

# Course of Study Bioprocess Engineering (Study Cohort w14)

## 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 FormHrs/wk	Semester 2 FormHrs/wk	Semester 3 FormHrs/wk	Semester 4 FormHrs/wk	Semester 5 FormHrs/wk	Semester 6 FormHrs/wk
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
2	Engineering Mechanics I UE 2	Engineering Mechanics II UE 2	Basics of Electrical Engineering UE 2	Exercises in Fluid Mechanics for Process Engineering HÜ 1	Heat and Mass Transfer UE 1	<b>Chemical Reaction Engineering (part 2)</b>
3						Experimental Course Chemical Engineering PR 2
4						<b>Process and Plant Engineering I</b>
5						Process and Plant Engineering I VL 2
6						Process and Plant Engineering I HÜ 1
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>	
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		<b>Biochemistry and Microbiology</b>	<b>Mathematics III</b>	<b>Foundations of Management</b>	<b>Introduction to Control Systems</b>	
15	<b>Fundamentals in Inorganic Chemistry</b>	Biochemistry VL 2	Analysis III VL 2	Introduction to Management VL 4	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	<b>Fundamentals of Process Engineering</b>	<b>Mathematics II</b>	<b>Fundamentals in Molecular Biology</b>	<b>Informatics for Process Engineers</b>	<b>Chemical Reaction Engineering (part 1)</b>	
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			<b>Bioprocess Engineering - Advanced</b>	
26	Fundamentals of Technical Drawing and Materials HÜ 1	Analysis II HÜ 1			Bioprocess Engineering - Advanced VL 2	
27	<b>Physics for VT/BVT/EUT-Engineers</b>	Analysis II UE 1			Bioprocess Engineering - Advanced UE 2	
28	Physics for VT/BVT/EUT-Engineers VL 2					
29	Physics for VT/BVT/EUT-Engineers UE 1	<b>Organic Chemistry</b>				
30	Physics-Lab for VT/BVT/EUT-Engineers PR 2	Organic Chemistry VL 4				
31		Organic Chemistry PR 3				
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.