

Course of Study Bioprocess Engineering (Study Cohort w18)

Sample course plan A Master Bioprocess Engineering (BVTMS)
Specialisation A - General Bioprocess Engineering

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/wk	Semester 2	Form Hrs/wk	Semester 3	Form Hrs/wk	Semester 4	Form Hrs/wk
1	Transport Processes		Advanced Chemical Reaction Engineering		Process Design Project		Dimensioning and Assessment of Renewable Energy Systems (part 2)	
2	Heat & Mass Transfer in Process Engineering	VL 2	Chemical Reaction Engineering	VL 2	Process Design Project	PK 6	Heat Provision from Renewable Sources of Energy	SE 2
	Multiphase Flows	VL 2	Chemical Reaction Engineering	HÜ 2				
3	Reactor Design Using Local Transport Processes	PBL 2	Experimental Course Chemical Engineering	PR 2				
4							Master Thesis	
5								
6								
7	Process and Plant Engineering II		Bioprocess and Biosystems Engineering		Bioprocess Engineering Advanced Practical Course			
8	Process and Plant Engineering II	VL 2	Bioreactor Design and Operation	VL 2	Advanced Practical Course in Microbiology	PR 3		
9	Process and Plant Engineering II	HÜ 1	Biosystems Engineering	VL 2	Bioprocess Engineering Advanced Practical Course	PR 3		
10	Process and Plant Engineering II	UE 1	Bioreactors and Biosystems Engineering	PBL 1				
11								
12								
13	Separation Technologies for Life Sciences		Technical Microbiology		Particle Technology and Solid Matter Process Technology			
14	Chromatographic Separation Processes	VL 2	Applied Molecular Biology	VL 2	Advanced Particle Technology II	VL 2		
15	Unit Operations for Bio-Related Systems	VL 2	Technical Microbiology	VL 2	Advanced Particle Technology II	PBL 1		
16	Unit Operations for Bio-Related Systems	PBL 2	Technical Microbiology	HÜ 1	Experimental Course Particle Technology	PR 3		
17								
18								
19	Biocatalysis		Cell and Tissue Engineering		Study work Bioprocess Engineering			
20	Technical Biocatalysis	VL 2	Fundamentals of Cell and Tissue Engineering	VL 2	Study Work Bioprocess Engineering	PR 6		
21	Biocatalysis and Enzyme Technology	VL 2	Bioprocess Engineering for Medical Applications	VL 2				
22								
23								
24								
25					Dimensioning and Assessment of Renewable Energy Systems (part 1)			
26					Electricity Generation from Renewable Sources of Energy	SE 2		
27					Environmental Technology and Energy Economics	PBL 2		
28								
29								
30								
31								
32								
Business & Management (from catalogue) - 6LP								
Nontechnical Elective Complementary Courses for Master (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.

