Course of Study Green Technologies: Energy, Water, Climate (Study Cohort w21)

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 T Bachelor Green Technologies: Energy, Water, Climate (GTBS)
Specialisation Energy Technology

LP	Semester 1	Form	Hrs/wk	Semester 2	Form	Hrs/wk	Semester 3	Form	Hrs/wk	Semester 4	Form	Hrs/wk	Semester 5	Form	Hrs/wk	Semester 6	Form	Hrs/wk
1	**Mathematics I**			**Technical Thermodynamics I**			**Basics of Electrical Engineering**			**Fundamentals of Fluid Mechanics**			**Heat and Mass Transfer**			**Mechanical Engineering: Design (part 2)**		
2	Linear Algebra I	VL	2	Technical Thermodynamics I	VL	2	Basics of Electrical Engineering	VL	3	Fundamentals of Fluid Mechanics	VL	2	Heat and Mass Transfer	VL	2	Team Project Design Methodology	PBL	2
3	Linear Algebra I	GÜ	1	Technical Thermodynamics I	HÜ	1	Basics of Electrical Engineering	GÜ	2	Fluid Mechanics for Process Engineering	HÜ	2	Heat and Mass Transfer	GÜ	1	Mechanical Design Project II	PBL	3
4	Linear Algebra I	HÜ	1	Technical Thermodynamics I	GÜ	1							Heat and Mass Transfer	HÜ	1			
5	Analysis I	VL	2													**Reciprocating Machinery (part 2)**		
6	Analysis I	GÜ	1													Internal Combustion Engines I	VL	2
7	Analysis I	HÜ	1	**Mechanics II: Mechanics of Materials**			**Technical Thermodynamics II**			**Sanitary Engineering I**			**Foundations of Management**			Internal Combustion Engines I	HÜ	1
8				Mechanics II	VL	2	Technical Thermodynamics II	VL	2	Wastewater Disposal	VL	2	Introduction to Management	VL	3			
9	**General and Inorganic Chemistry**			Mechanics II	GÜ	2	Technical Thermodynamics II	HÜ	1	Wastewater Disposal	HÜ	1	Management Tutorial	GÜ	2	**Bachelor Thesis**		
10	General and Inorganic Chemistry	VL	3	Mechanics II	HÜ	2	Technical Thermodynamics II	GÜ	1	Drinking Water Supply	VL	2						
11	Fundamentals in Inorganic Chemistry	PR	3							Drinking Water Supply	HÜ	1						
12	Fundamentals in Inorganic Chemistry	GÜ	1															
13				**Mathematics II**			**Mathematics III**			**Conventional Energy Systems and Energy Economics**			**Introduction to Control Systems**					
14				Linear Algebra II	VL	2	Analysis III	VL	2	Energy systems and markets	VL	2	Introduction to Control Systems	VL	2			
15	**Mechanics I (Statics)**			Linear Algebra II	GÜ	1	Analysis III	GÜ	1	Fossil Energy Sources	VL	3	Introduction to Control Systems	GÜ	2			
16	Mechanics I	VL	2	Linear Algebra II	HÜ	1	Analysis III	HÜ	1	Fossil Energy Sources	HÜ	1						
17	Mechanics I	GÜ	2	Analysis II	VL	2	Differential Equations 1	VL	2									
18	Mechanics I	HÜ	1	Analysis II	HÜ	1	Differential Equations 1	GÜ	1									
19				Analysis II	GÜ	1	Differential Equations 1	HÜ	1	**Renewable Energies**			**Fundamentals of Materials Science (part 2)**					
20										Renewable Energies I	VL	2	Fundamentals of Materials Science I	VL	2			
21	**Computer Science for Engineers - Introduction and Overview**			**Organic Chemistry**			**Measurement Technology for VT/ BVT**			Renewable Energies II	VL	2	Physical and Chemical Basics of Materials Science	VL	2			
22				Organic Chemistry	VL	4	Measurement Technology	VL	2	Renewable Energies I	HÜ	1						
23	Computer Science for Engineers - Introduction and Overview	VL	3	Organic Chemistry	PR	3	Physical Fundamentals of Measurement Technology	VL	2	Renewable Energies II	HÜ	1	**Mechanical Engineering: Design (part 1)**					
24													Embodiment Design and 3D-CAD	VL	2			
25	Computer Science for Engineers - Introduction and Overview	GÜ	2				Practical Course Measurement Technology	PR	2	**Green Technologies II (part 2)**			Mechanical Design Project I	PBL	3			
26										Practical Exercise Environmental Technology	PR	1						
27	**Green Technologies I**						**Green Technologies II (part 1)**			**Fundamentals of Mechanical Engineering Design**			**Mechanics III (Dynamics)**					
28	Meteorology and Climate Systems - Introduction	VL	2				Environmental Technologie	VL	2	Fundamentals of Mechanical Engineering Design	VL	2	Mechanics III	VL	3			
29	Introduction to Green Technologies	SE	2				Environmental Assessment	VL	2	Fundamentals of Mechanical Engineering Design	HÜ	2	Mechanics III	GÜ	2			
30	Meteorology and Climate Systems - Introduction	GÜ	2				Environmental Assessment	GÜ	1				Mechanics III	HÜ	1			
31																		
32										**Fundamentals of Materials Science (part 1)**			**Reciprocating Machinery (part 1)**					
33										Fundamentals of Materials Science II	VL	2	Fundamentals of Reciprocating Engines and Turbomachinery - Part Reciprocating Engines	VL	1			
													Fundamentals of Reciprocating Engines and Turbomachinery - Part Reciprocating Engines	HÜ	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.