

Course of Study Chemical and Bioprocess Engineering (Study Cohort w24)

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

		Core Qualification Compulsory		Specialisation Compulsory		Focus Compulsory		Thesis Compulsory											
		Core Qualification Elective Compulsory		Specialisation Elective Compulsory		Focus Elective Compulsory		Interdisciplinary complement											
Specialisation Chemical Engineering																			
1	Mathematics I			Biological and Biochemical Fundamentals (part 2)		Technical Thermodynamics II		Fundamentals of Fluid Mechanics		Heat and Mass Transfer		Particle Technology and Solids Process Engineering							
2	Mathematics I	VL	4	Fundamental Biological and Biochemical	PR	3	Technical Thermodynamics II	VL	2	Fundamentals of Fluid Mechanics	VL	2	Heat and Mass Transfer	VL	2	Particle Technology I	VL	2	
3	Mathematics I	HÜ	2	Practical Course			Technical Thermodynamics II	HÜ	1	Fluid Mechanics for Process Engineering	HÜ	2	Heat and Mass Transfer	GÜ	2	Particle Technology I	GÜ	1	
4	Mathematics I	GÜ	2	Introduction to the Biological and Biochemical	VL	1	Technical Thermodynamics II	GÜ	1	Fundamentals on Fluid Mechanics	GÜ	2	Heat and Mass Transfer	HÜ	1	Particle Technology I		PR	2
5																			
6				Technical Thermodynamics I	VL	2													
7				Technical Thermodynamics I	HÜ	1													
8				Technical Thermodynamics I	GÜ	1													
9	General and Inorganic Chemistry							Mathematics III		Phase Equilibria Thermodynamics		Thermal Separation Processes		Conceptual Process Design					
10	General and Inorganic Chemistry	VL	3				Analysis III	VL	2	Phase Equilibria Thermodynamics	VL	2	Thermal Separation Processes	VL	2	Conceptual Process Design	VL	2	
11	Fundamentals in Inorganic Chemistry	PR	3				Analysis III	GÜ	1	Phase Equilibria Thermodynamics	GÜ	1	Thermal Separation Processes	GÜ	2	Conceptual Process Design	HÜ	2	
12	Fundamentals in Inorganic Chemistry	GÜ	1	Mathematics II	VL	4	Differential Equations 1	VL	2	Phase Equilibria Thermodynamics	HÜ	1	Thermal Separation Processes	HÜ	1	Conceptual Process Design	GÜ	1	
13				Mathematics II	HÜ	2	Differential Equations 1	GÜ	1				Separation Processes	PR	1				
14				Mathematics II	GÜ	2	Differential Equations 1	HÜ	1										
15	Introduction to Chemical and Bioengineering									Computer Science for Engineers - Programming Concepts, Data Handling & Communication		Introduction to Control Systems		Fundamentals of Chemical Kinetics					
16	Introduction to Chemical and Bioengineering	VL	2				Chemical Reaction Engineering (part 1)			Computer Science for Engineers - Programming	VL	3	Introduction to Control Systems	VL	2	Fundamentals of Chemical Kinetics	VL	2	
17							Chemical Reaction Engineering	VL	2	Concepts, Data Handling & Communication				GÜ	2				
18							Chemical Reaction Engineering	HÜ	2										
19	Biological and Biochemical Fundamentals (part 1)									Chemical Reaction Engineering (part 2)		Economic and environmental project assessment		Bachelor Thesis					
20	Biological and Biochemical Fundamentals	VL	2	Organic Chemistry	VL	2	Measurement Technology for Chemical and Bioprocess Engineering			Experimental Course Chemical Engineering	PR	2	Basics of Environmental Project Assessment	VL	2	Bachelor Thesis			
21	Engineering Mechanics I (Stereostatics)			Organic Chemistry	PR	2	Measurement Technology	VL	2			Basics of environmental project assessment	GÜ	1					
22	Engineering Mechanics I	VL	2	Organic Chemistry	GÜ	2	Physical Fundamentals of Measurement Technology	VL	2	Renewable Energies			Basics of economic project assesment	VL	2				
23	Engineering Mechanics I	GÜ	2				Practical Course Measurement Technology	PR	2	Renewable Energies I	VL	2							
24	Engineering Mechanics I	HÜ	2							Renewable Energies II	VL	2							
25										Renewable Energies I	HÜ	1							
26				Fundamentals of Technical Drawing						Fuels II	VL	1							
27				Fundamentals of Technical Drawing	VL	1	Bioprocess Technology I						Construction and Apparatus Engineering						
28				Fundamentals of Technical Drawing	HÜ	1	Bioprocess Technology I	VL	2				Construction and Apparatus Engineering	VL	2				
29							Bioprocess Technology I	HÜ	2				Construction and Apparatus Engineering	GÜ	2				
30							Bioprocess Technology I - Fundamental Practical Course	PR	2										
31				Engineering Mechanics II (Elastostatics)															
32				Engineering Mechanics II	VL	2							Material Engineering						
33				Engineering Mechanics II	GÜ	2							Material Engineering	VL	2				
				Engineering Mechanics II	HÜ	2													
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.

