

Course of Study Bioprocess Engineering (Study Cohort w18)

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

