

Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject Chemistry as a Master's with 1 major with the degree "Master of Science" (120 ECTS credits)

Responsible: Faculty of Chemistry and Pharmacy

Examination regulations version: 2016

Abbreviations used: Course types: **E** = field trip, **K** = colloquium, **O** = conversatorium, **P** = placement/lab course, **R** = project, **S** = seminar, **T** = tutorial, **Ü** = exercise, **V** = lecture

Term: **SS** = summer semester, **WS** = winter semester

Methods of grading: **NUM** = numerical grade, **B/NB** = (not) successfully completed

Regulations: **(L)ASPO** = general academic and examination regulations (for teaching-degree programmes), **FSB** = subject-specific provisions, **SFB** = list of modules

Other: **A** = thesis, **LV** = course(s), **PL** = assessment(s), **TN** = participants, **VL** = prerequisite(s)

Conventions for the modules in this SFB: Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

Information on assessment procedures: Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the method of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the customary manner.

Should a module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below.

Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all individual assessments.

In accordance with the general regulations governing the degree subject described in this module catalogue:

ASPO2015

associated official publications (FSB (subject-specific provisions)/SFB (list of modules)):

15-Dec-2015 (2015-257)

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.

Every module will be described using the following form:

Abbreviation	Module title						
	ECTS		Duration	(in semesters)	Method of grading		Module level
	Courses		To be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y				
	Method of assessment						
	Only after successful completion of		if applicable				
	Other prerequisites		if applicable				
	Participants and allocation of places		if applicable				
	Additional information		if applicable				
	Referred to in LPO I		if applicable (examination regulations for teaching-degree programmes)				

Compulsory Electives Focuses (75 ECTS credits)

Students must take three focuses (focuses 1 through 3 pursuant to Section 3 Subsection 2 Sentence 2 FSB (subject-specific provisions)) worth 25 ECTS credits each; provisions on available combinations are set out in Section 3 Subsection 2 Sentence 8 FSB.

Inorganic Chemistry (25 ECTS credits)**Compulsory Courses (20 ECTS credits)**

o8-ACM1-161-mo1	Advanced Inorganic Chemistry							
	ECTS	10	Duration	2 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3) + S (3)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-ACPM-161-mo1	Inorganic Chemistry practical course for advanced							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (24) Module taught in: German or English					
	Method of assessment		report on practical course (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					
Compulsory Electives (5 ECTS credits)								
o8-ACM2-161-mo1	Bioinorganic Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English					
o8-ACM3-161-mo1	Solid state chemistry and inorganic materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					

o8-HKM2-161-mo1	Advanced organometallic chemistry and its application in homogeneous catalysis							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
Organic Chemistry (25 ECTS credits)								
Compulsory Courses (15 ECTS credits)								
o8-OCM-SYNT-161-mo1	Modern Synthetic Methods							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (1) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
o8-OCM-AKP1-161-mo1	Advanced Research Project Organic Chemistry							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (20) Module taught in: German or English						
	Method of assessment	Log (approx. 15 to 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English						
Compulsory Electives (10 ECTS credits)								
o8-OCM-NAT-161-mo1	Modern Aspects of Natural Product Chemistry and Biological Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English						
	Participants and allocation of places	MA Chemie: unbegrenzt, Ma Biochemie: 20 places. Places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated by lot as they become available.						
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o8-OCM-FM-161-mo1	Organic Functional Materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-HKM1-152-mo1	Organo- and Biocatalysis							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English					
o8-SCM1-152-mo1	Supramolecular Chemistry (Basics)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) Language of assessment: German and/or English					
o8-SCM3-152-mo1	Bioorganic Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English					
o8-TCM2-161-mo1	Basics and Applications of Quantum Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					

Physical Chemistry (25 ECTS credits)									
Compulsory Courses (10 ECTS credits)									
o8-PCM1a-161-mo1	Laser Spectroscopy								
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses		S (2) + Ü (1) Module taught in: German or English						
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) Language of assessment: German and/or English						
o8-PCM1b-161-mo1	Advanced Physical Chemistry (Lab)								
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate	
	Courses		P (4) Module taught in: German or English						
	Method of assessment		Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English						
	Additional Information		Additional information on module duration: block taught lab course with approx. 20 working days.						
Compulsory Electives (15 ECTS credits)									
o8-PCM2-161-mo1	Statistical Mechanics and Reaction Dynamics								
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses		S (2) + Ü (1) Module taught in: German or English						
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English						
o8-PCM3-161-mo1	Nanoscale Materials								
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses		S (2) + Ü (1) Module taught in: German or English						
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English creditable for bonus						

o8-PCM4-161-mo1	Ultrafast spectroscopy and quantum-control							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English					
	other prerequisites		Prior completion of modules o8-PCM1a and o8-PCM1b recommended.					
o8-PCM5-161-mo1	Physical Chemistry of Supramolecular Assemblies							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English					
o8-PCM6-161-mo1	Physical Chemistry (Advanced Lab)							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (4) Module taught in: German or English					
	Method of assessment		presentation (approx. 20 minutes) Language of assessment: German and/or English					
	Additional Information		Additional information on module duration: block taught lab course with approx. 20 working days.					
o8-TCM1-161-mo1	Selected Topics in Theoretical Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					

o8-TCM2-161-mo1	Basics and Applications of Quantum Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
Biochemistry (25 ECTS credits)								
Compulsory Courses (15 ECTS credits)								
o8-BC-MOLMC-161-mo1	Molecular Biology for Advanced Students							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (2) + Ü (1)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					

