

Exclosure to Subject Specific Regulations  
 from 09.03.2022  
 for Bachelor-Programme  
 Chemie- und Bioingenieurwesen  
 at TUHH dual study program  
 Programme Director: Prof. Johannes Gescher  
 Total: 210 CP  
 Number of Specialisations to choose: 1



# Course Scheme Bachelor Chemical and Bioprocess Engineering (CBBS) dual study program

Consolidated Version  
 for Study Cohort: WiSe22/23  
 en\_head\_sda  
 and Approval of Chair from:  
 29.05.2024  
 Replaces Version from: 12.04.2023  
 Out of Force on: 31.03.2027

Information regarding the lectures are available in the TUHH modul manuals as well as in the course catalogue.

Re-com. Term	Module						Examination			Course Work		
	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/OM (2)	CP (4)	Grade	Examination Form(3)	Compulsory	Course Work Type	Bonus (in %)
<b>Core Qualification</b> Compulsory Courses: 180 LP Optional Courses: 0 LP												
1	Allgemeine und Anorganische Chemie / General and Inorganic Chemistry	DE	Prof. Luinstra	0-UNIHH	C	CM	6	Y	KL	Y	FFST	0
1	Einführung in das Chemie- und Bioingenieurwesen / Introduction to Chemical and Bioengineering	DE	Prof. Gescher	SD-V	C	CM	3	Y	SA			
1	Mathematik I / Mathematics I	DE	Prof. Taraz	E-10	C	CM	8	Y	KL	Y	ÜA	10
1	Praxismodul 1 im dualen Bachelor / Practical module 1 (dual study program, Bachelor's degree)	DE	Dr. Haschke	0-A3	C	CM	6	N	SA			
1	Technische Mechanik I (Stereostatik) / Engineering Mechanics I (Stereostatics)	DE	Prof. Kriegesmann	M-24	C	CM	6	Y	KL			
1-2	Biologische und Biochemische Grundlagen / Biological and Biochemical Fundamentals	DE	Prof. Gescher	V-7	C	CM	6	Y	KL	Y	RE	0
2	Grundlagen des Technischen Zeichnens / Fundamentals of Technical Drawing	DE	Dr. Hoffmann	V-5	C	CM	3	Y	KL	N	ÜA	5
2	Mathematik II / Mathematics II	DE	Prof. Taraz	E-10	C	CM	8	Y	KL	Y	ÜA	10
2	Organische Chemie / Organic Chemistry	DE	Prof. Holl	0-UNIHH	C	CM	6	Y	KL	Y	FFST	0
2	Praxismodul 2 im dualen Bachelor / Practical module 2 (dual study program, Bachelor's degree)	DE	Dr. Haschke	0-A3	C	CM	6	N	SA			
2	Technische Mechanik II (Elastostatik) / Engineering Mechanics II (Elastostatics)	DE	Prof. Cyron	M-15	C	CM	6	Y	KL			
2	Technische Thermodynamik I / Technical Thermodynamics I	DE	Prof. Speerforck	M-21	C	CM	6	Y	KL			
3	Bioproszesstechnik I / Bioprocess Technology I	DE	Prof. Liese	V-6	C	CM	6	Y	KL			

		Module					Examination			Course Work		
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3	Mathematik III / Mathematics III	DE	Prof. Lindner	0-UNIHH-M	C	CM	8	Y	KL			
3	Messtechnik für Chemie- und Bioingenieurwesen / Measurement Technology for Chemical and Bioprocess Engineering	DE	Prof. Penn	V-10	C	CM	6	Y	KL	N	ÜA	20
3	Praxismodul 3 im dualen Bachelor / Practical module 3 (dual study program, Bachelor's degree)	DE	Dr. Haschke	0-A3	C	CM	6	N	SA			
3	Technische Thermodynamik II / Technical Thermodynamics II	DE	Prof. Speerforck	M-21	C	CM	6	Y	KL			
3-4	Chemische Reaktionstechnik / Chemical Reaction Engineering	DE / EN	Prof. Horn	V-2	C	CM	6	Y	KL	Y	FFST	0
4	Grundlagen der Strömungsmechanik / Fundamentals of Fluid Mechanics	DE	Prof. Schlüter	V-5	C	CM	6	Y	KL	N	MT	5
4	Informatik für Ingenieure - Programmierkonzepte, Data Handling & Kommunikation / Computer Science for Engineers - Programming Concepts, Data Handling & Communication	DE	Prof. Fröschle	E-15	C	CM	6	Y	KL	N	TE	10
4	Phasengleichgewichtsthermodynamik / Phase Equilibria Thermodynamics	DE	Prof. Smirnova	V-8	C	CM	6	Y	KL			
4	Praxismodul 4 im dualen Bachelor / Practical module 4 (dual study program, Bachelor's degree)	DE	Dr. Haschke	0-A3	C	CM	6	N	SA			
5	Grundlagen der Regelungstechnik / Introduction to Control Systems	DE	Prof. Faulwasser	E-14	C	CM	6	Y	KL			
5	Ökonomische und ökologische Projektbewertung / Economic and environmental project assessment	DE / EN	Prof. Kaltschmitt	V-9	C	CM	6	Y	KL			
5	Praxismodul 5 im dualen Bachelor / Practical module 5 (dual study program, Bachelor's degree)	DE	Dr. Haschke	0-A3	C	CM	6	N	SA			
5	Thermische Grundoperationen / Thermal Separation Processes	DE / EN	Prof. Smirnova	V-8	C	CM	6	Y	KL			
5	Wärme- und Stoffübertragung / Heat and Mass Transfer	DE	Prof. Smirnova	V-8	C	CM	6	Y	KL			
6	Entwicklung verfahrenstechnischer Prozesse / Conceptual Process Design	DE	Prof. Skiborowski	V-4	C	CM	6	Y	KL	Y	FFST	10
										N	MT	5
6	Partikeltechnologie und Feststoffverfahrenstechnik I / Particle Technology and Solids Process Engineering	DE / EN	Prof. Heinrich	V-3	C	CM	6	Y	KL	Y	SA	0
1-6	Theorie-Praxis-Verzahnung im dualen Bachelor / Linking theory and practice (dual study program, Bachelor's degree)	DE	Dr. Haschke	0-A3	C	CM	6	N	SA			
<b>Specialisation Bio Engineering</b> Compulsory Courses: 15 LP Optional Courses: 3 LP												
4	Molekularbiologische Grundlagen / Fundamentals in Molecular Biology	DE	Prof. Gescher	V-7	C	CM	6	Y	KL	Y	FFST	20

