

Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject Functional Materials 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: 2012

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:

ASP02009

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

12-Jul-2012 (2012-139)

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 sp	be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y							
	Method of as	sessm	ent								
	Only after su completion o		ıl if applic	f applicable							
	Other prereq	uisites	if applic	if applicable							
	Participants and allocation of places		ocati- if applic	if applicable							
	Additional information		ion if applic	if applicable							
	Referred to in	1 LPO I	if applic	if applicable (examination regulations for teaching-degree programmes)							

Compulsory Course	es (40 EC	CTS cred	its)									
11-E5T-092-m01	Mecha	nical an	d Therma	Mate	rial Properties							
	ECTS	5	Duration		1 semester	Method of gradi	ng numerical:	grade	Modul level	graduate		
	Course	s S	,	V + Ü	(no information o	n SWS (weekly cont	act hours) and	course language av	ailable)			
	Method	d of asse		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)								
	other p	rerequis	sites	to qu cours obtai for as	Admission prerequisite to assessment: successful completion of approx. 50% of exercises. Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
11-MOE-092-m01	Opto-electronic Material Properties											
	ECTS	5	Duration	l	1 semester	Method of gradi	ng numerical	grade	Modul level	graduate		
	Course	S		V + Ü	(no information o	n SWS (weekly cont	act hours) and	course language av	ailable)			
	Method	d of asse	essment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)								
	other p	rerequis	sites	Admission prerequisite to assessment: successful completion of approx. 50% of exercises. Certain prerequisites must be me to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment an ew.								
08-IOC4-122-m01	Organi	c Chemi	stry 4 for	Engin	eers							
	ECTS	5	Duration		1 semester	Method of gradi	ng numerical	grade	Modul level	undergraduate		
	Course	S		V + Ü	(no information o	n SWS (weekly cont	act hours) and	course language av	ailable)			
	Method	d of asse	essment	a) 1 to 3 written examinations (1 written examination: approx. 90 minutes; 2 written examinations: approx. 60 or 90 minutes each; 3 written examinations: approx. 60 minutes each) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German or English								
	other prerequisites			ning	of the course (usu		s to be success			classes as specified at the begin- attendance of exercises (usually		

08-0CM-FM-102-	Organi	c Functi	onal Mat	erials								
mo1	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		S (no	S (no information on SWS (weekly contact hours) and course language available)							
	Method	d of asse	essment	nation the m ning o) 1 to 3 written examinations (60 or 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) oral examiation in groups (groups of 2, 30 minutes). Should there be the option to choose between several methods of assessment, ne module coordinator will choose the method to be used for the module component in the current semester at the begining of the course. anguage of assessment: German or English							
08-PR-092-m01	Research project											
	ECTS 10 Duratio		n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		R (no	R (no information on SWS (weekly contact hours) and course language available)							
	Method	d of asse	essment	report (approx. 10 to 15 pages) Language of assessment: German or English								
08-PR2-122-m01	Resear	ch proje	ect 2									
	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			R (no	R (no information on SWS (weekly contact hours) and course language available)							
	Method of assessment			report (approx. 10 to 15 pages) Language of assessment: German or English								

Compulsory Electives (50 ECTS credits)

General Compulsory Electives

Of the following modules, students may take up to two modules. The remaining ECTS credits in the sub-area of mandatory electives must be achieved in the focuses A and/or B; modules already completed as part of the sub-area of focuses may not be used again in the sub-area of mandatory electives. If none of the following modules are chosen, the remaining ECTS credits must be achieved in the two focuses.

08-FS5-101-m01				chieved in the two for nalytics and Applica							
-	ECTS 5	Dura	tion	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		This	This module comprises 2 module components. Information on courses will be listed separately for each module component. • 08-FS5-1-101: V (no information on SWS (weekly contact hours) and course language available) • 08-FS5-2-101: V (no information on SWS (weekly contact hours) and course language available)							
	Method o	of assessme				essments in the individual mod module will require successfu					
			• • Asse	 Assessment in module component o8-FS5-1-101: Sol-Gel Chemistry 2 2 ECTS, Method of grading: numerical grade a) oral examination (approx. 15 minutes) or b) written examination (approx. 45 minutes) Assessment in module component o8-FS5-2-101: Application oriented Characterization of colloidal and polymeric systems 3 ECTS, Method of grading: numerical grade a) oral examination (approx. 20 minutes) or b) written examination (approx. 45 minutes) 							
	Participa cation of	nts and allo places	a sta of pla numb respe (25% comp	Number of places: 20. Should the number of applications exceed the number of available places, places will be allocated in a standardised procedure among all applicants irrespective of their subjects according to the following quotas: Quota 1 (50% of places): total number of ECTS credits already achieved in the respective degree subject; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25% 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. Quota 3 (25% of places): allocation by lot. In this procedure, applicants who already have successfully completed at least one module component of the respective module will be given preferential consideration. A waiting list will be maintained and places reallocated as they become available.							
	Additiona	al Informatio	n The c	ourse is offered as a	a block course at the e	nd of the semester.					

