

# Course of Study Bioprocess Engineering (Study Cohort w18)

Sample course plan B Master Bioprocess Engineering (BVTMS)  
Specialisation B - Industrial 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	<b>Transport Processes</b>		<b>Advanced Chemical Reaction Engineering</b>		<b>Process Design Project</b>		<b>Master Thesis</b>	
2	Heat & Mass Transfer in Process	VL 2	Chemical Reaction Engineering	VL 2	Process Design Project	PK 6		
3	Engineering		Chemical Reaction Engineering	HÜ 2				
4	Multiphase Flows	VL 2	Experimental Course Chemical	PR 2				
5	Reactor Design Using Local Transport	PBL 2	Engineering					
6	Processes							
7	<b>Process and Plant Engineering II</b>		<b>Bioprocess and Biosystems Engineering</b>		<b>Bioprocess Engineering Advanced Practical Course</b>			
8	Process and Plant Engineering II	VL 2	Bioreactor Design and Operation	VL 2	Advanced Practical Course in	PR 3		
9	Process and Plant Engineering II	HÜ 1	Biosystems Engineering	VL 2	Microbiology			
10	Process and Plant Engineering II	UE 1	Bioreactors and Biosystems Engineering	PBL 1	Bioprocess Engineering Advanced	PR 3		
11					Practical Course			
12								
13	<b>Separation Technologies for Life Sciences</b>		<b>Technical Microbiology</b>		<b>Synthesis and Design of Industrial Processes</b>			
14	Chromatographic Separation Processes	VL 2	Applied Molecular Biology	VL 2	Synthesis and Design of Industrial	VL 1		
15	Unit Operations for Bio-Related Systems	VL 2	Technical Microbiology	VL 2	Facilities			
16	Unit Operations for Bio-Related Systems	PBL 2	Technical Microbiology	HÜ 1	Industrial Plant Design and Economics	PBL 3		
17								
18								
19	<b>Biocatalysis</b>		<b>Cell and Tissue Engineering</b>		<b>Industrial Bioprocess Engineering</b>			
20	Technical Biocatalysis	VL 2	Fundamentals of Cell and Tissue	VL 2	Biotechnical Processes	PBL 2		
21	Biocatalysis and Enzyme Technology	VL 2	Engineering		Development of bioprocess engineering	SE 2		
22			Bioprocess Engineering for Medical	VL 2	processes in industrial practice			
23			Applications					
24								
25					<b>Study work Bioprocess Engineering</b>			
26					Study Work Bioprocess Engineering	PR 6		
27								
28								
29								
30								
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.

