

# Course of Study Chemical and Bioprocess Engineering (Study Cohort w22)

Sample course plan C Bachelor Chemical and Bioprocess Engineering (CBBS) Dual study program

Specialisation: Chemical Engineering		Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Form Hrs/wk	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk
1	<b>Mathematics I</b>	<b>Technical Thermodynamics I</b>	<b>Technical Thermodynamics II</b>	<b>Fundamentals of Fluid Mechanics</b>	<b>Heat and Mass Transfer</b>	<b>Process and Plant Engineering I</b>
2	Mathematics I VL 4	Technical Thermodynamics I VL 2	Technical Thermodynamics II VL 2	Fundamentals of Fluid Mechanics VL 2	Heat and Mass Transfer VL 2	Process and Plant Engineering I VL 2
3	Mathematics I HÜ 2	Technical Thermodynamics I HÜ 1	Technical Thermodynamics II HÜ 1	Fluid Mechanics for Process Engineering HÜ 2	Heat and Mass Transfer GÜ 1	Process and Plant Engineering I HÜ 1
4	Mathematics I GÜ 2	Technical Thermodynamics I GÜ 1	Technical Thermodynamics II GÜ 1	Fundamentals on Fluid Mechanics GÜ 2	Heat and Mass Transfer HÜ 1	Process and Plant Engineering I GÜ 1
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8		<b>Mathematics II</b>	<b>Mathematics III</b>	<b>Phase Equilibria Thermodynamics</b>	<b>Thermal Separation Processes</b>	<b>Particle Technology and Solids Process Engineering</b>
9	<b>General and Inorganic Chemistry</b>	Mathematics II VL 4	Analysis III VL 2	Phase Equilibria Thermodynamics VL 2	Thermal Separation Processes VL 2	Particle Technology I VL 2
10	General and Inorganic Chemistry VL 3	Mathematics II HÜ 2	Analysis III GÜ 1	Phase Equilibria Thermodynamics GÜ 1	Thermal Separation Processes GÜ 2	Particle Technology I GÜ 1
11	Fundamentals in Inorganic Chemistry PR 3	Mathematics II GÜ 2	Analysis III HÜ 1	Phase Equilibria Thermodynamics HÜ 1	Thermal Separation Processes HÜ 1	Particle Technology I PR 2
12	Fundamentals in Inorganic Chemistry GÜ 1		Differential Equations 1 VL 2		Separation Processes PR 1	
13			Differential Equations 1 GÜ 1			
14			Differential Equations 1 HÜ 1	<b>Computer Science for Engineers - Programming Concepts, Data Handling &amp; Communication</b>	<b>Introduction to Control Systems</b>	<b>Fundamentals of Chemical Kinetics</b>
15	<b>Practical module 1 (dual study program, Bachelor's degree)</b>	<b>Organic Chemistry</b>	<b>Chemical Reaction Engineering (part 1)</b>	Computer Science for Engineers - Programming VL 3	Introduction to Control Systems VL 2	Fundamentals of Chemical Kinetics VL 2
16	Practical term 1 0	Organic Chemistry VL 4	Chemical Reaction Engineering VL 2	Concepts, Data Handling & Communication GÜ 2	Introduction to Control Systems GÜ 2	
17		Organic Chemistry PR 3	Chemical Reaction Engineering HÜ 2			
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20			<b>Measurement Technology for Chemical and Bioprocess Engineering</b>	<b>Practical module 4 (dual study program, Bachelor's degree)</b>	<b>Practical module 5 (dual study program, Bachelor's degree)</b>	
21	<b>Introduction to Chemical and Bioengineering</b>	<b>Fundamentals of Technical Drawing</b>	Measurement Technology VL 2	Practical term 4 0	Practical term 5 0	
22	Introduction to Chemical and Bioengineering VL 2	Fundamentals of Technical Drawing VL 1	Physical Fundamentals of Measurement Technology VL 2			
23		Fundamentals of Technical Drawing HÜ 1	Technology PR 2			
24	<b>Biological and Biochemical Fundamentals (part 1)</b>	<b>Practical module 2 (dual study program, Bachelor's degree)</b>				
25	Biological and Biochemical Fundamentals VL 2	Practical term 2 0	<b>Practical module 3 (dual study program, Bachelor's degree)</b>	<b>Chemical Reaction Engineering (part 2)</b>	<b>Economic and environmental project assessment</b>	
26	<b>Engineering Mechanics I (Stereostatics)</b>		Practical term 3 0	Experimental Course Chemical Engineering PR 2	Environmental Assessment VL 2	
27	Engineering Mechanics I VL 2				Case studies project assessment GÜ 1	
28	Engineering Mechanics I GÜ 2			<b>Renewable Energies</b>	Economic basics VL 2	
29	Engineering Mechanics I HÜ 1			Renewable Energies I VL 2		
30				Renewable Energies II VL 2		
31		<b>Engineering Mechanics II (Elastostatics)</b>	<b>Bioprocess Technology I</b>	Renewable Energies I HÜ 1		
32		Engineering Mechanics II VL 2	Bioprocess Technology I VL 2	Renewable Energies II HÜ 1	<b>Construction and Apparatus Engineering</b>	
33		Engineering Mechanics II GÜ 2	Bioprocess Technology I HÜ 2		Construction and Apparatus Engineering VL 2	
34		Engineering Mechanics II HÜ 2	Bioprocess Technology I - Fundamental Practical Course PR 2		Construction and Apparatus Engineering GÜ 2	
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36		<b>Biological and Biochemical Fundamentals (part 2)</b>				
37		Fundamental Biological and Biochemical Practical Course PR 3			<b>Material Engineering</b>	
38		Introduction to the Biological and Biochemical Practical Course VL 1			Material Engineering VL 2	
39						

Linking theory and practice (dual study program, Bachelor's degree) - 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.