08-NT-122-m01	Chemically	and bio-insp	ired Nanotechnology fo	or Material Synthesis						
	ECTS 5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		• 08-NT-1-122: V (no information on SWS	s. Information on courses will (weekly contact hours) and c (weekly contact hours) and c	course language av				
	Method of a	assessment				s as specified below. Unless all individual assessments.				
			 Assessment in module component o8-NT-1-122: Sol-Gel Chemistry 1: Fundamentals 2 ECTS, Method of grading: numerical grade a) written examination (approx. 45 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment in module component o8-NT-2-122: From Biomineralisation to biologically inspired Materials Synthesis 3 ECTS, Method of grading: numerical grade a) written examination (approx. 45 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes) 							
08-EEW-122-m01			Storage and Conversio	1						
	ECTS 5	Duration		Method of grading		Modul level	graduate			
	Courses		•		act hours) and course langua	<u> </u>				
	Method of a	assessment	nical course (approx. 5 (approx. 20 minutes) of se more than one grad	/ project report / report on tech- amination of one candidate each ould a module component compri- erwise specified; should the lec- lo so by two weeks after the start						
	other prered	quisites	Admission prerequisite to assessment: regular attendance of lab course (a maximum of one incident of unexcused absence).							
11-BVG-092-m01	Coating Tec	hnologies ba	ased on Vapour Deposi	ion						
	ECTS 5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		V + R (no information of	n SWS (weekly contact	hours) and course language	available)				
	Method of a		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (a prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be a nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.							
	other prered		tive details at the begi on to assessment. If st the lecturer will put the	nning of the course. Regudents have obtained teir registration for assest or in the subsequent	gistration for the course will be he qualification for admissio sment into effect. Students v	oe considered a de n to assessment o who meet all prere	nform students about the respec- eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as- ents will have to obtain the quali-			

11-SPD-102-m01	Semico	nductor Physic	and D	evices								
	ECTS	6 Duratio	n	1 semester	Method of grading numerical grade		Modul level	graduate				
	Courses				n SWS (weekly contact hours) and course							
	Method	l of assessment	30 m ges, t Asses noun 2009	written examination (approx. 90 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English								
	other pi	rerequisites	tive of on to the le	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-HLF-092-m01	Semiconductor Lasers - Principles and Current Research											
	ECTS	6 Duratio	n	1 semester	Method of grading numerical grade		Modul level	graduate				
	Courses	5	R + V	(no information or	n SWS (weekly contact hours) and course	language ava	ailable)					
	Method	l of assessment	prox. to 10 Asses noun 2009	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will b nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulation 2009. Language of assessment: German, English								
	other pi	rerequisites	tive of on to the le	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								

11-QTH-102-m01	Quantum	Transport in S	emiconductor Nanostri	ıctures								
	ECTS 6	Duratio	n 1 semester	Method of grading	numerical grade	Modul level	graduate					
	Courses		V + R (no information of	on SWS (weekly contact	hours) and course language av	ailable)						
	Method o	f assessment	prox. 30 minutes per c to 10 pages, time to co Assessment offered: V nounced in due form u 2009.	anguage of assessment: German, English								
	other pre	requisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-ZMB-112-m01	Methods for non-destructive Characterization of Materials and Components											
	ECTS 4	Duration	n 1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Courses		V + R (no information of	on SWS (weekly contact	hours) and course language av	ailable)						
	Method o	f assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.									
	other prei	requisites	tive details at the begi on to assessment. If si the lecturer will put the	nning of the course. Required to the course have obtained the course have obtained the course have a seen the course of the cour	gistration for the course will be he qualification for admission t sment into effect. Students wh	considered a de to assessment c o meet all prere	nform students about the respec- eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- ents will have to obtain the quali-					

