

Course of Study Bioprocess Engineering (Study Cohort w15)

Sample course plan A Bachelor Bioprocess Engineering (BVTBS)

Legend:

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

LP	Semester 1 FormHrs/wk	Semester 2 FormHrs/wk	Semester 3 FormHrs/wk	Semester 4 FormHrs/wk	Semester 5 FormHrs/wk	Semester 6 FormHrs/wk
1	Engineering Mechanics I	Engineering Mechanics II	Basics of Electrical Engineering	Fundamentals of Fluid Mechanics	Heat and Mass Transfer	Thermal Separation Processes (part 2)
	Engineering Mechanics I VL 3	Engineering Mechanics II VL 3	Basics of Electrical Engineering VL 3	Fundamentals of Fluid Mechanics VL 2	Heat and Mass Transfer VL 2	Separation Processes PR 1
2	Engineering Mechanics I UE 2	Engineering Mechanics II UE 2	Basics of Electrical Engineering UE 2	Fluid Mechanics for Process Engineering HÜ 2	Heat and Mass Transfer UE 1	Chemical Reaction Engineering (part 2)
3						Experimental Course Chemical Engineering PR 2
4						Process and Plant Engineering I
5						Process and Plant Engineering I VL 2
6						Process and Plant Engineering I HÜ 1
7	Mathematics I	Technical Thermodynamics I	Technical Thermodynamics II	Phase Equilibria Thermodynamics	Thermal Separation Processes (part 1)	
8	Linear Algebra I VL 2	Technical Thermodynamics I VL 2	Technical Thermodynamics II VL 2	Thermodynamics III VL 2	Thermal Separation Processes VL 3	
9	Linear Algebra I UE 1	Technical Thermodynamics I HÜ 1	Technical Thermodynamics II HÜ 1	Thermodynamics III UE 1	Thermal Separation Processes UE 2	
10	Linear Algebra I HÜ 1	Technical Thermodynamics I UE 1	Technical Thermodynamics II UE 1	Thermodynamics III HÜ 1	Thermal Separation Processes HÜ 1	
11	Analysis I VL 2					
12	Analysis I UE 1					
13	Analysis I HÜ 1					
14		Biochemistry and Microbiology	Mathematics III	Foundations of Management	Introduction to Control Systems	
15	General and Inorganic Chemistry	Biochemistry VL 2	Analysis III VL 2	Introduction to Management VL 3	Introduction to Control Systems VL 2	
16	Fundamentals in Inorganic Chemistry VL 4	Biochemistry POL 1	Analysis III UE 1	Project Entrepreneurship POL 2	Introduction to Control Systems UE 2	
17	Fundamentals in Inorganic Chemistry PR 3	Microbiology VL 2	Analysis III HÜ 1			
18		Microbiology POL 1	Differential Equations 1 VL 2			
19			Differential Equations 1 UE 1			
20			Differential Equations 1 HÜ 1			
21	Fundamentals of Process Engineering	Mathematics II	Fundamentals in Molecular Biology	Informatics for Process Engineers	Chemical Reaction Engineering (part 1)	
22	Environmental Technologie VL 2	Linear Algebra II VL 2	Genetics and Molecular Biology VL 2	Numeric and Matlab PR 2	Chemical Reaction Engineering VL 2	
23	Introduction into Process VL 2	Linear Algebra II UE 1	Genetics and Molecular Biology POL 1	Informatics for Process Engineers VL 2	Chemical Reaction Engineering HÜ 2	
24	Engineering/Bioprocess Engineering	Linear Algebra II HÜ 1	Lab Course in Microbiology and Biochemistry PR 3	Informatics for Process Engineers UE 2		
25	Fundamentals of Technical Drawing and Materials VL 1	Analysis II VL 2			Bioprocess Engineering - Advanced	
26	Fundamentals of Technical Drawing and Materials HÜ 1	Analysis II HÜ 1			Bioprocess Engineering - Advanced VL 2	
27	Physics	Analysis II UE 1			Bioprocess Engineering - Advanced UE 2	
28	Physics VL 2	Organic Chemistry				
29	Physics UE 1	Organic Chemistry VL 4				
30	Physics-Lab for VT/ BVT/ EUT PR 2	Organic Chemistry PR 3				
31						
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.