Julius-Maximilians-
UNIVERSITÄT
WÜRZBURG

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)

08-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					
08-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)

08-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					
08-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					

08-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					
Organic Chemistry (25 ECTS credits)								
Compulsory Courses (15 ECTS credits)								
08-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					
08-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)								
08-OCM-NAT-161-m01	**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.					

08-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					
08-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					
08-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					
08-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					
08-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					

Physical Chemistry (25 ECTS credits)								
Compulsory Courses (10 ECTS credits)								
08-PCM1a-161-m01	**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					
08-PCM1b-161-m01	**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)								
08-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					
08-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					

08-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 08-PCM1a and 08-PCM1b recommended.					
08-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					
08-PCM6-161-m01	**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.					
08-TCM1-161-m01	**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					
08-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					

Biochemistry (25 ECTS credits)								
Compulsory Courses (15 ECTS credits)								
08-BC-MOLMC-161-m01	**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					
08-BC-MOLP-152-m01	**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) Assessment offered: Once a year, winter semester Language of assessment: German and/or English					
	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)								
08-BC-VPMM-161-m01	**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		08-BC-MOLP					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					

08-BC-VPPD-161-m01	**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		08-BC-MOLP					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					
08-BC-VPRB-161-m01	**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		08-BC-MOLP					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					
08-BC-VPSB-161-m01	**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		08-BC-MOLP					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					
08-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					
08-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					

08-OCM-NAT-161-m01	**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.					
08-MCM3-152-m01	**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.					
08-PH-KAC-152-m01	**Clinical-analytical Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (3)					
	Method of assessment		written examination (approx. 120 minutes) Language of assessment: German and/or English					
08-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					

Functional Materials (25 ECTS credits)								
Compulsory Courses (20 ECTS credits)								
08-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					
08-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					
08-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					
08-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)								
08-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					

08-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					
08-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					
03-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) Assessment offered: Once a year, winter semester Language of assessment: German and/or English creditable for bonus					
03-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					
08-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					

08-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					
08-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					
Homogeneous Catalysis (25 ECTS credits)								
Compulsory Courses (20 ECTS credits)								
08-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					
08-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					
08-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					

08-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)								
08-HKM4-161-m01	**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					
08-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					
08-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					
08-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					

03-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) Assessment offered: Once a year, winter semester Language of assessment: German and/or English creditable for bonus					
Medicinal Chemistry (25 ECTS credits)								
Compulsory Courses (15 ECTS credits)								
08-MCM1-161-m01	**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					
08-MCM3-152-m01	**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)								
08-MCM2a-161-m01	**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					

08-MCM2b-161-m01	**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					
08-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) Assessment offered: Once a year, winter semester Language of assessment: German and/or English					
	Participants and allocation of places		67 places.					
Supramolecular Chemistry (25 ECTS credits)								
Compulsory Courses (10 ECTS credits)								
08-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					
08-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		08-SCM1					

Compulsory Electives (15 ECTS credits)								
08-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					
08-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		08-SCM2					
	Additional Information		Additional information on module duration: block taught lab course with approx. 20 working days.					
08-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					
08-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					
08-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					

08-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					
08-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)								
08-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					
08-TCM3-161-m01	**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					
08-TCM4-161-m01	**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)								
08-TCM1-161-m01	**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					
08-TCAP1-161-m01	**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.					
08-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.					
08-MCM3-152-m01	**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.

08-BC-MOLP-152-m01	**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) Assessment offered: Once a year, winter semester Language of assessment: German and/or English					
	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.					
08-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					
08-MCM3-152-m01	**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.					

08-PH-KAC-152-m01	**Clinical-analytical Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (3)					
	Method of assessment		written examination (approx. 120 minutes) Language of assessment: German and/or English					
08-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					
08-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					
08-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					
08-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					
08-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					

08-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					
08-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					
03-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) Assessment offered: Once a year, winter semester Language of assessment: German and/or English creditable for bonus					
08-PCM1a-161-m01	**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					
08-PCM1b-161-m01	**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.					

08-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					
08-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					
08-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 08-PCM1a and 08-PCM1b recommended.					
08-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					
08-PCM6-161-m01	**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.					

08-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					
08-TCM3-161-m01	**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					
08-TCM4-161-m01	**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					
08-TCM1-161-m01	**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					
08-TCAP1-161-m01	**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.					

08-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.					
08-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					
08-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.					
08-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					
08-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					

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					

08-BC-VPMM-161-m01	**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		08-BC-MOLP					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					
08-BC-VPPD-161-m01	**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		08-BC-MOLP					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					
08-BC-VPRB-161-m01	**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		08-BC-MOLP					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					
08-BC-VPSB-161-m01	**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		08-BC-MOLP					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					
08-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					

08-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					
03-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					
08-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					
08-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					
08-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					
08-HKM4-161-m01	**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					

08-MCM1-161-m01	**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					
08-MCM2a-161-m01	**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					
08-MCM2b-161-m01	**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					
08-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) Assessment offered: Once a year, winter semester Language of assessment: German and/or English					
	Participants and allocation of places		67 places.					

