

Course of Study Bioprocess Engineering (Study Cohort w16)

Sample course plan A 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	Form	Hrs/wk	Semester 2	Form	Hrs/wk	Semester 3	Form	Hrs/wk	Semester 4	Form	Hrs/wk	Semester 5	Form	Hrs/wk	Semester 6	Form	Hrs/wk																	
1	Engineering Mechanics I Engineering Mechanics I Engineering Mechanics I	VL	3	Engineering Mechanics II Engineering Mechanics II Engineering Mechanics II	VL	3	Basics of Electrical Engineering Basics of Electrical Engineering Basics of Electrical Engineering	VL	3	Fundamentals of Fluid Mechanics Fundamentals of Fluid Mechanics Fluid Mechanics for Process Engineering	VL	2	Heat and Mass Transfer Heat and Mass Transfer Heat and Mass Transfer Heat and Mass Transfer	VL	2	Thermal Separation Processes (part 2) Separation Processes	PR	1																	
2																		Chemical Reaction Engineering (part 2) Experimental Course Chemical Engineering																	
3																	PR		2																
4																																			
5																		Process and Plant Engineering I																	
6																		Process and Plant Engineering I																	
7	Mathematics I Linear Algebra I Linear Algebra I Linear Algebra I Analysis I Analysis I Analysis I	VL	2	Technical Thermodynamics I Technical Thermodynamics I Technical Thermodynamics I Technical Thermodynamics I	VL	2	Technical Thermodynamics II Technical Thermodynamics II Technical Thermodynamics II Technical Thermodynamics II	VL	2	Phase Equilibria Thermodynamics Phase Equilibria Thermodynamics Phase Equilibria Thermodynamics Phase Equilibria Thermodynamics	VL	2	Thermal Separation Processes (part 1) Thermal Separation Processes Thermal Separation Processes Thermal Separation Processes	VL	2	Process and Plant Engineering I Process and Plant Engineering I Particle Technology and Solids Process Engineering Particle Technology I Particle Technology I Particle Technology I	HÜ	1																	
8																																			
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16																			General and Inorganic Chemistry Fundamentals in Inorganic Chemistry Fundamentals in Inorganic Chemistry	VL	4	Biochemistry and Microbiology Biochemistry Microbiology Microbiology	PBL	1	Mathematics III Analysis III Analysis III Analysis III	VL	2	Foundations of Management Introduction to Management Project Entrepreneurship	VL	3	Introduction to Control Systems Introduction to Control Systems Introduction to Control Systems	VL	2	Bachelor Thesis	
17																																			
18																																			
19																																			
20	Fundamentals of Process Engineering Introduction into Process Engineering/Bioprocess Engineering Fundamentals of material engineering	PR	3	Mathematics II Linear Algebra II Linear Algebra II Linear Algebra II Analysis II Analysis II Analysis II	VL	2	Fundamentals in Molecular Biology Genetics and Molecular Biology Genetics and Molecular Biology Lab Course in Microbiology and Biochemistry	VL	2	Informatics for Process Engineers Numeric and Matlab Informatics for Process Engineers Informatics for Process Engineers	PR	2	Chemical Reaction Engineering (part 1) Chemical Reaction Engineering Chemical Reaction Engineering	VL	2	Bioprocess Engineering - Advanced Bioprocess Engineering - Advanced Bioprocess Engineering - Advanced	VL	2																	
21																																			
22																																			
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25																																			
26	Physics Physics Physics-Lab for VT/ BVT/ EUT	VL	2	Organic Chemistry Organic Chemistry Organic Chemistry	VL	4				Bioprocess Engineering - Fundamentals Bioprocess Engineering - Fundamentals Bioprocess Engineering-	VL	2																							
27																																			
28																																			
29																																			
30																																			

30	Fundamentals of technical drawing Fundamentals of Technical Drawing VL 1	Fundamentals Bioprocess Engineering - Fundamental Practical Course PR 2
31	Fundamentals of Technical Drawing HÜ 1	
32		

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.