Course of Study Bioprocess Engineering (Study Cohort w14)

Sample course plan B Bachelor Bioprocess Engineering (BVTBS)

Physics for VT/BVT/EUT-

Physics for VT/BVT/EUT-

Engineers

28

Organic Chemistry

VL 4 PR 3

Organic Chemistry

Organic Chemistry

Core qualification Elective Specialisation Elective Focus Elective Compulsory Interdisciplinary complement Compulsory Compulsory LP Formirs/w8/emester 2 FornHrs/w8emester 4 FormHrs/w8kemester 5 Formers/w8emester 6 Semester 1 Fornhirs/w8emester 3 FornHrs/wk **Engineering Mechanics I Engineering Mechanics II** Thermal Separation Processes **Basics of Electrical Engineering** Fundamentals of Fluid Mechanics **Heat and Mass Transfer** (part 2) Engineering Mechanics I VL 3 VL 3 VL 2 Engineering Mechanics II VL 3 Basics of Electrical Fundamentals of Fluid Heat and Mass Transfer Separation Processes PR 1 Engineering Mechanics Engineering Mechanics I UE 2 Engineering Mechanics II UE 2 Heat and Mass Transfer UE 1 Basics of Electrical UE 2 Exercises in Fluid Mechanics HÜ 1 **Chemical Reaction Engineering** Engineering for Process Engineering 3 (part 2) Experimental Course PR 2 Chemical Engineering Process and Plant Engineering I 5 Process and Plant VL 2 Engineering I HÜ 1 Process and Plant Mathematics I Technical Thermodynamics I Technical Thermodynamics II Phase Equilibria Thermodynamics Thermal Separation Processes Engineering I (part 1) VL 2 VL 2 Technical Thermodynamics VL 2 Linear Algebra I Technical Thermodynamics I VL 2 Thermodynamics III Thermal Separation Process and Plant UE 1 UE Linear Algebra I UE 1 Technical Thermodynamics I HÜ 1 Thermodynamics III Engineering I Processes Technical Thermodynamics HÜ 1 HÜ 1 Technical Thermodynamics I UE 1 Thermodynamics III HÜ 1 Linear Algebra I Thermal Separation UE 2 VL 2 Particle Technology and Solids Analysis I **Processes** Technical Thermodynamics UE 1 **Process Engineering** UE 1 Analysis I Thermal Separation HÜ 1 Particle Technology I VL 2 HÜ 1 Analysis I Processes UE 1 Particle Technology I 12 **Introduction to Control Systems** Particle Technology I PR 2 13 **Biochemistry and Microbiology** Mathematics III Foundations of Management Introduction to Control VL 2 Systems Biochemistry Analysis III VL 2 Introduction to Management 15 UE 2 Fundamentals in Inorganic Introduction to Control PBL 1 UE 1 PBL 2 Biochemistry Analysis III Project Entrepreneurship 16 Systems Chemistry **Bachelor Thesis** VL 2 Analysis III HÜ 1 Microbiology 17 Fundamentals in Inorganic VL 4 Microbiology PBL 1 Differential Equations 1 VL 2 18 Chemistry Chemical Reaction Engineering Differential Equations 1 UE 1 19 Fundamentals in Inorganic (part 1) Mathematics II Informatics for Process Engineers HÜ 1 Differential Equations 1 20 Chemistry **Chemical Reaction** VL 2 Numeric and Matlab Linear Algebra II VL 2 PR 2 21 Engineering VL 2 Linear Algebra II UE 1 Informatics for Process **Fundamentals of Process** Fundamentals in Molecular HÜ 2 Chemical Reaction Engineering Engineers Biology HÜ 1 Linear Algebra II Engineering VL 2 Informatics for Process UE 2 Environmental Technologie VL 2 Genetics and Molecular VL 2 Analysis II 22 Biology Engineers VL 2 Introduction into Process HÜ 1 Bioprocess Engineering -Analysis II 23 Engineering/Bioprocess Genetics and Molecular PBL 1 Advanced UE 1 Analysis II Engineering Biology Bioprocess Engineering -VL 2 25 Fundamentals of Technical VL 1 Lab Course in Microbiology PR 3 Advanced Bioprocess Engineering -Drawing and Materials and Biochemistry **Fundamentals** Bioprocess Engineering -UE 2 Fundamentals of Technical HÜ 1 Advanced Bioprocess Engineering -VL 2 Drawing and Materials **Fundamentals** 27 Bioprocess Engineering-HÜ 2

Fundamentals

Bioprocess Engineering -

PR 2

Specialisation Compulsory

Focus Compulsory

Thesis Compulsory

Engineers Physics for VT/BVT/EUT-	UE 1	
31 Engineers		
Physics-Lab for VT/BVT/EUT-Engineers	PR 2	

Practical

Nontechnical Complementary 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.