o8-BC-MOLP-152-mo1	Molecular Biology laboratory course							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	P (5)						
	Method of assessment	a) written examination (approx. 45 to 90 minutes) or b) log (10 to 20 pages) or c) oral examination of one candidate each (20 to 30 minutes) or d) oral examination in groups of up to 3 candidates (approx. 15 to 20 minutes per candidate) or e) presentation (20 to 30 minutes) or f) practical examination (on average approx. 2 hours; time to complete will vary according to subject area but will not exceed a maximum of 4 hours) Language of assessment: German and/or English Assessment offered: Once a year, winter semester						
	Participants and allocation of places	Biochemie (Biochemistry), Bachelor's: 24 places. Selection process Biochemie (Biochemistry), Bachelor's (180 ECTS credits): Should the number of applications exceed the number of available places, places will be allocated according to the following quotas: Quota 1 (two thirds of places): current average grade of successfully completed modules; among applicants with the same average grade, places will be allocated by lot. Quota 2 (one third of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available. Chemie (Chemistry), Master's: 6 places. Selection process Chemie (Chemistry), Bachelor's (120 ECTS credits): Places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated by lot as they become available.						
Compulsory Electives (10 ECTS credits)								
o8-BC-VPMM-161-mo1	Practical course "Molecular Machines" for advanced students							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	P (10)						
	Method of assessment	Log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English						
	Modules successfully completed	o8-BC-MOLP						
o8-BC-VPPD-161-mo1	Additional Information	Additional information on module duration: block taught lab course with approx. 40 working days.						
	Practical course "Protein Degradation in Eukaryotes" for advanced students							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	P (10)						
	Method of assessment	Log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English						
	Modules successfully completed	o8-BC-MOLP						
	Additional Information	Additional information on module duration: block taught lab course with approx. 40 working days.						

o8-BC-VPRB-161-mo1	Practical course "RNA Biochemistry" for advanced students							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	P (10)						
	Method of assessment	Log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English						
	Modules successfully completed	o8-BC-MOLP						
	Additional Information	Additional information on module duration: block taught lab course with approx. 40 working days.						
o8-BC-VPSB-161-mo1	Practical course "Structural Biology" for advanced students							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	P (10)						
	Method of assessment	Log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English						
	Modules successfully completed	o8-BC-MOLP						
	Additional Information	Additional information on module duration: block taught lab course with approx. 40 working days.						
o8-ACM2-161-mo1	Bioinorganic Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English						
o8-HKM1-152-mo1	Organo- and Biocatalysis							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3)						
	Method of assessment	a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English						

o8-OCM-NAT-161-mo1	Modern Aspects of Natural Product Chemistry and Biological Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English						
	Participants and allocation of places	MA Chemie: unbegrenzt, Ma Biochemie: 20 places. Places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated by lot as they become available.						
o8-MCM3-152-mo1	Drug design							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (1) Module taught in: German or English						
	Method of assessment	presentation with discussion (approx. 30 minutes) Language of assessment: German and/or English						
	Participants and allocation of places	20 places. 4 places for students of the Master's degree programme Chemie (Chemistry): Places will be allocated according to the same number of subject semesters; students who have chosen Medizinische Chemie (Medicinal Chemistry) as their focus will be given preferential consideration; among applicants with the same number of subject semesters, places will be allocated by lot.; 6 places for students of the Master's degree programme Biochemie (Biochemistry): Places will be allocated according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot; a waiting list will be maintained and places re-allocated by lot as they become available.						
o8-PH-KAC-152-mo1	Clinical-analytical Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V (3)						
	Method of assessment	written examination (approx. 120 minutes) Language of assessment: German and/or English						
o8-PH-KACP-152-mo1	Practical course of clinical-analytical Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	P (5)						
	Method of assessment	Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English						

Functional Materials (25 ECTS credits)								
Compulsory Courses (20 ECTS credits)								
o8-FU-Ma-Wi1-152-m01	Material Science 1 (Basic introduction)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (3) + Ü (1)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-FMM-PA-161-m01	Project Work							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (10)					
	Method of assessment		Log (approx. 15 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English					
o8-OCM-FM-161-m01	Organic Functional Materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-FMM-MP-161-m01	Lab Course Material Science							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (8)					
	Method of assessment		Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English					

Compulsory Electives (5 ECTS credits)							
o8-FU-Ma-Wi2-152-m01	Material Science 2 (The Material Groups)						
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level undergraduate
	Courses	V (3) + Ü (1)					
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-FU-NT-152-m01	Chemically and bio-inspired Nanotechnology for Material Synthesis						
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level undergraduate
	Courses	V (4)					
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-FU-Mo-MaV-152-m01	Molecular Materials (Lecture)						
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level undergraduate
	Courses	V (3) + S (1)					
	Method of assessment	[a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes)] as well as talk (approx. 30 minutes), weighted 3:1 Language of assessment: German and/or English					
o3-FU-PM1-152-m01	Polymer Chemistry 1 (Lecture and Practical Course)						
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level undergraduate
	Courses	V (2) + P (2)					
	Method of assessment	a) assessment and b) Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical assignments (2 to 4 random examinations) Language of assessment: German and/or English Assessment offered: Once a year, winter semester creditable for bonus					

o3-FU-PM2-161-mo1	Polymers II							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English					
o8-PCM3-161-mo1	Nanoscale Materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English creditable for bonus					
o8-SCM1-152-mo1	Supramolecular Chemistry (Basics)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) Language of assessment: German and/or English					
o8-ACM3-161-mo1	Solid state chemistry and inorganic materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					

Homogeneous Catalysis (25 ECTS credits)								
Compulsory Courses (20 ECTS credits)								
o8-HKM1-152-m01	Organo- and Biocatalysis							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English					
o8-HKM2-161-m01	Advanced organometallic chemistry and its application in homogeneous catalysis							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-HKM3AC-161-m01	Practical course "Homogeneous catalysis in Inorganic Chemistry"							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (6) Module taught in: German or English					
	Method of assessment		report on practical course (approx. 10 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English					
o8-HKM3OC-161-m01	Practical course "Homogeneous catalysis in Organic Chemistry"							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (6) Module taught in: German or English					
	Method of assessment		report on practical course (approx. 10 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English					

