

Course of Study Bioprocess Engineering (Study Cohort w24)

Sample course plan B Master Bioprocess Engineering (BVTMS)

Specialisation B - Industrial Bioprocess Engineering

	Core Qualification Compulsory		Specialisation Compulsory		Focus Compulsory		Thesis Compulsory	
	Core Qualification Elective Compulsory		Specialisation Elective Compulsory		Focus Elective Compulsory		Interdisciplinary complement	
1	Transport Processes		Advanced Chemical Reaction Engineering		Process Design Project		Master Thesis	
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 under consideration of local transport processes	PBL 2	Experimental Course Chemical Engineering	PR 2				
5								
6								
7	Separation Technologies for Life Sciences		Bioprocess and Biosystems Engineering		Bioprocess Engineering Advanced Practical Course			
8	Chromatographic Separation Processes	VL 2	Bioreactor Design and Operation	VL 2	Advanced Practical Course in Microbiology	PR 3		
9	Unit Operations for Bio-Related Systems	VL 2	Biosystems Engineering	VL 2	Bioprocess Engineering Advanced Practical Course	PR 3		
10	Unit Operations for Bio-Related Systems	PBL 2	Bioreactors and Biosystems Engineering	PBL 1				
11								
12								
13	Biocatalysis		Technical Microbiology		Cell and Tissue Engineering			
14	Technical Biocatalysis	VL 2	Applied Molecular Biology	VL 2	Fundamentals of Cell and Tissue Engineering	VL 2		
15	Biocatalysis and Enzyme Technology	VL 2	Technical Microbiology	VL 2	Bioprocess Engineering for Medical Applications	VL 2		
16			Technical Microbiology	HÜ 1				
17								
18								
19	Process modeling and control		Industrial Bioprocess Engineering		Industrial Bioprocesses in Practice			
20	Process modeling and control	VL 2	Biotechnical Processes	PBL 2	Practice in bioprocess engineering	SE 2		
21	Process modeling and control	GÜ 3	Development of bioprocess engineering processes in industrial practice	SE 2	Industrial biotechnology in Chemical Industry	SE 2		
22								
23								
24								
25					Study work Bioprocess Engineering			
26					Study Work Bioprocess Engineering	PR 6		
27								
28								
29								
30								
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.

