## Course of Study Green Technologies: Energy, Water, Climate (Study Cohort w24) 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 B Bachelor Green Technologies; Energy, Water, Climate (GTBS) Dual study program

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lisation Biotechnolo	gies					
Mathematics I			Technical Thermodynamics I			Basics of Electrica
Mathematics I	VL	4	Technical Thermodynamics I	VL	2	Basics of Electrical E
Mathematics I	HÜ	2	Technical Thermodynamics I	HÜ	1	Basics of Electrical E
Mathematics I	GÜ	2	Technical Thermodynamics I	GÜ	1	
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1	Mathematics I	Technical Thermodynamics I	Basics of Electrical Engineering	Fundamentals of Fluid Mechanics	Heat and Mass Transfer	Biological and Biochemical Fundamentals (part 2)
2	Mathematics I VL 4	Technical Thermodynamics I VL 2	Basics of Electrical Engineering VL 3	Fundamentals of Fluid Mechanics VL 2	Heat and Mass Transfer VL 2	Fundamental Biological and Biochemical PR 3
3	Mathematics I HŪ 2	Technical Thermodynamics I HÜ 1	Basics of Electrical Engineering GŪ 2	Fluid Mechanics for Process Engineering HŪ 2	Heat and Mass Transfer GÜ 2	Practical Course
	Mathematics I GÜ 2	Technical Thermodynamics I GÜ 1		Fundamentals on Fluid Mechanics GÜ 2	Heat and Mass Transfer HÜ 1	Introduction to the Biological and Biochemical VL 1 Practical Course
4	_					
5						Fundamentals in Molecular Biology
6						Genetics and Molecular Biology VL 2
7		Mathematics II	Technical Thermodynamics II	Sanitary Engineering I	Introduction to Control Systems	Genetics and Molecular Biology PBL 1 Molecular Biology Lab Course PR 3
8		Mathematics II VL 4	Technical Thermodynamics II VL 2	Wastewater Disposal VL 2	Introduction to Control Systems VL 2	Molecular biology Lab Course PK 5
-		Mathematics II HÜ 2	Technical Thermodynamics II HÜ 1	Wastewater Disposal HŪ 1	Introduction to Control Systems GÜ 2	
9	General and Inorganic Chemistry	Mathematics II GÜ 2	Technical Thermodynamics II GŪ 1	Drinking Water Supply VL 2		
10	General and Inorganic Chemistry VL 3 Fundamentals in Inorganic Chemistry PR 3			Drinking Water Supply HŪ 1		
11	Fundamentals in Inorganic Chemistry GÜ 1					Regulatory aspects of biological agents
12						Regulatory aspects of biological agents VL 2
13	-		Mathematics III	Conventional Energy Systems and Energy Industry	Practical module 5 (dual study program, Bachelor's	
14	-		Analysis III VL 2	Power Industry VL 1	degree)	Bioinformatics
			Analysis III GÜ 1	Energy markets and energy trading VL 2	Practical term 5 0	Bioinformatics SE 2
15	Computer Science for Engineers - Introduction and Overview	Organic Chemistry	Analysis III HÜ 1	Fossil Energy Systems VL 2		Biomormatics SE 2
16	Computer Science for Engineers - Introduction VL 3	Organic Chemistry VL 2 Organic Chemistry PR 2	Differential Equations 1 VL 2	Fuels I VL 1		
17	and Overview	Organic Chemistry GÜ 2	Differential Equations 1 GŪ 1 Differential Equations 1 HŪ 1			Conceptual Process Design
18	Computer Science for Engineers - Introduction GÜ 2					Conceptual Process Design VL 2
19	and Overview			Renewable Energies	Economic and environmental project assessment	Conceptual Process Design HÜ 2
	-			Renewable Energies I VL 2	Basics of Environmental Project Assessment VL 2	Conceptual Process Design GÜ 1
20				Renewable Energies II VL 2	Case studies economic and environmental GÜ 1	
21	Green Technologies I	Practical module 2 (dual study program, Bachelor's	Measurement Technology for Chemical and Bioprocess	Renewable Energies I HŪ 1	project assessment	
22	Meteorology and Climate Systems - Introduction VL 2	degree)	Engineering	Fuels II VL 1	Basics of economic project assement VL 2	
22		Brastical term 2	Moosurement Technology VII 2	10001		
22	Introduction Green Technologies SE 2 Meteorology and Climate Systems - Introduction GÜ 2	Practical term 2 0	Measurement Technology VL 2 Physical Fundamentals of Measurement VL 2			Bachelor thesis (dual study program)
