

Course of Study Process Engineering (Study Cohort w24)

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 under consideration of local transport processes PBL 2		Bioreactors and Biosystems Engineering PBL 1
11			
12			
13	Fluid Mechanics in Process Engineering		Practical module 2 (dual study program, Master's degree)
14	Fluid Mechanics II VL 2		Practical term 2 0
15	Applications of Fluid Mechanics in Process Engineering HÜ 2		
16			
17			
18			Process Modeling in Water Technology
19	Practical module 1 (dual study program, Master's degree)		Process Modeling in Drinking Water Treatment PBL 2
20	Practical term 1 0		Process Modelling of Wastewater Treatment PBL 2
21			
22			
23			System Aspects of Renewable Energies
24			Energy Trading VL 1
25			Energy Trading GÜ 1
26			Fuel Cells, Batteries, and Gas Storage: New Materials for Energy Production and Storage VL 2
27			Deep Geothermal Energy VL 2
28			
29	Process modeling and control		Process Simulation and Process Safety
30	Process modeling and control VL 2		CAPE with Computer Exercises IV 3
31	Process modeling and control GÜ 3		Methods of Process Safety and Dangerous Substances VL 2
32			
33			
34			
35			Biological Waste Treatment
36			Biological Waste Treatment PBL 3
37			Waste and Environmental Chemistry PR 2
38			
39			
40			Waste Treatment and Recycling
			Recycling technologies and thermal waste treatment VL 2
			Recycling technologies and thermal waste treatment GÜ 1
			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.

