

Course of Study Process Engineering (Study Cohort w20)

Sample course plan B Master Process Engineering (VTMS)

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

Specialisation Chemical Process Engineering

Year	Course Name	Code	Credits	Course Name	Code	Credits	Course Name	Code	Credits	Category
1	Particle Technology and Solid Matter Process Technology			Advanced Chemical Reaction Engineering			Process Design Project			Master Thesis
2	Advanced Particle Technology II	VL	2	Chemical Reaction Engineering	VL	2	Process Design Project	PK	6	
3	Advanced Particle Technology II	PBL	1	Chemical Reaction Engineering	HÜ	2				
3	Experimental Course Particle Technology	PR	3	Experimental Course Chemical Engineering	PR	2				
4										
5										
6										
7	Transport Processes			Bioprocess and Biosystems Engineering			Applied Thermodynamics: Thermodynamic Properties for Industrial Applications			
8	Heat & Mass Transfer in Process Engineering	VL	2	Bioreactor Design and Operation	VL	2	Applied Thermodynamics: Thermodynamic Properties for Industrial Applications	VL	4	
9	Multiphase Flows	VL	2	Biosystems Engineering	VL	2	Applied Thermodynamics: Thermodynamic Properties for Industrial Applications	GÜ	2	
9	Reactor Design Using Local Transport Processes	PBL	2	Bioreactors and Biosystems Engineering	PBL	1				
10										
11										
12										
13	Process and Plant Engineering II			Computer Aided Process Engineering (CAPE)			Synthesis and Design of Industrial Processes			
14	Process and Plant Engineering II	VL	2	CAPE with Computer Exercises	VL	2	Synthesis and Design of Industrial Facilities	VL	1	
15	Process and Plant Engineering II	HÜ	1	Methods of Process Safety and Dangerous Substances	VL	2	Industrial Plant Design and Economics	PBL	3	
15	Process and Plant Engineering II	GÜ	1							
16										
17										
18										
19	Fluid Mechanics in Process Engineering			Heterogeneous Catalysis			Examples in Solid Process Engineering			
20	Fluid Mechanics II	VL	2	Analysis and Design of Heterogeneous Catalytic Reactors	VL	2	Fluidization Technology	VL	2	
21	Applications of Fluid Mechanics in Process Engineering	HÜ	2	Modern Methods in Heterogeneous Catalysis	VL	2	Technical Applications of Particle Technology	VL	2	
21				Modern Methods in Heterogeneous Catalysis	PR	2	Practical Course Fluidization Technology	PR	1	
22							Exercises in Fluidization Technology	GÜ	1	
23										
24										
25							Research Project Process Engineering			
26							Research Project in Process Engineering	PBL	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.

