

# Course of Study Bioprocess Engineering (Study Cohort w15)

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

30	Physics-Lab for VT/ BVT/ EUT PR 2		Fundamental Practical Course
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.