

# Course of Study Process Engineering (Study Cohort w20)

Sample course plan A Bachelor Process Engineering (VTBS)

Legend		Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
Core qualification 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	Semester 5	Form	Hrs/wk	Semester 6	Form	Hrs/wk																					
1	<b>Engineering Mechanics I</b>			<b>Engineering Mechanics II</b>			<b>Basics of Electrical Engineering</b>			<b>Fundamentals of Fluid Mechanics</b>			<b>Heat and Mass Transfer</b>			<b>Process and Plant Engineering I</b>																							
2																			Engineering Mechanics I	VL	3	Engineering Mechanics II	VL	3	Basics of Electrical Engineering	VL	3	Fundamentals of Fluid Mechanics	VL	2	Heat and Mass Transfer	VL	2	Process and Plant Engineering I	VL	2			
3																			Engineering Mechanics I	UE	2	Engineering Mechanics II	UE	2	Basics of Electrical Engineering	UE	2	Basics of Electrical Engineering	UE	2	Fluid Mechanics for Process Engineering	HÜ	2	Heat and Mass Transfer	HÜ	1	Process and Plant Engineering I	HÜ	1
4																			Engineering Mechanics I	UE	2	Engineering Mechanics II	UE	2	Basics of Electrical Engineering	UE	2	Basics of Electrical Engineering	UE	2	Fluid Mechanics for Process Engineering	HÜ	2	Heat and Mass Transfer	HÜ	1	Process and Plant Engineering I	HÜ	1
5																			Engineering Mechanics I	UE	2	Engineering Mechanics II	UE	2	Basics of Electrical Engineering	UE	2	Basics of Electrical Engineering	UE	2	Fluid Mechanics for Process Engineering	HÜ	2	Heat and Mass Transfer	HÜ	1	Process and Plant Engineering I	HÜ	1
6																			Engineering Mechanics I	UE	2	Engineering Mechanics II	UE	2	Basics of Electrical Engineering	UE	2	Basics of Electrical Engineering	UE	2	Fluid Mechanics for Process Engineering	HÜ	2	Heat and Mass Transfer	HÜ	1	Process and Plant Engineering I	HÜ	1
7	<b>Mathematics I</b>			<b>Technical Thermodynamics I</b>			<b>Technical Thermodynamics II</b>			<b>Phase Equilibria Thermodynamics</b>			<b>Thermal Separation Processes</b>			<b>Particle Technology and Solids Process Engineering</b>																							
8																			Linear Algebra I	VL	2	Technical Thermodynamics I	VL	2	Technical Thermodynamics II	VL	2	Phase Equilibria Thermodynamics	VL	2	Thermal Separation Processes	VL	2	Particle Technology I	VL	2			
9																			Linear Algebra I	UE	1	Technical Thermodynamics I	UE	1	Technical Thermodynamics II	UE	1	Phase Equilibria Thermodynamics	UE	1	Thermal Separation Processes	UE	2	Particle Technology I	UE	1			
10																			Linear Algebra I	HÜ	1	Technical Thermodynamics I	HÜ	1	Technical Thermodynamics II	HÜ	1	Phase Equilibria Thermodynamics	HÜ	1	Thermal Separation Processes	HÜ	1	Particle Technology I	PR	2			
11																			Analysis I	VL	2	Technical Thermodynamics I	UE	1	Technical Thermodynamics II	UE	1	Phase Equilibria Thermodynamics	HÜ	1	Thermal Separation Processes	HÜ	1	Particle Technology I	PR	2			
12																			Analysis I	UE	1	Technical Thermodynamics I	UE	1	Technical Thermodynamics II	UE	1	Phase Equilibria Thermodynamics	HÜ	1	Thermal Separation Processes	HÜ	1	Particle Technology I	PR	2			
13	<b>General and Inorganic Chemistry</b>			<b>Mathematics II</b>			<b>Construction and Apparatus Engineering</b>			<b>Renewables and Energy Systems</b>			<b>Foundations of Management</b>			<b>Environmental Technology</b>																							
14																			Linear Algebra II	VL	2	Linear Algebra II	UE	1	Construction and Apparatus Engineering	VL	2	Renewable Energy	VL	2	Introduction to Management	VL	3	Environmental Assessment	VL	2			