08-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		08-SCM1					
08-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		08-SCM2					
	Additional Information		Additional information on module duration: block taught lab course with approx. 20 working days.					
Subfield Other additional qualifications (10 ECTS credits)								
08-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 08-WRM1.					
08-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 08-WRM1.					

08-APM1-161-m01	**Foreign Studies (short)**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (0) 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 08-APM2.					
	Additional Information		Additional information on module duration: block placement abroad with a duration of no less than 20 working days.					
08-APM2-161-m01	**Foreign Studies (long)**							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		P (0) 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 08-APM1.					
	Additional Information		Additional information on module duration: block placement abroad with a duration of no less than 40 working days.					
08-CHPM1-161-m01	**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.					
08-CHPM2-161-m01	**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.					

08-CHPM3-161-m01	**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.					
08-CHPM4-161-m01	**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)								
08-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.					
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)								
03-TR-152-m01	**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)					
	Referred to in LPO I		§ 22 II Nr. 1 h) § 22 II Nr. 2 f) § 22 II Nr. 3 f)					

08-VPM-DA-161-m01	**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)								
08-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 or 30 ECTS credits)								
Compulsory Courses (20 ECTS credits)								
08-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					
08-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 or 10 ECTS credits)								
08-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					
08-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					
08-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					
08-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					

Organic Chemistry (25 or 30 ECTS credits)								
Compulsory Courses (15 ECTS credits)								
08-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						
08-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 or 15 ECTS credits)								
08-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						
08-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						
08-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						

08-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					
08-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					
08-OCM-NAT-161-m01	**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.					
08-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					
Physical Chemistry (25 or 30 ECTS credits)								
Compulsory Courses (20 ECTS credits)								
08-PCM1a-161-m01	**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					

08-PCM1b-161-m01	**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.					
08-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					
08-PCM6-161-m01	**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 or 10 ECTS credits)								
08-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					
08-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					

08-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 08-PCM1a and 08-PCM1b recommended.					
08-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					
08-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					
08-TCM3-161-m01	**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					
08-TCM1-161-m01	**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					

08-TCAP1-161-m01	**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.					
08-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.					
08-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					
Biochemistry (25 or 30 ECTS credits)								
Compulsory Courses (15 ECTS credits)								
08-BC-MOLP-152-m01	**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) Assessment offered: Once a year, winter semester Language of assessment: German and/or English					
	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.					

08-BC-MOLMC-161-m01	**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 or 15 ECTS credits)								
08-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					
08-MCM3-152-m01	**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.					
08-PH-KAC-152-m01	**Clinical-analytical Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (3)					
	Method of assessment		written examination (approx. 120 minutes) Language of assessment: German and/or English					
08-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					

08-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					
08-OCM-NAT-161-m01	**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.					
08-BC-VPMM-161-m01	**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		08-BC-MOLP					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					
08-BC-VPPD-161-m01	**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		08-BC-MOLP					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					

08-BC-VPRB-161-m01	**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		08-BC-MOLP					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					
08-BC-VPSB-161-m01	**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		08-BC-MOLP					
	Additional Information		Additional information on module duration: block taught lab course with approx. 40 working days.					
Functional Materials (25 or 30 ECTS credits)								
Compulsory Courses (20 ECTS credits)								
08-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					
08-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					
08-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					

08-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					
Compulsory Electives (5 or 10 ECTS credits)								
08-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					
08-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					
08-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					
08-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					

03-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) Assessment offered: Once a year, winter semester Language of assessment: German and/or English creditable for bonus					
08-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					
08-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					
08-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					
03-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 or 30 ECTS credits)								
Compulsory Courses (20 ECTS credits)								
08-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						
08-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						
08-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						
08-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 or 10 ECTS credits)								
03-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) Assessment offered: Once a year, winter semester Language of assessment: German and/or English creditable for bonus						

08-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					
08-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					
08-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					
08-HKM4-161-m01	**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 or 30 ECTS credits)								
Compulsory Courses (10 ECTS credits)								
08-MCM1-161-m01	**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 or 20 ECTS credits)								
08-MCM3-152-m01	**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.				
08-PH-KAC-152-m01	**Clinical-analytical Chemistry**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (3)					
	Method of assessment		written examination (approx. 120 minutes) Language of assessment: German and/or English					
08-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					
08-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					
08-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-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					

08-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) Assessment offered: Once a year, winter semester Language of assessment: German and/or English					
	Participants and allocation of places		67 places.					
Supramolecular Chemistry (25 or 30 ECTS credits)								
Compulsory Courses (10 ECTS credits)								
08-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					
08-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		08-SCM1					
Compulsory Electives (15 or 20 ECTS credits)								
08-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					

08-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					
08-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					
08-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					
08-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					
08-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					

08-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		08-SCM2					
	Additional Information		Additional information on module duration: block taught lab course with approx. 20 working days.					
Theoretical Chemistry (25 or 30 ECTS credits)								
Compulsory Courses (15 ECTS credits)								
08-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					
08-TCM3-161-m01	**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					
08-TCM4-161-m01	**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 or 15 ECTS credits)								
08-MCM3-152-m01	**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.				
08-TCM1-161-m01	**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					
08-TCAP1-161-m01	**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.					
08-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)								
08-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.					