Course of Study Bioprocess Engineering (Study Cohort w17)

Sample course plan C Bachelor Bioprocess Engineering (BVTBS)

LP Formirs/weber 2 Formirs/webenester 3 Formers/weber 4 Formirs/weber 5 Formirs/weemester 6 Formers/wk Semester 1 1 **Engineering Mechanics I** Engineering Mechanics II **Basics of Electrical Fundamentals of Fluid** Heat and Mass Transfer **Chemical Reaction** 2 Engineering Mechanics Engineering (part 2) VL 2 Engineering Mechanics I VL 3 Engineering Mechanics II VL 3 Heat and Mass Transfer **Basics of Electrical** VL 3 Fundamentals of Fluid VL 2 **Experimental Course** PR 2 Heat and Mass Transfer UE 1 Engineering Mechanics I UE 2 Engineering Mechanics II UE 2 Engineering Mechanics **Chemical Engineering** Heat and Mass Transfer HÜ 1 Basics of Electrical UE 2 Fluid Mechanics for HÜ 2 3 **Process and Plant Engineering** Process Engineering Engineering 4 5 Process and Plant VL 2 6 Engineering I 7 Process and Plant HÜ 1 Mathematics I **Technical Thermodynamics I** Phase Equilibria **Thermal Separation Processes Technical Thermodynamics II** 8 Engineering I Thermodynamics VL 2 Linear Algebra I VL 2 Technical VL 2 Technical Thermal Separation VL 2 Process and Plant UE 1 Thermodynamics II VL 2 Thermodynamics I Phase Equilibria Processes UE 1 Linear Algebra I Engineering I Thermodynamics Technical HÜ 1 Technical ΗÜ 1 Thermal Separation UE 2 HÜ 1 Linear Algebra I 9 Thermodynamics I Thermodynamics II Phase Equilibria UE 1 Processes Particle Technology and Analysis I VL 2 10 Thermodynamics Technical UE 1 Technical UE 1 Thermal Separation HÜ 1 **Solids Process Engineering** Analysis I UE 1 11 Thermodynamics I Thermodynamics II Phase Equilibria HÜ 1 Processes Particle Technology I VL 2 HÜ 1 Analysis I Thermodynamics 12 Separation Processes PR 1 Particle Technology I UE 1 13 Particle Technology I PR 2 **Biochemistry and Microbiology** Mathematics III Foundations of Management Introduction to Control 14 Systems VI 3 Analysis III VL 2 Introduction to Biochemistry VL 2 15 Management Introduction to Control VL 2 **General and Inorganic Bachelor Thesis** PBL 1 Analysis III UE 1 Biochemistry 16 Systems Chemistry Management Tutorial HÜ 2 Microbiology VL 2 Analysis III HÜ 1 17 Introduction to Control UE 2 Fundamentals in Inorganic VL 4 Microbiology PBL 1 **Differential Equations 1** VL 2 18 Systems Chemistry UE 1 **Differential Equations 1** 19 Fundamentals in Inorganic PR 3 Mathematics II Informatics for Process **Chemical Reaction** HÜ 1 Differential Equations 1 Chemistry 20 Engineers Engineering (part 1) VL 2 Linear Algebra II 21 Numeric and Matlab PR 2 **Chemical Reaction** VL 2 Fundamentals of Process **Fundamentals in Molecular** UE 1 Linear Algebra II 22 Engineering Biology Engineering VI 2 Informatics for Process HÜ 1 Linear Algebra II Chemical Reaction HÜ 2 Engineers Introduction into Process VL 2 Genetics and Molecular VL 2 Analysis II VL 2 Engineering/Bioprocess Engineering Biology Informatics for Process UE 2 ΗÜ 1 Analysis II Engineering 23 Genetics and Molecular PBL 1 Engineers **Bioprocess Engineering -**UE 1 Analysis II Fundamentals of material VL 2 Biology Advanced engineering Lab Course in Microbiology PR 3 Bioprocess Engineering - VL 2 and Biochemistry 24 Advanced Physics 25 Bioprocess Engineering - UE 2 Physics **Bioprocess Engineering -**VL 2 26 Advanced **Fundamentals** Physics UE 1 27 **Organic Chemistry** Bioprocess Engineering - VL 2 Physics-Lab for VT/ BVT/ PR 2 28 **Fundamentals** EUT Organic Chemistry VL 4 29 **Bioprocess Engineering-**HÜ 2 Organic Chemistry PR 3 30 **Fundamentals** Bioprocess Engineering -PR 2 **Fundamental Practical** Course

Core gualification Elective

Compulsory

Specialisation Elective

. Compulsory Thesis Compulsory

Interdisciplinary

complement

Focus Elective Compulsory

31 32	_			Environmental Tech	nology
33	_			Environmental Assessment	VL 2
				Environmental Assessment	UE 1
	٦	Nontechnical Complementary Courses for Bachelors (from catalog	ue) - 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.