11-A3-072-m01	Laborat	tory and	d Measure	ement	Technology							
	ECTS	6	Duration	า	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	S		V + Ü	(no information o	on SWS (weekly contact	t hours) and course language av	ailable)				
	Methoc	of ass	essment	writte	n examination (a	pprox. 120 minutes)						
	other p	rerequis	sites	to qua course obtain for as:	alify for admissio e. Registration fo ned the qualificat sessment into eff	n to assessment. The low the course will be cortion for admission to as fect. Students who mee	ecturer will inform students abou nsidered a declaration of will to s assessment over the course of the et all prerequisites will be admit	ut the respective seek admission as semester, the ted to assessmother.	Certain prerequisites must be met e details at the beginning of the to assessment. If students have lecturer will put their registration ent in the current or in the subsent for admission to assessment an-			
	cation	oants an of place	!S	,	Only as part of pool of general key skills (ASQ): 15 places. Places will be allocated by lot.							
11-LMB-092-m01	Laboratory and Measurement Technology in Biophysics											
	ECTS	6	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		R + V	R + V (no information on SWS (weekly contact hours) and course language available)							
	Method	l of asse	essment	prox. to 10 p Asses nound 2009.	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (app to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulatio 2009. Language of assessment: German, English							
	other p	rerequis	sites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								

11-HLP-092-m01	Semiconductor Physics												
	ECTS	6	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		R + V ((no information on	SWS (weekly contact	hours) and course language av	ailable)					
	Method	d of ass		prox. to 10 p Asses nounc 2009.	Language of assessment: German, English								
	other p	rerequi		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-IEM-111-m01	Introdu	Introduction to Electron Microscopy											
	ECTS 4 Duratio				1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V + R ((no information on	SWS (weekly contact	hours) and course language av	ailable)					
	Method	d of ass		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (a prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be a nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
	other p	rerequi		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-ZDR-111-m01	Principles of two- and threedimensional Röntgen imaging											
	ECTS 6	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses		V + R	(no information on	SWS (weekly contact	hours) and course language	available)					
	Method of	assessment	prox. to 10 Asses	30 minutes per can pages, time to com sment offered: Who ced in due form und	didate, for modules of plete: 1 to 4 weeks) cen and how often ass	with less than 4 ECTS credits a or d) presentation/seminar pre sessment will be offered depe	approx. 20 minute esentation (appro nds on the metho	r oral examination in groups (apes) or c) project report (approx. 8 ox. 30 minutes) od of assessment and will be anand examination regulations)				
	other prere	equisites	tive d on to the le sessn	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-BMT-092-m01	Biophysica	al Measureme	nt Tec	hnology in Medical	Science							
	ECTS 6	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	,	R + V	R + V (no information on SWS (weekly contact hours) and course language available)								
			a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
	other prere		tive d on to the le sessn fication	etails at the beginn assessment. If stuc cturer will put their nent in the current con for admission to	ing of the course. Re lents have obtained registration for asse or in the subsequent assessment anew.	gistration for the course will b the qualification for admission ssment into effect. Students w	ne considered a don n to assessment o who meet all prere	nform students about the respececlaration of will to seek admissiover the course of the semester, equisites will be admitted to asents will have to obtain the quali-				
99-HIS-122-m01		for high volta	ge insı	ılation and high vo	ltage systems							
	ECTS 5	Duratio		1 semester	Method of grading		Modul level	unknown				
	Courses					tact hours) and course langua						
	Method of	assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes total)									
99-MSTS-092-m01	Modelling	and simulation	on for technology systems									
	ECTS 5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	unknown				
	Courses		V + Ü	(no information on	SWS (weekly contact	hours) and course language	available)					
	Method of	assessment	written examination (approx. 90 minutes) or modelling assignment in the form of a project (expenditure of time for modelling assignment to be specified at the beginning of the course)									
Master's with 1 major Fur	ectional Materials	(2012)				IMII Wiirzhurg • generated 26-Aug	r-2024 • evam reg data	record 88 g81 - - H 2012 page 11 / 2/				

08-PS3-092-m01	Applied	Spectr	oscopy 3								
	ECTS	5	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Course	S		V (no information on SWS (weekly contact hours) and course language available)							
	Method of assessment 1 written examination (approx. 90 minutes) or 2 written examinations (approx. 60 or 90 minutes each) or 3 written e ons (approx. 60 minutes each) or oral examination of one candidate each (approx. 20 minutes) or oral examination (groups of 2, approx. 30 minutes)										

