

Course of Study Process Engineering (Study Cohort w23)

Sample course plan C Master Process Engineering (VTMS) Dual study program

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			
1	Particle Technology and Solid Matter Process Technology		Advanced Chemical Reaction Engineering
2	Advanced Particle Technology II VL 2		Chemical Reaction Engineering VL 2
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
8	Heat & Mass Transfer in Process Engineering VL 2		Bioreactor Design and Operation VL 2
9	Multiphase Flows VL 2		Biosystems Engineering VL 2
10	Reactor Design Using Local Transport Processes PBL 2		Bioreactors and Biosystems Engineering PBL 1
11			
12			
13	Process and Plant Engineering II		Practical module 2 (dual study program, Master's degree)
14	Process and Plant Engineering II VL 2		Practical term 2 0
15	Process and Plant Engineering II HÜ 2		
16			
17			
18			Process Modeling in Water Technology
19	Fluid Mechanics in Process Engineering		Process Modeling in Drinking Water Treatment PBL 2
20	Fluid Mechanics II VL 2		Process Modelling of Wastewater Treatment PBL 2
21	Applications of Fluid Mechanics in Process Engineering HÜ 2		
22			
23			System Aspects of Renewable Energies
24			Energy Trading VL 1
25	Practical module 1 (dual study program, Master's degree)		Energy Trading GÜ 1
26	Practical term 1 0		Fuel Cells, Batteries, and Gas Storage: New Materials for Energy Production and Storage VL 2
27			Deep Geothermal Energy VL 2
28			
29			Process Simulation and Process Safety
30			CAPE with Computer Exercises IV 3
31			Methods of Process Safety and Dangerous Substances VL 2
32			
33			Biological Waste Treatment
34			Biological Waste Treatment PBL 3
35			Waste and Environmental Chemistry PR 2
36			
37			Waste Treatment and Recycling
38			Recycling technologies and thermal waste treatment VL 2
39			Recycling technologies and thermal waste treatment GÜ 1
40			Planning of waste treatment plants PBL 3
Business & Management (from catalogue) - 6LP			
Linking theory and practice (dual study program, Master's degree) (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.

