

Course of Study Green Technologies: Energy, Water, Climate (Study Cohort w25)

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 W Bachelor Green Technologies: Energy, Water, Climate (GTBS)

Specialisation Water Technologies						
1	Mathematics I Mathematics I VL 4 Mathematics I HÜ 2 Mathematics I GÜ 2	Technical Thermodynamics I Technical Thermodynamics I VL 2 Technical Thermodynamics I HÜ 1 Technical Thermodynamics I GÜ 2	Basics of Electrical Engineering Basics of Electrical Engineering VL 3 Basics of Electrical Engineering GÜ 2	Fundamentals of Fluid Mechanics Fundamentals of Fluid Mechanics VL 2 Fluid Mechanics for Process Engineering HÜ 2 Fundamentals on Fluid Mechanics GÜ 2	Heat and Mass Transfer Heat and Mass Transfer VL 2 Heat and Mass Transfer GÜ 2 Heat and Mass Transfer HÜ 1	Sanitary Engineering II Drinking Water Treatment SE 2 Management of Wastewater Infrastructure SE 2
2						
3						
4						
5						
6						
7	General and Inorganic Chemistry General and Inorganic Chemistry VL 3 Fundamentals in Inorganic Chemistry PR 3 Fundamentals in Inorganic Chemistry GÜ 1	Mathematics II Mathematics II VL 4 Mathematics II HÜ 2 Mathematics II GÜ 2	Technical Thermodynamics II Technical Thermodynamics II VL 2 Technical Thermodynamics II HÜ 1 Technical Thermodynamics II GÜ 2	Sanitary Engineering I Wastewater Treatment VL 2 Wastewater Treatment HÜ 1 Drinking Water Supply VL 2 Drinking Water Supply HÜ 1	Introduction to Control Systems Introduction to Control Systems VL 2 Introduction to Control Systems GÜ 2	Applied Water Management Modelling of soil water dynamics VL 2 Modelling of soil water dynamics PBL 2 Nature-oriented Hydraulic Engineering PBL 2
8						
9						
10						
11						
12						
13	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	Organic Chemistry Organic Chemistry VL 2 Organic Chemistry PR 2 Organic Chemistry 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	Conventional Energy Systems and Energy Industry Power Industry VL 1 Energy markets and energy trading VL 2 Fossil Energy Systems VL 2 Fuels I VL 1	Economic and environmental project assessment Basics of Environmental Project Assessment VL 2 Case studies economic and environmental project assessment GÜ 1 Basics of economic project assesment VL 2	Bachelor Thesis
14						
15						
16						
17						
18						
19	Green Technologies I Meteorology and Climate Systems - Introduction VL 2 Introduction Green Technologies SE 2 Meteorology and Climate Systems - Introduction GÜ 2	Engineering Mechanics II (Elastostatics) Engineering Mechanics II VL 2 Engineering Mechanics II GÜ 2 Engineering Mechanics II HÜ 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	Renewable Energies Renewable Energies I VL 2 Renewable Energies II VL 2 Renewable Energies I HÜ 1 Fuels II VL 1	Hydrology and Geoinformation Systems (part 2) Hydrology VL 1 Hydrology PBL 1	
20						
21						
22						
23						
24						
25	Engineering Mechanics I (Stereostatics) Engineering Mechanics I VL 2 Engineering Mechanics I GÜ 2 Engineering Mechanics I HÜ 2	Green Technologies II (part 1) Environmental Technologie VL 2 Pollutant analysis VL 2	Green Technologies II (part 2) Practical Exercise Environmental Technology PR 1	Hydrology and Geoinformation Systems (part 1) Introduction to Geoinformation Science PBL 3	Green Technologies III Scientific Work and Writing SE 2 Study Work Green Technologies PS 2	
26						
27						
28						
29						
30						
31	New Trends in Water and Environmental Research Introduction to Microplastics in Environment IV 2 Research Methods VL 1 Research Trends SE 2					
32						
33						
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.