07-4S1M-**Aspects of molecular Biotechnology** Z5-102-m01 **ECTS** Duration 1 semester Method of grading | numerical grade Modul level undergraduate This module comprises 2 module components. Information on courses will be listed separately for each module component. Courses • 07-4S1MZ5-1-102: V (no information on SWS (weekly contact hours) and course language available) • o7-4S1MZ5-2-102: S (no information on SWS (weekly contact hours) and course language available) Assessment in this module comprises the assessments in the individual module components as specified below. Unless Method of assessment stated otherwise, successful completion of the module will require successful completion of all individual assessments. Assessment in module component 07-4S1MZ5-1-102: Aspects of molecular Biotechnology • 3 ECTS, Method of grading: numerical grade • written examination (approx. 30 minutes) Assessment in module component 07-4S1MZ5-2-102: Molecular Biotechnology - Seminar • 2 ECTS, Method of grading: (not) successfully completed presentation (approx. 15 to 20 minutes) Number of places: XX1. Should the number of applications exceed the number of available places, places will be allocated as Participants and allofollows: Places will primarily be allocated to students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS crecation of places dits. Should the module be used in other subjects, there will be two quotas: 95% of places will be allocated to students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits and 5% of places (a minimum of one participant in total) will be allocated to students of the Bachelor's degree subject Biologie (Biology) with 60 ECTS credits and to students of the Bachelor's degree subjects Computational Mathematics and Mathematik (Mathematics), each with 180 ECTS credits, as part of the application-oriented subject Biology (as well as potentially to students of other 'importing' subjects). Should the number of places available in one quota exceed the number of applications, the remaining places will be allocated to applicants from the other quota. Should there be, within one module component, several courses with a restricted number of places, there will be a uniform regulation for the courses of one module component. In this case, places on all courses of a module component that are concerned will be allocated in a standardised procedure. In this procedure, applicants who already have successfully completed at least one other module component of the respective module will be given preferential consideration. A waiting list will be maintained and places re-allocated as they become available. Selection process group 1 (95%): Places will primarily be allocated according to the applicants' previous academic achievements. For this purpose, applicants will be ranked according to the number of ECTS credits they have achieved and their average grade of all assessments taken during their studies or of all module components in the subject of Biologie (Biology) (excluding Chemie (Chemistry), Physik (Physics), Mathematik (Mathematics)) at the time of application. This will be done as follows: First, applicants will be ranked, firstly, according to their average grade weighted according to the number of ECTS credits (qualitative ranking) and, secondly, according to their total number of ECTS credits achieved (quantitative ranking). The applicants' position in a third ranking will be calculated as the sum of these two rankings, and places will be allocated according to this third ranking. Among applicants with the same ranking, places will be allocated according to the qualitative ranking or otherwise by lot. Selection process group 2 (5%): Places will be allocated according to the following quotas: Quota 1 (50% of places): total number of ECTS credits already achieved in modules/module components of the Faculty of Biology; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25% 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. Quota 3 (25% of places): allocation by lot. Should the module be used only in the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits, places will be allocated according to the selection process of group 1. XX2: XX3 places. Places will be allocated by lot.

10-M-FAN-072-mo	1 Introd	uction to	o Function	al Ana	ılysis							
	ECTS	5	Duratio	n	1 semester	Method of gra	ding numerical grad	le	Modul level	undergraduate		
	Course	es		V + Ü	(no information	on SWS (weekly co	ntact hours) and cou	rse language av	ailable)			
	Metho	d of ass	essment	exam	written examination (approx. 90 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes) anguage of assessment: German, English if agreed upon with the examiner							
	otherp	orerequi	sites	Certa tive d on to the le sessr	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
	Referre	ed to in	LPO I	§ 73 (1) 1. Mathematik	Analysis						
10-M-ODE-082-	Ordina	ry Diffe	rential Eq	uation	s							
mo1	ECTS 5 Duratio			1	1 semester	Method of gra	ding numerical grad	le	Modul level	undergraduate		
	Course	25		V + Ü	(no information	on SWS (weekly co	ntact hours) and cou	rse language av	ailable)			
	Method of assessment			exam	written examination (approx. 90 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English if agreed upon with the examiner							
	other	other prerequisites			Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the tive details at the beginning of the course. Registration for the course will be considered a declaration of will to seek on to assessment. If students have obtained the qualification for admission to assessment over the course of the se the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted sessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the fication for admission to assessment anew.							
10-M-NM1-082-	Numer	ical Ma	thematics	1								
mo1	ECTS	8	Duration	n	1 semester	Method of gra	ding numerical grad	le	Modul level	undergraduate		
	Course	es		V + Ü	(no information	on SWS (weekly co	ntact hours) and cou	rse language av	ailable)			
	Method of assessment			written examination (approx. 90 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English if agreed upon with the examiner								
	other prerequisites			Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
	Referre	ed to in	LPO I	§ 73 (1) 5. Mathematik	Angewandte Matl	nematik					