15																			Linear Algebra II	UE	1	Linear Algebra II	HÜ	1	Construction and Apparatus Engineering	UE	2	Energy Systems and Energy Industry	VL	2	Management Tutorial	UE	2	Environmental Assessment	UE	1			
16																			General and Inorganic Chemistry	VL	3	Analysis II	VL	2	Construction and Apparatus Engineering	UE	2	Power Industry	VL	1	Renewable Energy	UE	1	Environmental Assessment	UE	1			
17																			Fundamentals in Inorganic Chemistry	PR	3	Analysis II	HÜ	1	Construction and Apparatus Engineering	UE	2	Power Industry	VL	1	Renewable Energy	UE	1	Environmental Assessment	UE	1			
18																			Fundamentals in Inorganic Chemistry	UE	1	Analysis II	UE	1	Construction and Apparatus Engineering	UE	2	Power Industry	VL	1	Renewable Energy	UE	1	Environmental Assessment	UE	1			
19	<b>Fundamentals of Process Engineering and Material Engineering</b>			<b>Organic Chemistry</b>			<b>Mathematics III</b>			<b>Informatics for Process Engineers</b>			<b>Introduction to Control Systems</b>			<b>Bachelor Thesis</b>																							
20																			Fundamentals in Inorganic Chemistry	UE	1	Analysis III	VL	2	Analysis III	UE	1	Numeric and Matlab	PR	2	Introduction to Control Systems	VL	2						
21																			Fundamentals in Inorganic Chemistry	UE	1	Analysis III	HÜ	1	Analysis III	HÜ	1	Informatics for Process Engineers	VL	2	Introduction to Control Systems	UE	2						
22																			Fundamentals in Inorganic Chemistry	UE	1	Analysis III	HÜ	1	Differential Equations 1	VL	2	Informatics for Process Engineers	UE	2	Introduction to Control Systems	UE	2						
23																			Introduction into Process Engineering/Bioprocess Engineering	VL	2	Organic Chemistry	VL	4	Differential Equations 1	UE	1	Informatics for Process Engineers	UE	2	Introduction to Control Systems	UE	2						
24																			Fundamentals of material engineering	VL	2	Organic Chemistry	PR	3	Differential Equations 1	HÜ	1	Informatics for Process Engineers	UE	2	Introduction to Control Systems	UE	2						
25	<b>Measurement Technology for VT/ BVT</b>			<b>Fundamentals of technical drawing</b>			<b>Chemical Reaction Engineering (part 1)</b>			<b>Bioprocess Engineering - Fundamentals</b>			<b>Practice of Process Engineering</b>																										
26																		Measurement Technology	VL	2	Fundamentals of technical drawing	VL	1	Chemical Reaction Engineering	VL	2	Bioprocess Engineering - Fundamentals	VL	2	Practice in Process Engineering	PS	2							
27																		Physical Fundamentals of Measurement Technology	VL	2	Fundamentals of technical drawing	VL	1	Chemical Reaction Engineering	VL	2	Bioprocess Engineering - Fundamentals	VL	2	Practice in Process Engineering	PS	2							
28	Practical Course	PR	2	Fundamentals of technical drawing	VL	1	Chemical Reaction Engineering	VL	2	Bioprocess Engineering - Fundamentals	HÜ	2	Lectures for Praticce of Process Engineering	SE	1																								
29	Measurement Technology			Fundamentals of technical drawing	VL	1	Chemical Reaction Engineering	VL	2	Bioprocess Engineering - Fundamentals	HÜ	2	Lectures for Praticce of Process Engineering	SE	1																								

28		Fundamentals of Technical HÜ 1	Chemical Reaction HÜ 2	Bioprocess Engineering - PR 2	
29		Drawing	Engineering	Fundamental Practical Course	
30					
31					
32				<b>Chemical Reaction Engineering (part 2)</b> Experimental Course PR 2 Chemical Engineering	

Non-technical Courses for Bachelors (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.