

Course of Study Bioprocess Engineering (Study Cohort w19)

Sample course plan A Master Bioprocess Engineering (BVTMS)

Specialisation A - General Bioprocess Engineering

		Semester 2		Semester 3		Semester 4			
	Form	Hrs/wk	Form	Hrs/wk	Form	Hrs/wk	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
3	Multiphase Flows	VL	2	Chemical Reaction Engineering	HÜ	2			
4	Reactor Design Using Local Transport Processes	PBL	2	Experimental Course Chemical Engineering	PR	2			
5									
6									
7	Process and Plant Engineering II		Bioprocess and Biosystems Engineering		Bioprocess Engineering Advanced Practical Course		Heat Provision from Renewable Sources of Energy		
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	GÜ	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									
Non-technical 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.

