Course of Study Process Engineering (Study Cohort w24)

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												
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						
4	Experimental Course Particle Technology	PR	3	Experimental Course Chemical Engineering	PR	2						
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						
10	Reactor design under consideration of local transport processes	PBL	2	Bioreactors and Biosystems Engineering	PBL	1	Applied Thermodynamics: Thermodynamic Properties for Industrial Applications	GÜ	2			
11												
12												
13	**Fluid Mechanics in Process Engineering**			**Heterogeneous Catalysis**			**Synthesis and Design of Industrial Processes**					
14	Fluid Mechanics II	VL	2	Analysis and Design of Heterogeneous Catalytic Reactors	VL	2	Synthesis and Design of Industrial Facilities	VL	1			
15	Applications of Fluid Mechanics in Process Engineering	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	**Process modeling and control**			**Process Simulation and Process Safety**			**Examples in Solid Process Engineering**					
20	Process modeling and control	VL	2	CAPE with Computer Exercises	IV	3	Fluidization Technology	VL	2			
21	Process modeling and control	GÜ	3	Methods of Process Safety and Dangerous Substances	VL	2	Technical Applications of Particle Technology	VL	2			
22							Practical Course Fluidization Technology	PR	1			
23							Exercises in Fluidization Technology	GÜ	1			
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.