23	Introduction Green Technologies SE 2 Meteorology and Climate Systems - Introduction GÜ 2	Practical term 2 0	Measurement Technology         VL         2           Physical Fundamentals of Measurement         VL         2           Technology         VL         2			Bachelor thesis (dual study program)
23 24	-	Practical term 2 0	Physical Fundamentals of Measurement VL 2			Bachelor thesis (dual study program)
23 24 25	-	Practical term 2 0	Physical Fundamentals of Measurement VL 2 Technology	Practical module 4 (dual study program, Bachelor's degree)	Biological and Biochemical Fundamentals (part 1)	Bachelor thesis (dual study program)
23 24 25 26	Meteorology and Climate Systems - Introduction GÜ 2		Physical Fundamentals of Measurement VL 2 Technology Practical Course Measurement Technology PR 2	Practical module 4 (dual study program, Bachelor's	Biological and Biochemical Fundamentals (part 1) Biological and Biochemical Fundamentals VL 2	Bachelor thesis (dual study program)
23 24 25	Meteorology and Climate Systems - Introduction GÜ 2 Practical module 1 (dual study program, Bachelor's	Engineering Mechanics II (Elastostatics)	Physical Fundamentals of Measurement VL 2 Technology Practical Course Measurement Technology PR 2 Green Technologies II (part 1)	Practical module 4 (dual study program, Bachelor's degree)	Biological and Biochemical Fundamentals (part 1) Biological and Biochemical Fundamentals VL 2 Bioprocess Technology I	Bachelor thesis (dual study program)
23 24 25 26	Meteorology and Climate Systems - Introduction GÜ 2         Practical module 1 (dual study program, Bachelor's degree)	Engineering Mechanics II (Elastostatics) Engineering Mechanics II VL 2	Physical Fundamentals of Measurement     VL     2       Technology     Practical Course Measurement Technology     PR     2       Green Technologies II (part 1)     Environmental Technologie     VL     2	Practical module 4 (dual study program, Bachelor's degree)	Biological and Biochemical Fundamentals (part 1)           Biological and Biochemical Fundamentals         VL         2           Bioprocess Technology I         VL         2	Bachelor thesis (dual study program)
23 24 25 26 27	Meteorology and Climate Systems - Introduction GÜ 2 Practical module 1 (dual study program, Bachelor's	Engineering Mechanics II (Elastostatics)	Physical Fundamentals of Measurement VL 2 Technology Practical Course Measurement Technology PR 2 Green Technologies II (part 1)	Practical module 4 (dual study program, Bachelor's degree)	Biological and Biochemical Fundamentals (part 1) Biological and Biochemical Fundamentals VL 2 Bioprocess Technology I	Bachelor thesis (dual study program)
23 24 25 26 27 28	Meteorology and Climate Systems - Introduction GÜ 2         Practical module 1 (dual study program, Bachelor's degree)	Engineering Mechanics II (Elastostatics) Engineering Mechanics II VL 2 Engineering Mechanics II GÜ 2	Physical Fundamentals of Measurement     VL     2       Technology     Practical Course Measurement Technology     PR     2       Green Technologies II (part 1)     Environmental Technologie     VL     2	Practical module 4 (dual study program, Bachelor's degree)	Biological and Biochemical Fundamentals (part 1)           Biological and Biochemical Fundamentals         VL         2           Bioprocess Technology I         UL         2           Bioprocess Technology I         VL         2           Bioprocess Technology I         UL         2	Bachelor thesis (dual study program)
23 24 25 26 27 28 29 30	Meteorology and Climate Systems - Introduction GÜ 2         Practical module 1 (dual study program, Bachelor's degree)	Engineering Mechanics II (Elastostatics) Engineering Mechanics II VL 2 Engineering Mechanics II GÜ 2	Physical Fundamentals of Measurement     VL     2       Technology     Practical Course Measurement Technology     PR     2       Green Technologies II (part 1)     Environmental Technologie     VL     2	Practical module 4 (dual study program, Bachelor's degree) Practical term 4 0	Biological and Biochemical Fundamentals (part 1)           Biological and Biochemical Fundamentals         VL         2           Bioprocess Technology I         VL         2           Bioprocess Technology I         VL         2           Bioprocess Technology I         HÜ         2	Bachelor thesis (dual study program)