Compulsory Electives (5 ECTS credits)								
o8-HKM4-161-mo1	Advanced transition metal chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-PCM2-161-mo1	Statistical Mechanics and Reaction Dynamics							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English					
o8-OCM-SYNT-161-mo1	Modern Synthetic Methods							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-TCM2-161-mo1	Basics and Applications of Quantum Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					

o3-FU-PM1-152-mo1	Polymer Chemistry 1 (Lecture and Practical Course)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2) + P (2)						
	Method of assessment	a) assessment and b) Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical assignments (2 to 4 random examinations) Language of assessment: German and/or English Assessment offered: Once a year, winter semester creditable for bonus						
Medicinal Chemistry (25 ECTS credits)								
Compulsory Courses (15 ECTS credits)								
o8-MCM1-161-mo1	Practical course medicinal chemistry							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (10) Module taught in: German or English						
	Method of assessment	Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical assignments (2 to 4 random examinations) as well as report (30 to 50 pages) Language of assessment: German and/or English						
o8-MCM3-152-mo1	Drug design							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (1) Module taught in: German or English						
	Method of assessment	presentation with discussion (approx. 30 minutes) Language of assessment: German and/or English						
	Participants and allocation of places	20 places. 4 places for students of the Master's degree programme Chemie (Chemistry): Places will be allocated according to the same number of subject semesters; students who have chosen Medizinische Chemie (Medicinal Chemistry) as their focus will be given preferential consideration; among applicants with the same number of subject semesters, places will be allocated by lot.; 6 places for students of the Master's degree programme Biochemie (Biochemistry): Places will be allocated according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot; a waiting list will be maintained and places re-allocated by lot as they become available.						
Compulsory Courses (10 ECTS credits)								
o8-MCM2a-161-mo1	Pharmaceutical/Medicinal Chemistry 1							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V (3)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						

o8-MCM2b-161-mo1	Pharmaceutical/Medicinal Chemistry 2							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V (3)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
o8-MBC-MSP-161-mo1	Mass-Spectrometry and Proteomics							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V (2) + S (1) + P (2) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 45 to 90 minutes) or b) log (20 to 30 pages) or c) oral examination of one candidate each (20 to 30 minutes) or d) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) or e) presentation (20 to 40 minutes) Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered, no less than once a year						
	Participants and allocation of places	67 places.						
Supramolecular Chemistry (25 ECTS credits)								
Compulsory Courses (10 ECTS credits)								
o8-SCM1-152-mo1	Supramolecular Chemistry (Basics)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3)						
	Method of assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) Language of assessment: German and/or English						
o8-SCM2-161-mo1	Supramolecular Chemistry (Practical Course)							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (6) Module taught in: German or English						
	Method of assessment	Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English						
	Modules successfully completed	o8-SCM1						

Compulsory Electives (15 ECTS credits)								
o8-SCM3-152-m01	Bioorganic Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3)						
	Method of assessment	a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English						
o8-SCM4-161-m01	Supramolecular Chemistry (Advanced Lab)							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (6) Module taught in: German or English						
	Method of assessment	presentation (approx. 20 minutes) Language of assessment: German and/or English						
	Modules successfully completed	o8-SCM2						
	Additional Information	Additional information on module duration: block taught lab course with approx. 20 working days.						
o8-PCM5-161-m01	Physical Chemistry of Supramolecular Assemblies							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (1) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English						
o8-ACM2-161-m01	Bioinorganic Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English						

o8-TCM2-161-m01	Basics and Applications of Quantum Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (2)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
o8-OCM-FM-161-m01	Organic Functional Materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
o8-PCM3-161-m01	Nanoscale Materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (1) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English creditable for bonus						
Theoretical Chemistry (25 ECTS credits)								
Compulsory Courses (15 ECTS credits)								
o8-TCM2-161-m01	Basics and Applications of Quantum Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (2)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						

o8-TCM3-161-mo1	Numerical Methods and Programming							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-TCM4-161-mo1	Quantum Dynamics							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
Compulsory Electives (10 ECTS credits)								
o8-TCM1-161-mo1	Selected Topics in Theoretical Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-TCAP1-161-mo1	Theoretical Chemistry - Project course quantum chemistry							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (5)					
	Method of assessment		presentation (approx. 30 minutes) Language of assessment: German and/or English					
	Additional Information		Additional information on module duration: block taught lab course with approx. 20 working days.					

o8-TCAP2-161-mo1	Theoretical Chemistry - Project course quantum dynamics							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (5)					
	Method of assessment		presentation (approx. 30 minutes) Language of assessment: German and/or English					
	Additional Information		Additional information on module duration: block taught lab course with approx. 20 working days.					
o8-MCM3-152-mo1	Drug design							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		presentation with discussion (approx. 30 minutes) Language of assessment: German and/or English					
	Participants and allocation of places		20 places. 4 places for students of the Master's degree programme Chemie (Chemistry): Places will be allocated according to the same number of subject semesters; students who have chosen Medizinische Chemie (Medicinal Chemistry) as their focus will be given preferential consideration; among applicants with the same number of subject semesters, places will be allocated by lot.; 6 places for students of the Master's degree programme Biochemie (Biochemistry): Places will be allocated according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot; a waiting list will be maintained and places re-allocated by lot as they become available.					

Additional qualifications (15 ECTS credits)								
Subfield Additional qualifications Compulsory Electives Focuses (5 ECTS credits)								
In the sub-area "Zusätzliche Kompetenzen aus den Schwerpunkten" ("Additional Skills from the Focus Area"), students may use a module of their choice from the Focus area that they are not using in the area of mandatory electives 1.								
o8-BC-MOLP-152-mo1	Molecular Biology laboratory course							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		P (5)					
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) log (10 to 20 pages) or c) oral examination of one candidate each (20 to 30 minutes) or d) oral examination in groups of up to 3 candidates (approx. 15 to 20 minutes per candidate) or e) presentation (20 to 30 minutes) or f) practical examination (on average approx. 2 hours; time to complete will vary according to subject area but will not exceed a maximum of 4 hours) Language of assessment: German and/or English Assessment offered: Once a year, winter semester					
	Participants and allocation of places		Biochemie (Biochemistry), Bachelor's: 24 places. Selection process Biochemie (Biochemistry), Bachelor's (180 ECTS credits): Should the number of applications exceed the number of available places, places will be allocated according to the following quotas: Quota 1 (two thirds of places): current average grade of successfully completed modules; among applicants with the same average grade, places will be allocated by lot. Quota 2 (one third of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available. Chemie (Chemistry), Master's: 6 places. Selection process Chemie (Chemistry), Bachelor's (120 ECTS credits): Places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated by lot as they become available.					
o8-HKM1-152-mo1	Organo- and Biocatalysis							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English					

