

# Course of Study Process Engineering (Study Cohort w20)

Sample course plan C Master Process Engineering (VTMS)

Core Qualification Compulsory    Specialisation Compulsory    Focus Compulsory    Thesis Compulsory  
 Core Qualification Elective Compulsory    Specialisation Elective Compulsory    Focus Elective Compulsory    Interdisciplinary complement

## Specialisation Environmental Process Engineering

Year	Course	Code	Credits	Category	Course	Code	Credits	Category	Course	Code	Credits	Category	
1	<b>Particle Technology and Solid Matter Process Technology</b>				<b>Advanced Chemical Reaction Engineering</b>				<b>Process Design Project</b>			Master Thesis	
2	Advanced Particle Technology II	VL	2	Core Qualification Compulsory	Chemical Reaction Engineering	VL	2	Specialisation Elective Compulsory	Process Design Project	PK	6		Thesis Compulsory
3	Advanced Particle Technology II	PBL	1		Chemical Reaction Engineering	HÜ	2		Chemical Reaction Engineering	HÜ	2		
4	Experimental Course Particle Technology	PR	3		Experimental Course Chemical Engineering	PR	2		Experimental Course Chemical Engineering	PR	2		
5													
6													
7	<b>Transport Processes</b>					<b>Bioprocess and Biosystems Engineering</b>				<b>Process Modeling in Water Technology</b>			
8	Heat & Mass Transfer in Process Engineering	VL	2	Core Qualification Elective Compulsory	Bioreactor Design and Operation	VL	2	Specialisation Compulsory	Process Modeling in Drinking Water Treatment	PBL	2	Focus Elective Compulsory	
9	Multiphase Flows	VL	2		Biosystems Engineering	VL	2		Process Modelling of Wastewater Treatment	PBL	2		
10	Reactor Design Using Local Transport Processes	PBL	2		Bioreactors and Biosystems Engineering	PBL	1						
11													
12													
13	<b>Process and Plant Engineering II</b>					<b>System Aspects of Renewable Energies</b>				<b>Aquatic Chemistry</b>			
14	Process and Plant Engineering II	VL	2	Core Qualification Elective Compulsory	Energy Trading	VL	1	Specialisation Elective Compulsory	Chemistry of Drinking Water Treatment	VL	2	Focus Elective Compulsory	
15	Process and Plant Engineering II	HÜ	1		Energy Trading	GÜ	1		Chemistry of Drinking Water Treatment	HÜ	1		
16	Process and Plant Engineering II	GÜ	1		Fuel Cells, Batteries, and Gas Storage: New Materials for Energy Production and Storage	VL	2		Practical Course Aquatic Chemistry	PR	4		
17					Deep Geothermal Energy	VL	2						
18													
19	<b>Fluid Mechanics in Process Engineering</b>					<b>Computer Aided Process Engineering (CAPE)</b>				<b>Wastewater Treatment and Air Pollution Abatement</b>			
20	Fluid Mechanics II	VL	2	Core Qualification Elective Compulsory	CAPE with Computer Exercises	VL	2	Specialisation Elective Compulsory	Air Pollution Abatement	VL	2	Focus Elective Compulsory	
21	Applications of Fluid Mechanics in Process Engineering	HÜ	2		Methods of Process Safety and Dangerous Substances	VL	2		Biological Wastewater Treatment	VL	2		
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23													
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25													
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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.