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23 24 25 26 27 28 29 30 31 31 32 33 34	Meteorology and Climate Systems - Introduction GÛ 2         Practical module 1 (dual study program, Bachelor's degree)         Practical term 1       0         Engineering Mechanics I (Stereostatics)	Engineering Mechanics II (Elastostatics) Engineering Mechanics II VL 2 Engineering Mechanics II GÜ 2	Physical Fundamentals of Measurement       VL       2         Technology       Practical Course Measurement Technology       PR       2         Green Technologies II (part 1)       Environmental Technologie       VL       2         Pollutant analysis       VL       2         Practical module 3 (dual study program, Bachelor's degree)       Fractical module 3 (dual study program, Bachelor's degree)       Fractical module 3 (dual study program, Bachelor's degree)	Practical module 4 (dual study program, Bachelor's degree) Practical term 4 0 Green Technologies II (part 2)	Biological and Biochemical Fundamentals (part 1)           Biological and Biochemical Fundamentals         VL         2           Bioprocess Technology I         VL         2           Bioprocess Technology I         VL         2           Bioprocess Technology I         HÜ         2	Bachelor thesis (dual study program)
23 24 25 26 27 28 29 30 31 32 33 34 35	Meteorology and Climate Systems - Introduction       GÜ       2         Practical module 1 (dual study program, Bachelor's degree)       Practical term 1       0         Practical term 1       0         Engineering Mechanics I (Stereostatics)       VL       2	Engineering Mechanics II (Elastostatics) Engineering Mechanics II VL 2 Engineering Mechanics II GÜ 2	Physical Fundamentals of Measurement       VL       2         Technology       Practical Course Measurement Technology       PR       2         Green Technologies II (part 1)       Environmental Technologie       VL       2         Pollutant analysis       VL       2         Practical module 3 (dual study program, Bachelor's degree)       Fractical module 3 (dual study program, Bachelor's degree)       Fractical module 3 (dual study program, Bachelor's degree)	Practical module 4 (dual study program, Bachelor's degree) Practical term 4 0 Green Technologies II (part 2)	Biological and Biochemical Fundamentals (part 1)           Biological and Biochemical Fundamentals         VL         2           Bioprocess Technology I         VL         2           Bioprocess Technology I         VL         2           Bioprocess Technology I         HÜ         2	Bachelor thesis (dual study program)
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23 24 25 26 27 28 29 30 31 31 32 33 34 35 36 37	Meteorology and Climate Systems - Introduction     GÛ     2       Practical module 1 (dual study program, Bachelor's degree)     0       Practical term 1     0       Engineering Mechanics I (Stereostatics)     VL     2       Engineering Mechanics I     VL     2       Engineering Mechanics I     HÚ     2       Engineering Mechanics I     HÚ     2	Engineering Mechanics II (Elastostatics) Engineering Mechanics II VL 2 Engineering Mechanics II GÜ 2	Physical Fundamentals of Measurement       VL       2         Technology       Practical Course Measurement Technology       PR       2         Green Technologies II (part 1)       Environmental Technologie       VL       2         Pollutant analysis       VL       2         Practical module 3 (dual study program, Bachelor's degree)       Practical term 3       0	Practical module 4 (dual study program, Bachelor's degree) Practical term 4 0 Green Technologies II (part 2)	Biological and Biochemical Fundamentals (part 1)           Biological and Biochemical Fundamentals         VL         2           Bioprocess Technology I         VL         2           Bioprocess Technology I         VL         2           Bioprocess Technology I         HÜ         2	Bachelor thesis (dual study program)

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.