

Course of Study Process Engineering (Study Cohort w23)

Sample course plan B Master Process Engineering (VTMS) Dual study program

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							
1	Particle Technology and Solid Matter Process Technology			Advanced Chemical Reaction Engineering		Process Design Project	Master thesis (dual study program)
2	Advanced Particle Technology II	VL	2	Chemical Reaction Engineering	VL	Process Design Project	
3	Advanced Particle Technology II	PBL	1	Chemical Reaction Engineering	HÜ	PK	
4	Experimental Course Particle Technology	PR	3	Experimental Course Chemical Engineering	PR	6	
5							
6							
7	Transport Processes			Bioprocess and Biosystems Engineering		Practical module 3 (dual study program, Master's degree)	
8	Heat & Mass Transfer in Process Engineering	VL	2	Bioreactor Design and Operation	VL	Practical term 3	
9	Multiphase Flows	VL	2	Biosystems Engineering	VL	0	
10	Reactor Design Using Local Transport Processes	PBL	2	Bioreactors and Biosystems Engineering	PBL		
11							
12							
13	Process and Plant Engineering II			Practical module 2 (dual study program, Master's degree)			
14	Process and Plant Engineering II	VL	2	Practical term 2			
15	Process and Plant Engineering II	HÜ	2		0		
16							
17							
18						Applied Thermodynamics: Thermodynamic Properties for Industrial Applications	
19	Fluid Mechanics in Process Engineering					Applied Thermodynamics: Thermodynamic Properties for Industrial Applications	
20	Fluid Mechanics II	VL	2			VL	
21	Applications of Fluid Mechanics in Process Engineering	HÜ	2			GÜ	
22						2	
23				Heterogeneous Catalysis		Synthesis and Design of Industrial Processes	
24				Analysis and Design of Heterogeneous Catalytic Reactors	VL	Synthesis and Design of Industrial Facilities	
25	Practical module 1 (dual study program, Master's degree)			Modern Methods in Heterogeneous Catalysis	VL	Industrial Plant Design and Economics	
26	Practical term 1		0	Modern Methods in Heterogeneous Catalysis	PBL	PBL	
27						3	
28							
29				Process Simulation and Process Safety		Examples in Solid Process Engineering	
30				CAPE with Computer Exercises	IV	Fluidization Technology	
31				Methods of Process Safety and Dangerous Substances	VL	Technical Applications of Particle Technology	
32						VL	
33						2	
34						PR	
35						1	
36						GÜ	
37						1	
38							
39							
40							
Business & Management (from catalogue) - 6LP							
Linking theory and practice (dual study program, Master's degree) (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.

