Course of Study Chemical and Bioprocess Engineering (Study Cohort w25)

Core Qualification Elective Compulsory Specialisation Elective Compulsory Focus Elective Compulsory Sample course plan C Bachelor Chemical and Bioprocess Engineering (CBBS) Dual study program Interdisciplinary complement Specialisation Chemical Engineering Mathematics I Technical Thermodynamics I Technical Thermodynamics II Fundamentals of Fluid Mechanics Heat and Mass Transfer Particle Technology and Solids Process Engineering 2 HŪ 2 Technical Thermodynamics I Technical Thermodynamics II Fluid Mechanics for Process Engineering Heat and Mass Transfer Particle Technology I GÜ 1 3 Mathematics I GÜ 2 Technical Thermodynamics I Technical Thermodynamics II GÜ 2 Fundamentals on Fluid Mechanics Heat and Mass Transfer Particle Technology I PR 2 5 Phase Equilibria Thermodynamics Introduction to Control Systems Conceptual Process Design 8 GÜ 1 Phase Equilibria Thermodynamics GÜ 1 Introduction to Control Systems HÜ 2 q General and Inorganic Chemistry MO 1 GÜ 1 Mathematics II Analysis III Phase Equilibria Thermodynamics Conceptual Process Design General and Inorganic Chemistry VI 2 10 Differential Equations 1 PR 3 Fundamentals in Inorganic Chemistry Differential Equations 1 11 Fundamentals in Inorganic Chemistry Differential Equations 1 12 13 Computer Science for Engineers - Programming Practical module 5 (dual study program, Bachelor's **Fundamentals of Chemical Kinetics** Concepts, Data Handling & Communication Fundamentals of Chemical Kinetics 14 Computer Science for Engineers - Programming IV 3 Practical term 5 Fundamentals of Chemical Kinetics HÜ 1 15 Practical module 1 (dual study program, Bachelor's Organic Chemistry Chemical Reaction Engineering (part 1) Concepts, Data Handling & Communication Organic Chemistry Chemical Reaction Engineering Computer Science for Engineers - Programming GÜ 2 16 Bachelor thesis (dual study program) Practical term 1 Concepts, Data Handling & Communication PR 2 HÜ 2 Organic Chemistry Chemical Reaction Engineering 17 Organic Chemistry GÜ 2 18 19 Measurement Technology for Chemical and Bioprocess Practical module 4 (dual study program, Bachelor's Economic and environmental project assessment Basics of Environmental Project Assessment 20 Measurement Technology Practical term 4 Case studies economic and environmental 21 Introduction to Chemical and Bioengineering **Fundamentals of Technical Drawing** Physical Fundamentals of Measurement Introduction to Chemical and Bioengineering VL 2 Fundamentals of Technical Drawing Basics of economic project assement 22 Practical Course Measurement Technology Fundamentals of Technical Drawing 23 24 Biological and Biochemical Fundamentals (part 1) Practical module 2 (dual study program, Bachelor's degree) 25 Biological and Biochemical Fundamentals Practical module 3 (dual study program, Bachelor's **Thermal Separation Processes** Experimental Course Chemical Engineering Thermal Separation Processes Engineering Mechanics I (Stereostatics) Practical term 3 Thermal Senaration Processes GÜ 2 Engineering Mechanics I VI 2 27 Renewable Energies HÜ 1 Thermal Separation Processes Engineering Mechanics I GÜ 2 Renewable Energies I Separation Processes Engineering Mechanics I HŪ 2 Renewable Energies II VL 2 29 Renewable Energies I HŪ 1 30 **Engineering Mechanics II (Elastostatics)** Engineering Mechanics II 31 **Construction and Apparatus Engineering** GÜ 2 Engineering Mechanics II 32 Engineering Mechanics II Construction and Apparatus Engineering 33 Bioprocess Technology I - Fundamental Practical PR 2 34 35 36 Biological and Biochemical Fundamentals (part 2) Fundamental Biological and Biochemical Practical PR 3 37 Material Engineering 38 Introduction to the Biological and Biochemical VL 1 Practical Course 39 Linking theory and practice (dual study program, Bachelor's degree) (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.