

# Course of Study Process Engineering (Study Cohort w24)

Sample course plan D 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 Process Engineering			
1	<b>Particle Technology and Solid Matter Process Technology</b>		<b>Advanced Chemical Reaction Engineering</b>
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	<b>Transport Processes</b>		<b>Bioprocess and Biosystems Engineering</b>
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	<b>Fluid Mechanics in Process Engineering</b>		<b>Practical module 2 (dual study program, Master's degree)</b>
14	Fluid Mechanics II VL 2		Practical term 2 0
15	Applications of Fluid Mechanics in Process Engineering HÜ 2		
16			
17			
18			
19	<b>Practical module 1 (dual study program, Master's degree)</b>		<b>Separation Technologies for Life Sciences</b>
20	Practical term 1 0		Chromatographic Separation Processes VL 2
21			Unit Operations for Bio-Related Systems VL 2
22			Unit Operations for Bio-Related Systems PBL 2
23			
24			<b>Applied optimization in energy and process engineering</b>
25			Applied optimization in energy and process engineering IV 2
26			Applied optimization in energy and process engineering GÜ 3
27			
28			
29	<b>Process modeling and control</b>		<b>Process Simulation and Process Safety</b>
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			<b>Research Project Process Engineering</b>
36			Research Project in Process Engineering PBL 6
37			
38			
39			
40			
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.