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5	Bioprozesstechnik II / Bioprocess Technology II	DE	Prof. Heins	V-1	C	CM	6	Y	KL			
5	Vertiefungspraktikum Bioingenieurwesen / Advanced Practical Course in Bioengineering	DE	Prof. Liese	V-6	C	CM	3	Y	FFA			
5	Werkstofftechnik / Material Engineering	DE	Dr. Hoffmann	V-5	EC	CM	3	Y	KL			
6	Bioinformatik / Bioinformatics	DE	Prof. Gescher	V-7	EC	CM	3	Y	FFA			
6	Grundlagen der Betriebswirtschaftslehre / Foundations of Management	DE	Prof. Lühje	W-3	EC	CM	6	Y	FFA			
6	Praxis in der Verfahrenstechnik / Practice of Process Engineering	DE / EN	Prof. Smirnova	SD-V	EC	CM	3	N	FFA			
6	Regulatorische Aspekte bei biologischen Arbeitsstoffen / Regulatory aspects of biological agents	DE	Prof. Heins	V-1	EC	CM	3	Y	KL			

**Specialisation Chemical Engineering** Compulsory Courses: 15 LP Optional Courses: 3 LP

4	Regenerative Energien / Renewable Energies	DE	Prof. Kaltschmitt	V-9	C	CM	6	Y	KL			
5	Konstruktion und Apparatebau / Construction and Apparatus Engineering	DE	Dr. Hoffmann	V-5	C	CM	6	Y	KL	N	ÜA	5
5	Werkstofftechnik / Material Engineering	DE	Dr. Hoffmann	V-5	C	CM	3	Y	KL			
6	Grundlagen der Betriebswirtschaftslehre / Foundations of Management	DE	Prof. Lühje	W-3	EC	CM	6	Y	FFA			
6	Grundlagen der Chemischen Kinetik / Fundamentals of Chemical Kinetics	DE	Prof. Horn	V-2	EC	CM	3	Y	KL			
6	Praxis in der Verfahrenstechnik / Practice of Process Engineering	DE / EN	Prof. Smirnova	SD-V	EC	CM	3	N	FFA			

**Thesis** Compulsory Courses: 12 LP Optional Courses: 0 LP

6	Bachelorarbeit im dualen Studium / Bachelor thesis (dual study program)		Professoren der TUHH	0-TUHH	C	CM	12	Y	AB			
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**Explanation:**

<sup>1</sup>C=Compulsory, EC=Elective Compulsory

<sup>2</sup>CM=Compulsory Defined Module, OM=Optional Defined Module

<sup>3</sup>KL=Written exam, MT=Midterm, SA=Written elaboration, FFST=Subject theoretical and practical work, FFA=Subject theoretical and practical work, RE=Presentation, ÜA=Exercices, AB=Thesis, TE=Attestation

<sup>4</sup>CP=Credit Points

<sup>5</sup>VL=Lecture, SE=Seminar, GÜ=Recitation Section (small), PBL=Project-/problem-based Learning, PR=Practical Course, PS=Project Seminar, HÜ=Recitation Section (large)

<sup>6</sup>DE=German, EN=English, DE/EN=German and English

<sup>7</sup>SWS=Contact hours