulsory | Basic Compulsory
Core Qualification Elective Compulsory | Specialisation Elective Compulsory | Focus Elective Compulsory | Interdisciplinary complement

Sample course plan B Bachelor Energy and Environmental Engineering (EUTBS)

1	**Engineering Mechanics I** Engineering Mechanics I VL 3 Engineering Mechanics I GÜ 2	**Engineering Mechanics II** Engineering Mechanics II VL 3 Engineering Mechanics II GÜ 2	**Mechanical Engineering: Design (part 1)** Embodiment Design and 3D-CAD VL 2 Mechanical Design Project I PBL 3	**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	**Environmental Technology (part 2)** Practical Exercise Environmental Technology PR 1
2						**Renewables Energy Systems und Energy Economy** Renewable Energy VL 2 Energy Systems and Energy Industry VL 2 Power Industry VL 1 Renewable Energy GÜ 1
3						
4			**Basics of Electrical Engineering** Basics of Electrical Engineering VL 3 Basics of Electrical Engineering GÜ 2			
5						
6						
7	**Mathematics I** Linear Algebra I VL 2 Linear Algebra I GÜ 1 Linear Algebra I HÜ 1 Analysis I VL 2 Analysis I GÜ 1 Analysis I HÜ 1	**Fundamentals of Mechanical Engineering Design** Fundamentals of Mechanical Engineering Design VL 2 Fundamentals of Mechanical Engineering Design HÜ 2		**Electrical Machines and Actuators** Electrical Machines and Actuators VL 3 Electrical Machines and Actuators HÜ 2	**Introduction to Control Systems** Introduction to Control Systems VL 2 Introduction to Control Systems GÜ 2	
8						**Particle Technology and Solids Process Engineering** Particle Technology I VL 2 Particle Technology I GÜ 1 Particle Technology I PR 2
9						
10			**Technical Thermodynamics II** Technical Thermodynamics II VL 2 Technical Thermodynamics II HÜ 1 Technical Thermodynamics II GÜ 1			
11						
12						
13		**Technical Thermodynamics I** Technical Thermodynamics I VL 2 Technical Thermodynamics I HÜ 1 Technical Thermodynamics I GÜ 1		**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	**Measurement Technology for Mechanical Engineers** Measurement Technology for Mechanical Engineering VL 2 Measurement Technology for Mechanical Engineering HÜ 1 Practical Course: Measurement and Control Systems PR 2	**Bachelor Thesis**
14						
15	**General and Inorganic Chemistry** General and Inorganic Chemistry VL 3 Fundamentals in Inorganic Chemistry PR 3 Fundamentals in Inorganic Chemistry GÜ 1		**Foundations of Management** Introduction to Management VL 3 Management Tutorial GÜ 2			
16						
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19		**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		**Mechanical Engineering: Design (part 2)** Team Project Design Methodology PBL 2 Mechanical Design Project II PBL 3	**Environmental Technology** Environmental Assessment VL 2 Case studies project assessment GÜ 1	
20						
21	**Introduction into Energy and Environmental Engineering** Introduction to Energy and Environmental Engineering PBL 4 Physics-Lab for EUT PR 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 Materials Science (part 2)** Fundamentals of Materials Science II VL 2	**Environmental Technology (part 1)** Environmental Technologie VL 2	
22						
23						
24					**Thermal Separation Processes** Thermal Separation Processes VL 2 Thermal Separation Processes GÜ 2 Thermal Separation Processes HÜ 1 Separation Processes PR 1	
25						
26						
27		**Organic Chemistry** Organic Chemistry VL 4 Organic Chemistry PR 3				
28						
29						
30			**Fundamentals of Materials Science (part 1)** Fundamentals of Materials Science I VL 2 Physical and Chemical Basics of Materials Science VL 2		**Gas and Steam Power Plants** Gas and Steam Power Plants VL 3 Gas and Steam Power Plants HÜ 1	
31						
32						
33						
34						
35						

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.