

Course of Study Process Engineering (Study Cohort w23)

Sample course plan B Master Process Engineering (VTMS)

Specialisation Chemical Process Engineering

	Core Qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
	Core Qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement
1	Particle Technology and Solid Matter Process Technology		Advanced Chemical Reaction Engineering	
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	Master Thesis	
4	Experimental Course Particle Technology PR 3	Experimental Course Chemical Engineering PR 2		
5				
6				
7	Transport Processes		Bioprocess and Biosystems Engineering	
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	
10	Reactor Design Using Local Transport Processes PBL 2	Bioreactors and Biosystems Engineering PBL 1		
11				
12				
13	Process and Plant Engineering II		Heterogeneous Catalysis	
14	Process and Plant Engineering II VL 2	Analysis and Design of Heterogeneous Catalytic Reactors VL 2	Synthesis and Design of Industrial Processes VL 1	
15	Process and Plant Engineering II HÜ 2	Modern Methods in Heterogeneous Catalysis VL 2	Industrial Plant Design and Economics PBL 3	
16		Modern Methods in Heterogeneous Catalysis PBL 2		
17				
18				
19	Fluid Mechanics in Process Engineering		Process Simulation and Process Safety	
20	Fluid Mechanics II VL 2	CAPE with Computer Exercises IV 3	Examples in Solid Process Engineering VL 2	
21	Applications of Fluid Mechanics in Process Engineering HÜ 2	Methods of Process Safety and Dangerous Substances VL 2	Fluidization Technology VL 2	
22			Technical Applications of Particle Technology VL 2	
23			Practical Course Fluidization Technology PR 1	
24			Exercises in Fluidization Technology GÜ 1	
25			Research Project Process Engineering PBL 6	
26				
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.