10-M-NM2-082- m01	Numeri	ical Ma	thematics	2								
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade		Modul level	undergraduate		
	Course	S		V + Ü	' + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method	d of ass	essment	written examination (approx. 90 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English if agreed upon with the examiner								
	other p	rerequi	sites	tive d on to the le sessn	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
	Referre	d to in	LPO I	§ 73 (1) 5. Mathematik A	ngewandte Mathema	tik					
10-M-COM-082-	Compu	terorie	nted Math	ematio	cs							
mo1	ECTS	3	Duration		1 semester	Method of grading				undergraduate		
	Course	S		V + Ü	(no information on	SWS (weekly contac	t hours) and cours	e language av	ailable)			
	Method	d of ass	essment	Asses	project in the form of programming exercises (as specified at the beginning of the course) Assessment offered: once a year, summer semester Language of assessment: German, English if agreed upon with the examiner							
	other prerequisites				Admission prerequisite to assessment: regular attendance of exercises (attendance monitored, a maximum of one incident of unexcused absence).							
	Referred to in LPO I					ngewandte Mathema	tik					
10-M-PRG-082-			*		students of Mathematics and other subjects 1 semester Method of grading (not) successfully completed Modul level undergraduate							
mo1	ECTS	3	Duration	1	1 semester	Method of grading	(not) successfull	y completed	Modul level	undergraduate		
	Course				(no information on SWS (weekly contact hours) and course language available)							
	Method	d of ass	essment		project in the form of programming exercises (as specified at the beginning of the course) Language of assessment: German, English if agreed upon with the examiner							
	other p	rerequi	sites	Admis abser		to assessment: regul	ar attendance (atte	endance moni	tored, a maxim	um of one incident of unexcused		
	Referre	d to in	LPO I	§ 73 (§ 73 (1) 5. Mathematik Angewandte Mathematik							
10-l=EL-102-m01	E-Learn	ing										
	ECTS	5	Duration	า	1 semester	Method of grading	numerical grade		Modul level	graduate		
	Course	S		V + Ü	V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method of assessment			written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one can didate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner								
	other p	rerequi	sites	Where	e applicable, prere	quisites as specified	by the lecturer at t	he beginning	of the course (e. g. completion of exercises).		

10-l=IR-102-m01	Informat	tion Re	trieval			'						
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade		Modul level	graduate		
	Courses			V + Ü	/ + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method	of asse	essment		written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each or an oral examination in groups).							
				didate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner								
	other pr	ereguis	sites		Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e.g. completion of exercises).							
10-l=DB2-102-m01	<u>-</u>					<u> </u>	.,		(-	3		
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Ì	Modul level	graduate		
	Courses		Į.	V + Ü	(no information or	SWS (weekly contact	hours) and course lar	nguage ava	ilable)	•		
	Method	of asse	essment	writte didat	en examination can e each: 15 minutes		al examination of one ites, groups of 3: 25 m	candidate e ninutes)		orior to the examination date, the l examination in groups (one can-		
	other pr	erequis	sites						f the course (e	e.g. completion of exercises).		
11-0HL-092-m01	Organic	Semic	onductor				· ·					
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade		Modul level	graduate		
	Courses			V + Ü	(no information or	SWS (weekly contact	hours) and course lar	nguage ava	ilable)			
	Method of assessment			prox.	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)							
	other prerequisites			to qu cours obtai for as	alify for admission ee. Registration for ned the qualification sessment into effe	to assessment. The le the course will be con on for admission to as ect. Students who mee	cturer will inform stuc sidered a declaration sessment over the cou t all prerequisites will	dents about of will to se urse of the l be admitte	the respective eek admission semester, the ed to assessme	Certain prerequisites must be met e details at the beginning of the to assessment. If students have lecturer will put their registration ent in the current or in the subsent for admission to assessment an-		
03-SP1A1-101-m01	Basic pr	inciple	s of cell b	iolog	y and tissue regen	eration						
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade		Modul level	graduate		
	Courses					n on SWS (weekly con	•					
	Method of assessment									/ project report / report on techniation (approx. 30 minutes)		
03-SP1A2-101-m01	Fundam	entals	of Tissue	Engin	eering and Quality	Management						
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade		Modul level	graduate		
	Courses			V + Ü	+ P (no information	n on SWS (weekly con	tact hours) and course	e language	available)			
	Method	of asse	essment							/ project report / report on techni- ation (approx. 30 minutes)		

