Course of Study Process Engineering (Study Cohort w19)

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**			**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 Using Local Transport Processes	PBL	2	Bioreactors and Biosystems Engineering	PBL	1	Applied Thermodynamics: Thermodynamic Properties for Industrial Applications	GÜ	2			
11												
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	GÜ	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	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.