Course of Study Bioprocess Engineering (Study Cohort w18)

Legend:

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

Sample course plan D Bachelor Bioprocess Engineering (BVTBS)

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