03-SP2A1-101-m01	Materia	ls used	for surgi	cal im	plants			-				
	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	$V + \ddot{U} + P$ (no information on SWS (weekly contact hours) and course language available)							
	Method	l of asse	essment		placement report / fieldwork report / report on practical training / report on practical course / project report / report on technical course (approx. 10 pages) and a) written examination (approx. 90 minutes) or b) presentation (approx. 30 minutes)							
03-SP2A2-101-m01	Materia	als for bi	iosensor	s, tissu	e engineering and t	issue regeneration						
	ECTS	5	Duratio		1 semester	Method of grading)	Modul level	graduate			
	Course						act hours) and course languag					
	Method of assessment						n practical training / report on p kamination (approx. 90 minute		/ project report / report on techniation (approx. 30 minutes)			
03-SP3A1-101-m01	Carrier	materia	ls and de	evices f	or therapeutic comp	oounds						
	ECTS	5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course						act hours) and course languag					
	Method	l of asse	essment	place cal co	ment report / fieldwo urse (approx. 10 pag	ork report / report on ges) and a) written ex	n practical training / report on p kamination (approx. 90 minute	ractical course s) or b) present	/ project report / report on techniation (approx. 30 minutes)			
03-SP3A2-101-m01	Micros	ystems f	for biolog	gical ar	nd medicinal Applica	itions						
	ECTS	5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	+ P (no information o	on SWS (weekly cont	act hours) and course languag	e available)				
	Method	l of asse	essment		placement report / fieldwork report / report on practical training / report on practical course / project report / report on technical course (approx. 10 pages) and a) written examination (approx. 90 minutes) or b) presentation (approx. 30 minutes)							
08-SCM1-102-m01	Supran	olecula	r Chemis	try (Ba	sics)			'				
	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		S (no	S (no information on SWS (weekly contact hours) and course language available)							
	Method	l of asse	essment		written examination (approx. 90 minutes) or oral examination of one candidate each (approx. 20 minutes) Language of assessment: German or English							
08-PCM3-102-m01	Nanosc	ale Mat	erials		•			'				
	ECTS	5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		S + Ü	(no information on S	SWS (weekly contact	hours) and course language av	ailable)				
	Method	l of asse	essment		n examination (90 m		ination of one candidate each	(20 minutes) or	talk (30 minutes)			
08-PCM5-102-m01	Physica	al chemi	stry of s	upramo	olecular assemblies							
	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	5		S + Ü	(no information on S	SWS (weekly contact	hours) and course language av	ailable)				
	Method	l of asse	essment		n examination (90 m		examination of one candidate	each (20 minute	es) and/or talk (30 minutes)			

11-ENT-092-m01	Principl	les of Energy Te	chnolo	gies	,							
	ECTS	6 Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5	R + V	(no information or	SWS (weekly contact	hours) and course language av	ailable)					
	Method	of assessment	prox. to 10 Asses noun	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English								
	other pi	rerequisites	tive d on to the le sessr	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-HNS-092-m01	Semiconductor Nanostructures											
	ECTS	6 Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5	R + V	(no information or	SWS (weekly contact	hours) and course language av	ailable)					
	Method	of assessment	prox. to 10 Asses noun 2009	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations 2009. Language of assessment: German, English								
	other pi	rerequisites	tive d on to the le sessr	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								

11-NAN-092-m01	Nanoan	alytics						,					
	ECTS	6	Duration	1	1 semester	Method of grading	g numerical grade	Modul level	graduate				
	Courses	S	,	R + V	+ V (no information on SWS (weekly contact hours) and course language available)								
	Method of assessment			prox. to 10 Asses	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be an-								
				2009. Langu	nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
	other pi	rerequi	sites	tive d on to the le sessn									
08-MW-122-m01	Structu	re and	Properties	s of Mo	of Modern Materials: Experiments and Simulations								
	ECTS	5	Duration	า	1 semester	Method of grading	g numerical grade	Modul level	graduate				
	Courses	S		V + S	(no information o	n SWS (weekly contac	t hours) and course lang	ruage available)					
	Method	of ass			a) talk (approx. 30 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes)								
08-SAM-122-m01	Technology of Sensor and Actor Materials including Smart Fluids												
	ECTS 5 Duratio			n 1 semester Method of grading numerical grade				Modul level	graduate				
	Courses	S		V + P (no information on SWS (weekly contact hours) and course language available)									
	Method	of ass	essment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes total)								
	other pi	rerequi	sites	Admis	Admission prerequisite to assessment: successful completion of lab course.								
03-PM2-122-m01	Polyme	rs II				'							
	ECTS	5	Duration	ı	1 semester	Method of grading	g numerical grade	Modul level	graduate				
	Courses	S		S+Ü	(no information o	n SWS (weekly contac	ct hours) and course lang	guage available)					
	Method	d of ass	essment			(approx. 90 minutes) nt: German or English		fone candidate each (a	20 minutes) or c) talk (30 minutes)				
08-PW1-122-m01	Polyme	r Mate	ials 1: Ted	chnolo	gy of Polymer Mo	dification		,					
	ECTS	5	Duration	ı	1 semester	Method of grading	g numerical grade	Modul level	graduate				
	Courses	S		V + P	(no information o	n SWS (weekly contac	t hours) and course lang	uage available)					
	Method	l of ass	essment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes total) Assessment offered: once a year, winter semester									