o8-MCM3-152-mo1	Drug design							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		presentation with discussion (approx. 30 minutes) Language of assessment: German and/or English					
	Participants and allocation of places		20 places. 4 places for students of the Master's degree programme Chemie (Chemistry): Places will be allocated according to the same number of subject semesters; students who have chosen Medizinische Chemie (Medicinal Chemistry) as their focus will be given preferential consideration; among applicants with the same number of subject semesters, places will be allocated by lot.; 6 places for students of the Master's degree programme Biochemie (Biochemistry): Places will be allocated according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot; a waiting list will be maintained and places re-allocated by lot as they become available.					
o8-PH-KAC-152-mo1	Clinical-analytical Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (3)					
	Method of assessment		written examination (approx. 120 minutes) Language of assessment: German and/or English					
o8-PH-KACP-152-mo1	Practical course of clinical-analytical Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		P (5)					
	Method of assessment		Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English					
o8-SCM3-152-mo1	Bioorganic Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English					
o8-SCM1-152-mo1	Supramolecular Chemistry (Basics)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) Language of assessment: German and/or English					

o8-FU-Mo-MaV-152-mo1	Molecular Materials (Lecture)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (3) + S (1)					
	Method of assessment		[a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes)] as well as talk (approx. 30 minutes), weighted 3:1 Language of assessment: German and/or English					
o8-FU-NT-152-mo1	Chemically and bio-inspired Nanotechnology for Material Synthesis							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (4)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-FU-Ma-Wi1-152-mo1	Material Science 1 (Basic introduction)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (3) + Ü (1)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-FU-Ma-Wi2-152-mo1	Material Science 2 (The Material Groups)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (3) + Ü (1)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					

o3-FU-PM1-152-mo1	Polymer Chemistry 1 (Lecture and Practical Course)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2) + P (2)						
	Method of assessment	a) assessment and b) Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical assignments (2 to 4 random examinations) Language of assessment: German and/or English Assessment offered: Once a year, winter semester creditable for bonus						
o8-PCM1a-161-mo1	Laser Spectroscopy							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (1) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) Language of assessment: German and/or English						
o8-PCM1b-161-mo1	Advanced Physical Chemistry (Lab)							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (4) Module taught in: German or English						
	Method of assessment	Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English						
	Additional Information	Additional information on module duration: block taught lab course with approx. 20 working days.						
o8-PCM2-161-mo1	Statistical Mechanics and Reaction Dynamics							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (1) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English						
o8-PCM3-161-mo1	Nanoscale Materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (1) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English creditable for bonus						

o8-PCM4-161-mo1	Ultrafast spectroscopy and quantum-control							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English					
	other prerequisites		Prior completion of modules o8-PCM1a and o8-PCM1b recommended.					
o8-PCM5-161-mo1	Physical Chemistry of Supramolecular Assemblies							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English					
o8-PCM6-161-mo1	Physical Chemistry (Advanced Lab)							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (4) Module taught in: German or English					
	Method of assessment		presentation (approx. 20 minutes) Language of assessment: German and/or English					
	Additional Information		Additional information on module duration: block taught lab course with approx. 20 working days.					
o8-TCM2-161-mo1	Basics and Applications of Quantum Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					

o8-TCM3-161-mo1	Numerical Methods and Programming							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-TCM4-161-mo1	Quantum Dynamics							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-TCM1-161-mo1	Selected Topics in Theoretical Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-TCAP1-161-mo1	Theoretical Chemistry - Project course quantum chemistry							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (5)					
	Method of assessment		presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-TCAP2-161-mo1	Theoretical Chemistry - Project course quantum dynamics							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (5)					
	Method of assessment		presentation (approx. 30 minutes) Language of assessment: German and/or English					
	Additional Information		Additional information on module duration: block taught lab course with approx. 20 working days.					

o8-ACM1-161-mo1	Advanced Inorganic Chemistry							
	ECTS	10	Duration	2 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3) + S (3)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
o8-ACPM-161-mo1	Inorganic Chemistry practical course for advanced							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (24) Module taught in: German or English						
	Method of assessment	report on practical course (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English						
	Additional Information	Additional information on module duration: block taught lab course with approx. 40 working days.						
o8-ACM2-161-mo1	Bioinorganic Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English						
o8-ACM3-161-mo1	Solid state chemistry and inorganic materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						

o8-OCM-SYNT-161-mo1	Modern Synthetic Methods							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-OCM-AKP1-161-mo1	Advanced Research Project Organic Chemistry							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (20) Module taught in: German or English					
	Method of assessment		Log (approx. 15 to 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English					
o8-OCM-NAT-161-mo1	Modern Aspects of Natural Product Chemistry and Biological Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English					
	Participants and allocation of places		MA Chemie: unbegrenzt, Ma Biochemie: 20 places. Places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated by lot as they become available.					
o8-OCM-FM-161-mo1	Organic Functional Materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					

o8-BC-MOLMC-161-mo1	Molecular Biology for Advanced Students							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (2) + Ü (1)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-BC-VPMM-161-mo1	Practical course "Molecular Machines" for advanced students							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		P (10)					
	Method of assessment		Log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English					
	Modules successfully completed		o8-BC-MOLP					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					
o8-BC-VPPD-161-mo1	Practical course "Protein Degradation in Eukaryotes" for advanced students							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		P (10)					
	Method of assessment		Log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English					
	Modules successfully completed		o8-BC-MOLP					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					
o8-BC-VPRB-161-mo1	Practical course "RNA Biochemistry" for advanced students							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		P (10)					
	Method of assessment		Log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English					
	Modules successfully completed		o8-BC-MOLP					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					

o8-BC-VPSB-161-mo1	Practical course "Structural Biology" for advanced students							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	P (10)						
	Method of assessment	Log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English						
	Modules successfully completed	o8-BC-MOLP						
	Additional Information	Additional information on module duration: block taught lab course with approx. 40 working days.						
o8-FMM-MP-161-mo1	Lab Course Material Science							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (8)						
	Method of assessment	Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English						
o8-FMM-PA-161-mo1	Project Work							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (10)						
	Method of assessment	Log (approx. 15 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English						
o3-FU-PM2-161-mo1	Polymers II							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (1)						
	Method of assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English						
o8-HKM2-161-mo1	Advanced organometallic chemistry and its application in homogeneous catalysis							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						

