Course of Study Chemical and Bioprocess Engineering (Study Cohort w25)

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

	Core Qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
	Core Qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

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

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.