Course of Study Bioprocess Engineering (Study Cohort w16)

Sample course plan C Bachelor Bioprocess Engineering (BVTBS)

Legend:

Core qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
Core qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

LP	Semester 1	Forn h irs/	w& semester 2	FormHrs	w& ween ester 3	Forn h irs/	w& semester 4 FormHrs	w& emester 5	Forn h irs/	w&semester 6	Forn h irs/wk
1	Engineering Mechanics I Engineering Mechanics I	VL 3	Engineering Mechanics II Engineering Mechanics II	VL 3	Basics of Electrical Engine Basics of Electrical	ering VL 3	Fundamentals of Fluid Mechanics	Heat and Mass Transfer Heat and Mass Transfer	VL 2	Thermal Separation Proc (part 2)	esses
	Engineering Mechanics I	UE 2	Engineering Mechanics II	UE 2	Engineering		Mechanics	Heat and Mass Transfer	UE 1	Separation Processes	PR 1
2 3					Basics of Electrical Engineering	UE 2	Fluid Mechanics for Process HÜ 2 Engineering	Heat and Mass Transfer	HÜ 1	Chemical Reaction Engin (part 2)	neering
										Experimental Course Chemical Engineering	PR 2
4 5										Process and Plant Engine	eering I
6										Process and Plant Engineering I	VL 2
7 8	Mathematics I Linear Algebra I	VL 2	Technical Thermodynamic Technical Thermodynamics		Technical Thermodynamic Technical Thermodynamics		Phase Equilibria Thermodynamics Phase Equilibria VL 2	Thermal Separation Proces (part 1)	sses	Process and Plant Engineering I	HÜ 1
9	Linear Algebra I Linear Algebra I	UE 1 HÜ 1	Technical Thermodynamics Technical Thermodynamics		II Technical Thermodynamics	HÜ 1	Thermodynamics Phase Equilibria UE 1	Thermal Separation Processes	VL 2	Process and Plant Engineering I	UE 1
10 11	Analysis I	VL 2			II Technical Thermodynamics	UE 1	Thermodynamics Phase Equilibria HÜ 1	Thermal Separation Processes	UE 2	Particle Technology and Process Engineering	Solids
	Analysis I Analysis I	UE 1 HÜ 1			П		Thermodynamics	Thermal Separation Processes	HÜ 1	Particle Technology I	VL 2
12								Introduction to Control Sy	stems	Particle Technology I Particle Technology I	UE 1 PR 2
13 14			Biochemistry and Microbi	ology	Mathematics III		Foundations of Management	Introduction to Control	VL 2	Tancie Technology T	111 2
15	Concept and Incomption Cha		Biochemistry	VL 2	Analysis III	VL 2	Introduction to Management VL 3	Systems Introduction to Control	UE 2		
16 17	General and Inorganic Che Fundamentals in Inorganic	VL 4	Biochemistry Microbiology	PBL 1 VL 2	Analysis III Analysis III	UE 1 HÜ 1	Project Entrepreneurship PBL 2	Systems	02 2	Bachelor Thesis	
18	Chemistry Fundamentals in Inorganic	PR 3	Microbiology	PBL 1	Differential Equations 1	VL 2		Chemical Reaction Engine	ering		
19 20	Chemistry		Mathematics II		Differential Equations 1 Differential Equations 1	UE 1 HÜ 1	Informatics for Process Engineers	(part 1)	Ŭ		
20			Linear Algebra II	VL 2	· · ·		Numeric and Matlab PR 2	Chemical Reaction Engineering	VL 2		
	Fundamentals of Process Engineering		Linear Algebra II Linear Algebra II	UE 1 HÜ 1	Fundamentals in Molecula Biology	r	Informatics for Process VL 2 Engineers	Chemical Reaction	HÜ 2		
22	Introduction into Process	VL 2	Analysis II	VL 2	Genetics and Molecular	VL 2	Informatics for Process UE 2	Engineering			
22	Engineering/Bioprocess Engineering		Analysis II	HÜ 1	Biology Genetics and Molecular	PBL 1	Engineers	Bioprocess Engineering - Advanced			
	Fundamentals of material engineering	VL 2	Analysis II	UE 1	Biology Lab Course in Microbiology	PR 3		Bioprocess Engineering - Advanced	VL 2		
24	Physics				and Biochemistry			Bioprocess Engineering -	UE 2		
25 26	Physics	VL 2					Bioprocess Engineering - Fundamentals	Advanced			
27	Physics Physics-Lab for VT/ BVT/	UE 1 PR 2	Organic Chemistry				Bioprocess Engineering - VL 2				
28 29	EUT		Organic Chemistry	VL 4			Fundamentals				
30			Organic Chemistry	PR 3			Bioprocess Engineering- HÜ 2				

		Fundamentals Bioprocess Engineering - PR 2 Fundamental Practical Course	
31 32 33		Environmental TechnologyEnvironmental AssessmentVLEnvironmental AssessmentUE1	
	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.