o8-HKM ₃ AC-161-mo1	Practical course "Homogeneous catalysis in Inorganic Chemistry"							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (6) Module taught in: German or English					
	Method of assessment		report on practical course (approx. 10 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English					
o8-HKM ₃ OC-161-mo1	Practical course "Homogeneous catalysis in Organic Chemistry"							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (6) Module taught in: German or English					
	Method of assessment		report on practical course (approx. 10 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English					
o8-HKM ₄ -161-mo1	Advanced transition metal chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-MCM ₁ -161-mo1	Practical course medicinal chemistry							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (10) Module taught in: German or English					
	Method of assessment		Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical assignments (2 to 4 random examinations) as well as report (30 to 50 pages) Language of assessment: German and/or English					
o8-MCM _{2a} -161-mo1	Pharmaceutical/Medicinal Chemistry 1							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (3)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					

o8-MCM2b-161-mo1	Pharmaceutical/Medicinal Chemistry 2							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V (3)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
o8-MBC-MSP-161-mo1	Mass-Spectrometry and Proteomics							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V (2) + S (1) + P (2) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 45 to 90 minutes) or b) log (20 to 30 pages) or c) oral examination of one candidate each (20 to 30 minutes) or d) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) or e) presentation (20 to 40 minutes) Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered, no less than once a year						
	Participants and allocation of places	67 places.						
o8-SCM2-161-mo1	Supramolecular Chemistry (Practical Course)							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (6) Module taught in: German or English						
	Method of assessment	Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English						
	Modules successfully completed	o8-SCM1						
o8-SCM4-161-mo1	Supramolecular Chemistry (Advanced Lab)							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (6) Module taught in: German or English						
	Method of assessment	presentation (approx. 20 minutes) Language of assessment: German and/or English						
	Modules successfully completed	o8-SCM2						
	Additional Information	Additional information on module duration: block taught lab course with approx. 20 working days.						

Subfield Other additional qualifications (10 ECTS credits)								
o8-WRM1-161-m01	Tutoring 1 (practical course)							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	T (3)						
	Method of assessment	Tutoring activities, (preparation of status and/or wrap-up reports, approx. 100 hours total) Language of assessment: German and/or English						
	other prerequisites	It is not permitted to use activities performed under a research assistant contract for this module. The tutorial must accompany a different course than the tutorial held in module o8-WRM1.						
o8-WRM2-161-m01	Tutoring 2 (practical course)							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	T (3)						
	Method of assessment	Tutoring activities, (preparation of status and/or wrap-up reports, approx. 100 hours total) Language of assessment: German and/or English						
	other prerequisites	It is not permitted to use activities performed under a research assistant contract for this module. The tutorial must accompany a different course than the tutorial held in module o8-WRM1.						
o8-APM1-161-m01	Foreign Studies (short)							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (o) Module taught in: German and/or English and potentially language of the respective country						
	Method of assessment	a) report (10 to 20 pages) or b) talk (10 to 20 minutes) Language of assessment: German and/or English and potentially language of the respective country						
	other prerequisites	May not be combined with o8-APM2.						
	Additional Information	Additional information on module duration: block placement abroad with a duration of no less than 20 working days.						
o8-APM2-161-m01	Foreign Studies (long)							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (o) Module taught in: German and/or English and potentially language of the respective country						
	Method of assessment	a) report (15 to 30 pages) or b) talk (15 to 30 minutes) Language of assessment: German and/or English and potentially language of the respective country						
	other prerequisites	May not be combined with o8-APM1.						
	Additional Information	Additional information on module duration: block placement abroad with a duration of no less than 40 working days.						

o8-CHPM1-161-mo1	Chemistry-related competences outside of the Natural Sciences							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	No courses assigned to module						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
	other prerequisites	Please consult with course advisory service in advance.						
o8-CHPM2-161-mo1	Chemistry-related competences within the Natural Sciences							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	No courses assigned to module						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
	other prerequisites	Please consult with course advisory service in advance.						
o8-CHPM3-161-mo1	Chemistry-related competences outside of the Natural Sciences acquired abroad							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	No courses assigned to module Module taught in: German and/or English and potentially language of the respective country						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English and potentially language of the respective country						
	other prerequisites	Please consult with course advisory service in advance.						

o8-CHPM4-161-mo1	Chemistry-related competences within the Natural Sciences acquired abroad							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	No courses assigned to module Module taught in: German and/or English and potentially language of the respective country						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English and potentially language of the respective country						
	other prerequisites	Please consult with course advisory service in advance.						
Thesis (30 ECTS credits)								
o8-MA-161-mo1	Master-Thesis Chemistry							
	ECTS	30	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	No courses assigned to module						
	Method of assessment	Master's thesis (approx. 60 to 80 pages) Language of assessment: German and/or English						
	other prerequisites	Where applicable, specific modules as specified by supervisor.						
Additional Information	Time to complete: 6 months.							
Compulsory Courses (double degree) (35 ECTS credits)								
This and the following areas are designed for students of Chemistry who take part in an exchange programme in accordance with the provisions of Annex DA of the relevant FSB (subject-specific provisions).								
Subfield Courses at partner university abroad (5 ECTS credits)								
o3-TR-152-mo1	Toxicology and legal studies							
	ECTS	3	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (1) + V (1)						
	Method of assessment	written examination (approx. 90 minutes)						
	Additional Information	according to § 2 para. 2 sentence 2 APOLmCh in conjunction with No. II 2nd letter g) and i) and No. II 1st letter d) of annex 1 to the APOLmCh and No. 5 and 6 of annex 3 to the APOLmCh						
	Referred to in LPO I	§ 22 II Nr. 1 h) § 22 II Nr. 2 f) § 22 II Nr. 3 f)						
o8-VPM-DA-161-mo1	Advanced chemical practical course							
	ECTS	2	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (3)						
	Method of assessment	report (approx. 3 pages) Language of assessment: German and/or English						

