

Course of Study Process Engineering (Study Cohort w17)

Sample course plan B Master Process Engineering (VTMS)
Specialisation Chemical Process Engineering

Legend:

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		Advanced Chemical Reaction Engineering		Process Design Project		Master Thesis						
2													
3		Advanced Particle Technology II		VL		2		Chemical Reaction Engineering	VL	2	Process Design Project	PK	6
4		Advanced Particle Technology II		UE		1		Chemical Reaction Engineering	HÜ	2			
5		Experimental Course Particle Technology		PR		3		Experimental Course Chemical Engineering	PR	2			
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			
9								Bioreactor Design and Operation	PR	1	Applied Thermodynamics: Thermodynamic Properties for Industrial Applications	VL	4
10		Multiphase Flows		VL		2		Biosystems Engineering	VL	2	Applied Thermodynamics: Thermodynamic Properties for Industrial Applications	UE	2
11		Reactor Design Using Local Transport Processes		PBL		2		Biosystems Engineering	PBL	1			
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
16		Process and Plant Engineering II		UE		1							
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
22								Modern Methods in Heterogeneous Catalysis	PR	2	Practical Course Fluidization Technology	PR	1
23											Exercises in Fluidization Technology	UE	1
24													
25					Research Project Process Engineering								
26						Research Project in Process Engineering		PBL	6				
27													
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.