

Course of Study Process Engineering (Study Cohort w18)

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

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