Subfield Courses at partner university abroad (30 ECTS credits)								
o8-VPU-161-m01	Qualifications - Partner University							
	ECTS	30	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		No courses assigned to module					
	Method of assessment		Assessments as specified by partner university abroad Language of assessment: German and/or language spoken at partner university abroad					
	other prerequisites		Please consult with course advisory service in advance.					
Compulsory Electives (double degree) (55 ECTS credits)								
Students must take one focus with 25 ECTS credits as well as one focus with 30 ECTS credits (focuses 1 and 2 pursuant to Section 3 Subsection 2 FSB (subject-specific provisions) Annex DA), provisions on available combinations are set out in Section 3 Subsection 2 Sentence 8 FSB.								
Inorganic Chemistry (25 ECTS credits)								
Compulsory Courses (20 ECTS credits)								
o8-ACM1-161-m01	Advanced Inorganic Chemistry							
	ECTS	10	Duration	2 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3) + S (3)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-ACPM-161-m01	Inorganic Chemistry practical course for advanced							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (24) Module taught in: German or English					
	Method of assessment		report on practical course (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					
Compulsory Electives (5 ECTS credits)								
o8-TCM2-161-m01	Basics and Applications of Quantum Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					

o8-ACM2-161-mo1	Bioinorganic Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English					
o8-ACM3-161-mo1	Solid state chemistry and inorganic materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-HKM2-161-mo1	Advanced organometallic chemistry and its application in homogeneous catalysis							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
Organic Chemistry (25 ECTS credits)								
Compulsory Courses (15 ECTS credits)								
o8-OCM-SYNT-161-mo1	Modern Synthetic Methods							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					

o8-OCM-AKP1-161-m01	Advanced Research Project Organic Chemistry							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (20) Module taught in: German or English					
	Method of assessment		Log (approx. 15 to 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English					
Compulsory Electives (10 ECTS credits)								
o8-HKM1-152-m01	Organo- and Biocatalysis							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English					
o8-PH-KACP-152-m01	Practical course of clinical-analytical Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		P (5)					
	Method of assessment		Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English					
o8-SCM3-152-m01	Bioorganic Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English					
o8-SCM1-152-m01	Supramolecular Chemistry (Basics)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) Language of assessment: German and/or English					

o8-TCM2-161-mo1	Basics and Applications of Quantum Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (2)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
o8-OCM-NAT-161-mo1	Modern Aspects of Natural Product Chemistry and Biological Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English						
o8-OCM-FM-161-mo1	Participants and allocation of places	MA Chemie: unbegrenzt, Ma Biochemie: 20 places. Places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated by lot as they become available.						
	Organic Functional Materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
	Physical Chemistry (25 ECTS credits)							
	Compulsory Courses (20 ECTS credits)							
	o8-PCM1a-161-mo1	Laser Spectroscopy						
ECTS		5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
Courses		S (2) + Ü (1) Module taught in: German or English						
Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) Language of assessment: German and/or English						

o8-PCM1b-161-mo1	Advanced Physical Chemistry (Lab)							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (4) Module taught in: German or English						
	Method of assessment	Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English						
	Additional Information	Additional information on module duration: block taught lab course with approx. 20 working days.						
o8-PCM2-161-mo1	Statistical Mechanics and Reaction Dynamics							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (1) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English						
o8-PCM6-161-mo1	Physical Chemistry (Advanced Lab)							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (4) Module taught in: German or English						
	Method of assessment	presentation (approx. 20 minutes) Language of assessment: German and/or English						
	Additional Information	Additional information on module duration: block taught lab course with approx. 20 working days.						
Compulsory Electives (5 ECTS credits)								
o8-FU-Ma-Wi1-152-mo1	Material Science 1 (Basic introduction)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (3) + Ü (1)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						

o8-PCM3-161-m01	Nanoscale Materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English creditable for bonus					
o8-PCM4-161-m01	Ultrafast spectroscopy and quantum-control							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English					
	other prerequisites		Prior completion of modules o8-PCM1a and o8-PCM1b recommended.					
o8-PCM5-161-m01	Physical Chemistry of Supramolecular Assemblies							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English					
o8-TCM2-161-m01	Basics and Applications of Quantum Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					

o8-TCM3-161-mo1	Numerical Methods and Programming							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-TCM1-161-mo1	Selected Topics in Theoretical Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-TCAP1-161-mo1	Theoretical Chemistry - Project course quantum chemistry							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (5)					
	Method of assessment		presentation (approx. 30 minutes) Language of assessment: German and/or English					
	Additional Information		Additional information on module duration: block taught lab course with approx. 20 working days.					
o8-TCAP2-161-mo1	Theoretical Chemistry - Project course quantum dynamics							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (5)					
	Method of assessment		presentation (approx. 30 minutes) Language of assessment: German and/or English					
	Additional Information		Additional information on module duration: block taught lab course with approx. 20 working days.					
o8-FMM-MP-161-mo1	Lab Course Material Science							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (8)					
	Method of assessment		Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English					

