

Course of Study Bioprocess Engineering (Study Cohort w17)

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

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Environmental Technology	
Environmental Assessment	VL 2
Environmental Assessment	UE 1

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.