08-PW2-122-m01	Polymer Mater	rials 2: Techi	nology of Filler Modifica	tion for Polymer Ma	terials										
	ECTS 5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate								
	Courses	V	/ + P (no information on SWS (weekly contact hours) and course language available)												
	Method of ass		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral ex-												
			amination in groups (groups of 2, approx. 30 minutes total) Assessment offered: once a year, summer semester												
Focus		AS	ssessment onerea: once	e a year, summer sem	iester										
	ect a focus (A or	B) and, with	in this focus, must take	modules worth no le	ss than 30 ECTS credits.										
Focus Subject A: Bi	ocompatible m	aterials (30 l	ECTS credits)												
03-SP1A1-101-m01	Basic principle	Basic principles of cell biology and tissue regeneration													
	ECTS 5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate								
	Courses	V	+ \ddot{U} + P (no information	on SWS (weekly cont	act hours) and course langua	ge available)									
	Method of ass						/ project report / report on techni-								
02-SP1A2-101-m01	Fundamentals	cal course (approx. 10 pages) and a) written examination (approx. 90 minutes) or b) presentation (approx. 30 minutes) entals of Tissue Engineering and Quality Management													
0) 31 1/12 101 11101	ECTS 5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate								
	Courses		+ Ü + P (no information		act hours) and course langua		13								
	Method of ass					<u> </u>	/ project report / report on techni-								
			cal course (approx. 10 pages) and a) written examination (approx. 90 minutes) or b) presentation (approx. 30 minutes)												
03-SP2A1-101-m01	Materials used	d for surgical	l implants												
	ECTS 5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate								
	Courses		V + Ü + P (no information on SWS (weekly contact hours) and course language available)												
	Method of ass				n practical training / report on kamination (approx. 90 minut		/ project report / report on techni- ation (approx. 30 minutes)								
03-SP2A2-101-m01	Materials for b		issue engineering and t		· · · · · ·										
	ECTS 5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate								
	Courses	V	+ Ü + P (no information	on SWS (weekly cont	act hours) and course langua	ge available)									
	Method of ass				n practical training / report on kamination (approx. 90 minut		/ project report / report on techni-								
03-SP3A1-101-m01	Carrier materia		ces for therapeutic comp		tammation (approvided immate	, c. 2, p. c. c.	ател (арртем је пипасес)								
	ECTS 5 Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate								
	Courses				act hours) and course langua		-								
	Method of ass	essment pl	lacement report / fieldw	ork report / report or		practical course	/ project report / report on techni-								

03-SP3A2-101-m01	Microsystems	for biolog	gical a	nd medicinal Applica	ations		<u> </u>				
	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		V + Ü	+ P (no information	on SWS (weekly cont	act hours) and course la	anguage available)				
	Method of asse	essment						/ project report / report on techni-			
				ourse (approx. 10 pag	ges) and a) written ex	kamination (approx. 90 i	minutes) or b) presenta	ation (approx. 30 minutes)			
Focus Subject B: Te											
11-HNS-092-m01	Semiconductor Nanostructures										
	ECTS 6	Duratio		1 semester	Method of grading		Modul level	graduate			
	Courses					hours) and course langu					
			prox. to 10 Asses noun 2009 Langu	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English							
	other prerequis		tive d on to the le sessr fication	etails at the beginni assessment. If stud cturer will put their i nent in the current o on for admission to a	ng of the course. Regents have obtained to the segistration for assesting the subsequent segsessment anew.	ristration for the course the qualification for adm sment into effect. Stude semester. For assessmen	will be considered a de ission to assessment o ents who meet all prere	form students about the respec- claration of will to seek admissi- ever the course of the semester, quisites will be admitted to as- ents will have to obtain the quali-			
08-MW-122-m01	Structure and Properties of Modern Materials: Experiments and Simulations										
	ECTS 5	Duratio		1 semester	Method of grading		Modul level	graduate			
	Courses			V + S (no information on SWS (weekly contact hours) and course language available)							
	Method of asse	essment	a) talk (approx. 30 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes)								
11-0HL-092-m01	Organic Semic	onductor									
	ECTS 5	Duratio		1 semester	Method of grading	•	Modul level	graduate			
	Courses		V + Ü	(no information on S	SWS (weekly contact	hours) and course langu	uage available)				
	Method of asse	essment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)								
	other prerequis	sites	to quo cours obtai for as	alify for admission to e. Registration for th ned the qualification sessment into effect	o assessment. The le ne course will be cons n for admission to ass t. Students who mee	cturer will inform studer sidered a declaration of sessment over the cours t all prerequisites will be	nts about the respective will to seek admission se of the semester, the e admitted to assessme	Certain prerequisites must be met e details at the beginning of the to assessment. If students have lecturer will put their registration ent in the current or in the subse- i for admission to assessment an-			