Biochemistry (25 ECTS credits)									
Compulsory Courses (15 ECTS credits)									
o8-BC-MOLP-152-mo1	Molecular Biology laboratory course								
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate	
	Courses		P (5)						
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) log (10 to 20 pages) or c) oral examination of one candidate each (20 to 30 minutes) or d) oral examination in groups of up to 3 candidates (approx. 15 to 20 minutes per candidate) or e) presentation (20 to 30 minutes) or f) practical examination (on average approx. 2 hours; time to complete will vary according to subject area but will not exceed a maximum of 4 hours) Language of assessment: German and/or English Assessment offered: Once a year, winter semester						
	Participants and allocation of places		Biochemie (Biochemistry), Bachelor's: 24 places. Selection process Biochemie (Biochemistry), Bachelor's (180 ECTS credits): Should the number of applications exceed the number of available places, places will be allocated according to the following quotas: Quota 1 (two thirds of places): current average grade of successfully completed modules; among applicants with the same average grade, places will be allocated by lot. Quota 2 (one third of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated as they become available. Chemie (Chemistry), Master's: 6 places. Selection process Chemie (Chemistry), Bachelor's (120 ECTS credits): Places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated by lot as they become available.						
o8-BC-MOLMC-161-mo1	Molecular Biology for Advanced Students								
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses		V (2) + Ü (1)						
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
Compulsory Electives (10 ECTS credits)									
o8-HKM1-152-mo1	Organo- and Biocatalysis								
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses		S (3)						
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English						
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o8-MCM3-152-mo1	Drug design							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		presentation with discussion (approx. 30 minutes) Language of assessment: German and/or English					
	Participants and allo- cation of places		20 places. 4 places for students of the Master's degree programme Chemie (Chemistry): Places will be allocated according to the same number of subject semesters; students who have chosen Medizinische Chemie (Medicinal Chemistry) as their focus will be given preferential consideration; among applicants with the same number of subject semesters, places will be alloca- ted by lot.; 6 places for students of the Master's degree programme Biochemie (Biochemistry): Places will be allocated accor- ding to the number of subject semesters; among applicants with the same number of subject semesters, places will be alloca- ted by lot; a waiting list will be maintained and places re-allocated by lot as they become available.					
o8-PH-KAC-152-mo1	Clinical-analytical Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (3)					
	Method of assessment		written examination (approx. 120 minutes) Language of assessment: German and/or English					
o8-PH-KACP-152-mo1	Practical course of clinical-analytical Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		P (5)					
	Method of assessment		Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English					
o8-ACM2-161-mo1	Bioinorganic Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English					

o8-OCM-NAT-161-mo1	Modern Aspects of Natural Product Chemistry and Biological Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English						
	Participants and allocation of places	MA Chemie: unbegrenzt, Ma Biochemie: 20 places. Places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated by lot as they become available.						
o8-BC-VPMM-161-mo1	Practical course "Molecular Machines" for advanced students							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	P (10)						
	Method of assessment	Log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English						
	Modules successfully completed	o8-BC-MOLP						
o8-BC-VPPD-161-mo1	Additional Information	Additional information on module duration: block taught lab course with approx. 40 working days.						
	Practical course "Protein Degradation in Eukaryotes" for advanced students							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	P (10)						
	Method of assessment	Log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English						
o8-BC-VPRB-161-mo1	Modules successfully completed	o8-BC-MOLP						
	Additional Information	Additional information on module duration: block taught lab course with approx. 40 working days.						
	Practical course "RNA Biochemistry" for advanced students							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	P (10)						
o8-BC-VPRB-161-mo1	Method of assessment	Log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English						
	Modules successfully completed	o8-BC-MOLP						
	Additional Information	Additional information on module duration: block taught lab course with approx. 40 working days.						

o8-BC-VPSB-161-mo1	Practical course "Structural Biology" for advanced students							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	P (10)						
	Method of assessment	Log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English						
	Modules successfully completed	o8-BC-MOLP						
	Additional Information	Additional information on module duration: block taught lab course with approx. 40 working days.						
Functional Materials (25 ECTS credits)								
Compulsory Courses (20 ECTS credits)								
o8-FU-Ma-Wi1-152-mo1	Material Science 1 (Basic introduction)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (3) + Ü (1)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
o8-OCM-FM-161-mo1	Organic Functional Materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
o8-FMM-MP-161-mo1	Lab Course Material Science							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (8)						
	Method of assessment	Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English						
o8-FMM-PA-161-mo1	Project Work							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (10)						
	Method of assessment	Log (approx. 15 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English						

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Compulsory Electives (5 ECTS credits)								
o8-SCM1-152-m01	Supramolecular Chemistry (Basics)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) Language of assessment: German and/or English					
o8-FU-Mo-MaV-152-m01	Molecular Materials (Lecture)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (3) + S (1)					
	Method of assessment		[a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes)] as well as talk (approx. 30 minutes), weighted 3:1 Language of assessment: German and/or English					
o8-FU-NT-152-m01	Chemically and bio-inspired Nanotechnology for Material Synthesis							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (4)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-FU-Ma-Wi2-152-m01	Material Science 2 (The Material Groups)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (3) + Ü (1)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o3-FU-PM1-152-m01	Polymer Chemistry 1 (Lecture and Practical Course)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (2) + P (2)					
	Method of assessment		a) assessment and b) Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical assignments (2 to 4 random examinations) Language of assessment: German and/or English Assessment offered: Once a year, winter semester creditable for bonus					

o8-PCM3-161-m01	Nanoscale Materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English creditable for bonus					
o8-TCM2-161-m01	Basics and Applications of Quantum Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-ACM3-161-m01	Solid state chemistry and inorganic materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o3-FU-PM2-161-m01	Polymers II							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English					

Homogeneous Catalysis (25 ECTS credits)								
Compulsory Courses (20 ECTS credits)								
o8-HKM1-152-m01	Organo- and Biocatalysis							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3)						
	Method of assessment	a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English						
o8-HKM2-161-m01	Advanced organometallic chemistry and its application in homogeneous catalysis							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
o8-HKM3AC-161-m01	Practical course "Homogeneous catalysis in Inorganic Chemistry"							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (6) Module taught in: German or English						
	Method of assessment	report on practical course (approx. 10 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English						
o8-HKM3OC-161-m01	Practical course "Homogeneous catalysis in Organic Chemistry"							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (6) Module taught in: German or English						
	Method of assessment	report on practical course (approx. 10 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English						

