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

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) Specialisation Biotechnologies Mathematics I **Basics of Electrical Engineering** Fundamentals of Fluid Mechanics Heat and Mass Transfer Chemical Reaction Engineering (part 2) Linear Algebra I Technical Thermodynamics I Basics of Electrical Engineering Fundamentals of Fluid Mechanics Heat and Mass Transfer Experimental Course Chemical Engineering GÜ 1 H0 1 GÜ 1 GÜ 2 HÜ 2 Heat and Mass Transfer Linear Algebra L Technical Thermodynamics I Basics of Electrical Engineering Fluid Mechanics for Process Engineering 3 Phase Equilibria Thermodynamics HŪ 1 Technical Thermodynamics I Fundamentals on Fluid Mechanics Heat and Mass Transfer Linear Algebra I Phase Equilibria Thermodynamics VL 2 Phase Equilibria Thermodynamics GÜ 1 GÜ 1 Phase Equilibria Thermodynamics Analysis I HÜ 1 Mechanics II: Mechanics of Materials Technical Thermodynamics II Sanitary Engineering I Introduction to Control Systems Machanice II Technical Thermodynamics II Wastewater Disposal Introduction to Control Systems V/I 2 HÜ 1 GÜ 2 HÜ 1 GÜ 2 Mechanics II Technical Thermodynamics II Wastewater Disposal Introduction to Control Systems General and Inorganic Chemistry **Bioprocess Engineering - Fundamentals** Mechanics II Technical Thermodynamics II Drinking Water Supply VL 2 Bioprocess Engineering - Fundamentals General and Inorganic Chemistry Drinking Water Supply 10 Fundamentals in Inorganic Chemistry Bioprocess Engineering- Fundamentals Fundamentals in Inorganic Chemistry GÜ 1 Bioprocess Engineering - Fundamental Practical PR 2 12 13 Mathematics II Mathematics III Conventional Energy Systems and Energy Industry Economic and environmental project assessment Linear Algebra II Analysis III Power Industry VI 1 Basics of Environmental Project Assessment 14 GÜ 1 GÜ 1 VI 2 Linear Algebra II Analysis III Energy markets and energy trading Case studies economic and environmental GÜ 1 15 Mechanics I (Statics) Bachelor Thesis HÜ 1 Analysis III HÜ 1 Fossil Energy Systems VL 2 Linear Algebra II Mechanics I Analysis II Differential Equations 1 Fossil Energy Systems Basics of economic project assement 16 Mechanics I Differential Equations 1 GÜ 1 17 Analysis II Differential Equations 1 MÜ 1 18 19 Renewable Energies Chemical Reaction Engineering (part 1) Renewable Energies I Chemical Reaction Engineering VL 2 VI 2 Chemical Reaction Engineering HÜ 2 Renewable Energies II 21 Computer Science for Engineers - Introduction and Organic Chemistry Measurement Technology for Chemical and Bioprocess HŪ 1 Renewable Energies I Organic Chemistry 22 Computer Science for Engineers - Introduction VL 3 Measurement Technology Organic Chemistry 23 Green Technologies III Physical Fundamentals of Measurement VI 2 Computer Science for Engineers - Introduction GÜ 2 Scientific Work and Writing SE 2 and Overview Practical Course Measurement Technology Study Work Green Technologies 25 Green Technologies II (part 2) Practical Exercise Environmental Technology 26 Biochemistry and Microbiology 27 Green Technologies I Green Technologies II (part 1) Biochemistry PBL 1 Meteorology and Climate Systems - Introduction VL 2 Environmental Technologie 28 VL 2 Introduction to Green Technologies Pollutant analysis 29 PBL 1 Meteorology and Climate Systems - Introduction GÜ 2 30 31 32 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.