

Course of Study Bioprocess Engineering (Study Cohort w21)

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

Sample course plan C Bachelor Bioprocess Engineering (BVTBS)

1	Mathematics I		Technical Thermodynamics I		Basics of Electrical Engineering		Fundamentals of Fluid Mechanics		Heat and Mass Transfer		Process and Plant Engineering I	
2	Linear Algebra I	VL 2	Technical Thermodynamics I	VL 2	Basics of Electrical Engineering	VL 3	Fundamentals of Fluid Mechanics	VL 2	Heat and Mass Transfer	VL 2	Process and Plant Engineering I	VL 2
3	Linear Algebra I	GÜ 1	Technical Thermodynamics I	HÜ 1	Basics of Electrical Engineering	GÜ 2	Fluid Mechanics for Process Engineering	HÜ 2	Heat and Mass Transfer	GÜ 1	Process and Plant Engineering I	HÜ 1
4	Linear Algebra I	HÜ 1	Technical Thermodynamics I	GÜ 1			Fundamentals on Fluid Mechanics	GÜ 2	Heat and Mass Transfer	HÜ 1	Process and Plant Engineering I	GÜ 1
5	Analysis I	VL 2										
6	Analysis I	GÜ 1										
7	Analysis I	HÜ 1										
8			Mechanics II: Mechanics of Materials		Technical Thermodynamics II		Phase Equilibria Thermodynamics		Thermal Separation Processes		Particle Technology and Solids Process Engineering	
9			Mechanics II	VL 2	Technical Thermodynamics II	VL 2	Phase Equilibria Thermodynamics	VL 2	Thermal Separation Processes	VL 2	Particle Technology I	VL 2
10	General and Inorganic Chemistry		Mechanics II	GÜ 2	Technical Thermodynamics II	HÜ 1	Phase Equilibria Thermodynamics	GÜ 1	Thermal Separation Processes	GÜ 2	Particle Technology I	GÜ 1
11	General and Inorganic Chemistry	VL 3	Mechanics II	HÜ 2	Technical Thermodynamics II	GÜ 1	Phase Equilibria Thermodynamics	HÜ 1	Thermal Separation Processes	HÜ 1	Particle Technology I	PR 2
12	Fundamentals in Inorganic Chemistry	PR 3							Separation Processes	PR 1		
13	Fundamentals in Inorganic Chemistry	GÜ 1										
14			Biochemistry and Microbiology		Mathematics III		Foundations of Management		Introduction to Control Systems		Bachelor Thesis	
15			Biochemistry	VL 2	Analysis III	VL 2	Introduction to Management	VL 3	Introduction to Control Systems	VL 2		
16	Fundamentals of Process Engineering and Material Engineering		Biochemistry	PBL 1	Analysis III	GÜ 1	Management Tutorial	GÜ 2	Introduction to Control Systems	GÜ 2		
17	Introduction into Process Engineering/Bioprocess Engineering	VL 2	Microbiology	VL 2	Analysis III	HÜ 1						
18	Fundamentals of material engineering	VL 2	Microbiology	PBL 1	Differential Equations 1	VL 2						
19					Differential Equations 1	GÜ 1						
20	Mechanics I (Statics)				Differential Equations 1	HÜ 1						
21	Mechanics I	VL 2	Mathematics II				Bioprocess Engineering - Fundamentals		Bioprocess Engineering - Advanced			
22	Mechanics I	GÜ 2	Linear Algebra II	VL 2			Bioprocess Engineering - Fundamentals	VL 2	Bioprocess Engineering - Advanced	VL 2		
23	Mechanics I	HÜ 1	Linear Algebra II	GÜ 1			Bioprocess Engineering- Fundamentals	HÜ 2	Bioprocess Engineering - Advanced	GÜ 2		
24			Linear Algebra II	HÜ 1	Fundamentals in Molecular Biology		Bioprocess Engineering - Fundamental Practical	PR 2				
25	Measurement Technology for VT/ BVT		Analysis II	VL 2	Genetics and Molecular Biology	VL 2	Course					
26	Measurement Technology	VL 2	Analysis II	HÜ 1	Genetics and Molecular Biology	PBL 1						
27	Physical Fundamentals of Measurement Technology	VL 2	Analysis II	GÜ 1	Lab Course in Microbiology and Biochemistry	PR 3						
28							Computer Science for Engineers - Programming Concepts, Data Handling & Communication					
29	Practical Course Measurement Technology	PR 2	Organic Chemistry		Chemical Reaction Engineering (part 1)		Computer Science for Engineers - Programming	VL 3				
30			Organic Chemistry	VL 4	Chemical Reaction Engineering	VL 2	Concepts, Data Handling & Communication					
31			Organic Chemistry	PR 3	Chemical Reaction Engineering	HÜ 2	Computer Science for Engineers - Programming	GÜ 2				
32							Concepts, Data Handling & Communication					
							Chemical Reaction Engineering (part 2)					
							Experimental Course Chemical Engineering	PR 2				

Non-technical 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.