Compulsory Electives (5 ECTS credits)								
o3-FU-PM1-152-m01	Polymer Chemistry 1 (Lecture and Practical Course)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (2) + P (2)					
	Method of assessment		a) assessment and b) Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical assignments (2 to 4 random examinations) Language of assessment: German and/or English Assessment offered: Once a year, winter semester creditable for bonus					
o8-PCM2-161-m01	Statistical Mechanics and Reaction Dynamics							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English					
o8-TCM2-161-m01	Basics and Applications of Quantum Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-OCM-SYNT-161-m01	Modern Synthetic Methods							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					

o8-HKM4-161-mo1	Advanced transition metal chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
Medicinal Chemistry (25 ECTS credits)								
Compulsory Courses (10 ECTS credits)								
o8-MCM1-161-mo1	Practical course medicinal chemistry							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (10) Module taught in: German or English						
	Method of assessment	Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical assignments (2 to 4 random examinations) as well as report (30 to 50 pages) Language of assessment: German and/or English						
Compulsory Electives (15 ECTS credits)								
o8-MCM3-152-mo1	Drug design							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (1) Module taught in: German or English						
	Method of assessment	presentation with discussion (approx. 30 minutes) Language of assessment: German and/or English						
	Participants and allocation of places	20 places. 4 places for students of the Master's degree programme Chemie (Chemistry): Places will be allocated according to the same number of subject semesters; students who have chosen Medizinische Chemie (Medicinal Chemistry) as their focus will be given preferential consideration; among applicants with the same number of subject semesters, places will be allocated by lot.; 6 places for students of the Master's degree programme Biochemie (Biochemistry): Places will be allocated according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot; a waiting list will be maintained and places re-allocated by lot as they become available.						
o8-PH-KAC-152-mo1	Clinical-analytical Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V (3)						
	Method of assessment	written examination (approx. 120 minutes) Language of assessment: German and/or English						

o8-PH-KACP-152-mo1	Practical course of clinical-analytical Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	P (5)						
	Method of assessment	Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English						
o8-ACM2-161-mo1	Bioinorganic Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English						
o8-OCM-SYNT-161-mo1	Modern Synthetic Methods							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (1) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
o8-OCM-NAT-161-mo1	Modern Aspects of Natural Product Chemistry and Biological Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3) Module taught in: German or English						
	Method of assessment	a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English						
	Participants and allocation of places	MA Chemie: unbegrenzt, Ma Biochemie: 20 places. Places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated by lot as they become available.						

o8-BC-MOLMC-161-mo1	Molecular Biology for Advanced Students							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (2) + Ü (1)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-BC-VPSB-161-mo1	Practical course "Structural Biology" for advanced students							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		P (10)					
	Method of assessment		Log (approx. 20 pages) and talk (approx. 15 minutes) Language of assessment: German and/or English					
	Modules successfully completed		o8-BC-MOLP					
Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.						
o8-MCM2a-161-mo1	Pharmaceutical/Medicinal Chemistry 1							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (3)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
o8-MCM2b-161-mo1	Pharmaceutical/Medicinal Chemistry 2							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (3)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					

o8-MBC-MSP-161-m01	Mass-Spectrometry and Proteomics							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		V (2) + S (1) + P (2) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) log (20 to 30 pages) or c) oral examination of one candidate each (20 to 30 minutes) or d) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) or e) presentation (20 to 40 minutes) Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered, no less than once a year					
	Participants and allocation of places		67 places.					
Supramolecular Chemistry (25 ECTS credits)								
Compulsory Courses (10 ECTS credits)								
o8-SCM1-152-m01	Supramolecular Chemistry (Basics)							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) Language of assessment: German and/or English					
o8-SCM2-161-m01	Supramolecular Chemistry (Practical Course)							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (6) Module taught in: German or English					
	Method of assessment		Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English					
	Modules successfully completed		o8-SCM1					
Compulsory Electives (15 ECTS credits)								
o8-SCM3-152-m01	Bioorganic Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3)					
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English					

o8-PCM3-161-m01	Nanoscale Materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English creditable for bonus					
o8-PCM5-161-m01	Physical Chemistry of Supramolecular Assemblies							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English					
o8-ACM2-161-m01	Bioinorganic Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (3) Module taught in: German or English					
	Method of assessment		a) written examination (approx. 45 to 90 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (15 to 30 minutes per candidate) Language of assessment: German and/or English					
o8-TCM2-161-m01	Basics and Applications of Quantum Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					

o8-OCM-FM-161-mo1	Organic Functional Materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (3)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
o8-SCM4-161-mo1	Supramolecular Chemistry (Advanced Lab)							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses	P (6) Module taught in: German or English						
	Method of assessment	presentation (approx. 20 minutes) Language of assessment: German and/or English						
	Modules successfully completed	o8-SCM2						
	Additional Information	Additional information on module duration: block taught lab course with approx. 20 working days.						
Theoretical Chemistry (25 ECTS credits)								
Compulsory Courses (15 ECTS credits)								
o8-TCM2-161-mo1	Basics and Applications of Quantum Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (2)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
o8-TCM3-161-mo1	Numerical Methods and Programming							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S (2) + Ü (2)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						

o8-TCM4-161-mo1	Quantum Dynamics							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
Compulsory Electives (10 ECTS credits)								
o8-MCM3-152-mo1	Drug design							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (1) Module taught in: German or English					
	Method of assessment		presentation with discussion (approx. 30 minutes) Language of assessment: German and/or English					
o8-TCM1-161-mo1	Participants and allocation of places		20 places. 4 places for students of the Master's degree programme Chemie (Chemistry): Places will be allocated according to the same number of subject semesters; students who have chosen Medizinische Chemie (Medicinal Chemistry) as their focus will be given preferential consideration; among applicants with the same number of subject semesters, places will be allocated by lot.; 6 places for students of the Master's degree programme Biochemie (Biochemistry): Places will be allocated according to the number of subject semesters; among applicants with the same number of subject semesters, places will be allocated by lot; a waiting list will be maintained and places re-allocated by lot as they become available.					
	Selected Topics in Theoretical Chemistry							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		S (2) + Ü (2)					
o8-TCAP1-161-mo1	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
	Theoretical Chemistry - Project course quantum chemistry							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (5)					
	Method of assessment		presentation (approx. 30 minutes) Language of assessment: German and/or English					
	Additional Information		Additional information on module duration: block taught lab course with approx. 20 working days.					

o8-TCAP2-161-m01	Theoretical Chemistry - Project course quantum dynamics							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (5)					
	Method of assessment		presentation (approx. 30 minutes) Language of assessment: German and/or English					
	Additional Information		Additional information on module duration: block taught lab course with approx. 20 working days.					
Thesis (30 ECTS credits)								
o8-MA-161-m01	Master-Thesis Chemistry							
	ECTS	30	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		No courses assigned to module					
	Method of assessment		Master's thesis (approx. 60 to 80 pages) Language of assessment: German and/or English					
	other prerequisites		Where applicable, specific modules as specified by supervisor.					
	Additional Information		Time to complete: 6 months.					