

Course of Study Chemical and Bioprocess Engineering (Study Cohort w26)

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

Specialisation Bio Engineering														
1	Mathematics I (part 1) Prep Course Mathematics IV 3 Mathematics I VL 4 Mathematics I HÜ 2 Mathematics I GÜ 2	Engineering Mechanics I (Stereostatics) (part 2) Repetitorium Technische Mechanik I IV 6	Mathematics II (part 2) Repetitorium Mathematik II IV 4 Technical Thermodynamics II Technical Thermodynamics II VL 2 Technical Thermodynamics II HÜ 1 Technical Thermodynamics II GÜ 2	Fundamentals of Fluid Mechanics Fundamentals of Fluid Mechanics VL 2 Fluid Mechanics for Process Engineering HÜ 2 Fundamentals on Fluid Mechanics GÜ 2	Heat and Mass Transfer Heat and Mass Transfer VL 2 Heat and Mass Transfer GÜ 2 Heat and Mass Transfer HÜ 1	Particle Technology and Solids Process Engineering Particle Technology I VL 2 Particle Technology I GÜ 1 Particle Technology I PR 2								
2														
3														
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7	General and Inorganic Chemistry General and Inorganic Chemistry VL 3 Fundamentals in Inorganic Chemistry PR 3 Fundamentals in Inorganic Chemistry GÜ 1	Mathematics II (part 1) Mathematics II VL 4 Mathematics II HÜ 2 Mathematics II GÜ 2	Mathematics III Analysis III VL 2 Analysis III GÜ 1 Analysis III HÜ 1 Differential Equations 1 VL 2 Differential Equations 1 GÜ 1 Differential Equations 1 HÜ 1	Phase Equilibria Thermodynamics Phase Equilibria Thermodynamics VL 2 Phase Equilibria Thermodynamics GÜ 1 Phase Equilibria Thermodynamics HÜ 1	Introduction to Control Systems Introduction to Control Systems VL 2 Introduction to Control Systems GÜ 2 Introduction to Control Systems HÜ 1	Conceptual Process Design Conceptual Process Design VL 2 Conceptual Process Design GÜ 2 Conceptual Process Design PBL 1								
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11														
12														
13	Practical Module 1 (Dual Study Program, Bachelor's Degree) Practical term 1 0	Organic Chemistry Organic Chemistry VL 2 Organic Chemistry PR 2 Organic Chemistry GÜ 2	Chemical Reaction Engineering (part 1) Chemical Reaction Engineering VL 2 Chemical Reaction Engineering HÜ 2	Practical Module 4 (Dual Study Program, Bachelor's Degree) Practical term 4 0	Practical Module 5 (Dual Study Program, Bachelor's Degree) Practical term 5 0	Bioinformatics Bioinformatics SE 2 Bachelor Thesis (Dual Study Program)								
14														
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19	Introduction to Chemical and Bioengineering Introduction to Chemical and Bioengineering VL 2	Fundamentals of Technical Drawing Fundamentals of Technical Drawing VL 1 Fundamentals of Technical Drawing HÜ 1	Measurement Technology for Chemical and Bioprocess Engineering Measurement Technology VL 2 Physical Fundamentals of Measurement Technology VL 2 Technology PR 2	Computer Science for Engineers - Programming Concepts, Data Handling & Communication Computer Science for Engineers - Programming IV 3 Concepts, Data Handling & Communication GÜ 2 Computer Science for Engineers - Programming Concepts, Data Handling & Communication	Economic and Environmental Project Assessment Basics of Environmental Project Assessment VL 2 Case studies economic and environmental project assessment GÜ 1 Basics of economic project assesment VL 2									
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25	Biological and Biochemical Fundamentals (part 1) Biological and Biochemical Fundamentals VL 2	Practical Module 2 (Dual Study Program, Bachelor's Degree) Practical term 2 0	Practical Module 3 (Dual Study Program, Bachelor's Degree) Practical term 3 0	Chemical Reaction Engineering (part 2) Experimental Course Chemical Engineering PR 2	Fundamentals in Molecular Biology Genetics and Molecular Biology VL 2 Genetics and Molecular Biology PBL 1 Molecular Biology Lab Course PR 3	Thermal Separation Processes Thermal Separation Processes VL 2 Thermal Separation Processes GÜ 2 Thermal Separation Processes HÜ 1 Separation Processes PR 1								
26														
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31	Engineering Mechanics I (Stereostatics) (part 1) Engineering Mechanics I VL 2 Engineering Mechanics I GÜ 2 Engineering Mechanics I HÜ 2	Engineering Mechanics II (Elastostatics) Engineering Mechanics II VL 2 Engineering Mechanics II GÜ 2 Engineering Mechanics II HÜ 2	Bioprocess Technology I Bioprocess Technology I VL 2 Bioprocess Technology I HÜ 2 Bioprocess Technology I - Fundamental Practical Course PR 2			Bioprocess Technology II Bioprocess Technology II VL 2 Bioprocess Technology II GÜ 2								
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37	Biological and Biochemical Fundamentals (part 2) Fundamental Biological and Biochemical Practical Course PR 3 Introduction to the Biological and Biochemical VL 1 Practical Course					Advanced Practical Course in Bioengineering Advanced Practical Course in Bioengineering PR 2								
38														
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.

