

Course of Study Bioprocess Engineering (Study Cohort w20)

Sample course plan B Master Bioprocess Engineering (BVTMS)

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

Specialisation B - Industrial Bioprocess Engineering

1	Transport Processes		Advanced Chemical Reaction Engineering		Process Design Project		Industrial Bioprocess Engineering (part 2)
2	Heat & Mass Transfer in Process Engineering	VL 2	Chemical Reaction Engineering	VL 2	Process Design Project	PK 6	Biotechnical Processes PBL 2
3	Multiphase Flows	VL 2	Chemical Reaction Engineering	HÜ 2			Development of bioprocess engineering processes in industrial practice SE 2
4	Reactor Design Using Local Transport Processes	PBL 2	Experimental Course Chemical Engineering	PR 2			
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7	Process and Plant Engineering II		Bioprocess and Biosystems Engineering		Bioprocess Engineering Advanced Practical Course		Master Thesis
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			
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13	Separation Technologies for Life Sciences		Technical Microbiology		Synthesis and Design of Industrial Processes		
14	Chromatographic Separation Processes	VL 2	Applied Molecular Biology	VL 2	Synthesis and Design of Industrial Facilities	VL 1	
15	Unit Operations for Bio-Related Systems	VL 2	Technical Microbiology	VL 2	Industrial Plant Design and Economics	PBL 3	
16	Unit Operations for Bio-Related Systems	PBL 2	Technical Microbiology	HÜ 1			
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19	Biocatalysis		Cell and Tissue Engineering		Industrial Bioprocess Engineering		
20	Technical Biocatalysis	VL 2	Fundamentals of Cell and Tissue Engineering	VL 2	Biotechnical Processes	PBL 2	
21	Biocatalysis and Enzyme Technology	VL 2	Bioprocess Engineering for Medical Applications	VL 2	Development of bioprocess engineering processes in industrial practice	SE 2	
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25					Study work Bioprocess Engineering		
26					Study Work Bioprocess Engineering	PR 6	
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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.