08-SAM-122-m01	Technology	of Sensor a	nd Acto	or Materials includ	ing Smart Fluids		,			
	ECTS 5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses		V + P	V + P (no information on SWS (weekly contact hours) and course language available)						
	Method of as	ssessment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral ex-						
	- 41 4 - 4 - 4 - 4	!-!+	amination in groups (groups of 2, approx. 30 minutes total)							
FNT and made	other prerequ		Admission prerequisite to assessment: successful completion of lab course.							
11-ENT-092-m01	Principles of				NA - 41			Laws durate		
	ECTS 6	Duratio		1 semester		numerical grade	Modul level	graduate		
	Courses					t hours) and course lan				
	metriod or dis	ssessiment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English							
	other prerequ	uisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
11-NAN-092-m01	Nanoanalytic	cs								
	ECTS 6	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses		R + V (no information on SWS (weekly contact hours) and course language available)							
			a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English							
	other prereq	uisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							

03-PM2-122-m01	Polyme	rs II									
	ECTS	5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		S + Ü	S + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method	d of ass	essment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (20 minutes) or c) talk (30 minutes)						
- 5111					Language of assessment: German or English						
08-PW1-122-m01					nology of Polymer Modification						
	ECTS 5 Duratio				1 semester	Method of grading		Modul level	graduate		
	Course						hours) and course language av				
	Method of assessment			amina	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes total) Assessment offered: once a year, winter semester						
08-PCM3-102-m01	Nanosc	ale Ma	terials								
	ECTS	5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		S + Ü	(no information on	SWS (weekly contact	t hours) and course language av	ailable)			
	Method	of ass	essment			minutes) or oral exar : German or English	nination of one candidate each	(20 minutes) or	talk (30 minutes)		
08-PW2-122-m01	Polymer Materials 2: Technology of Filler Modification for Polymer Materials										
	ECTS	5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		V + P	V + P (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment			amina	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral ex amination in groups (groups of 2, approx. 30 minutes total) Assessment offered: once a year, summer semester						
08-SCM1-102-m01	Supran	nolecula	ar Chemis	try (Ba	sics)	'		'			
	ECTS	5	Duratio	า	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		S (no	S (no information on SWS (weekly contact hours) and course language available)						
	Method	d of ass	essment		written examination (approx. 90 minutes) or oral examination of one candidate each (approx. 20 minutes) Language of assessment: German or English						
08-PCM5-102-m01	Physica	al chem	istry of s	upramo	olecular assemblie:	5					
	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		S + Ü	(no information on	SWS (weekly contact	t hours) and course language av	ailable)			
	Method of assessment					minutes) and/or oral : German or English	examination of one candidate of	each (20 minute	es) and/or talk (30 minutes)		

Thesis (30 ECTS cre	edits)										
08-MT-TF-122-m01	Master	Thesis I	unctional N	Materials							
	ECTS	30	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S	Th	This module has 2 components; information on courses listed separately for each component. • 08-MT-TF-2-122: K (no information on language and number of weekly contact hours available) • 08-MT-TF-1-122: A (no information on language and number of weekly contact hours available)							
	Method	d of asse		This module has the following 2 assessment components. Unless stated otherwise, students must pass all of these assessment components to pass the module as a whole							
			As	 Assessment component to module component o8-MT-TF-2-122: Kolloquium zur Master-Arbeit 5 ECTS credits, method of grading: numerical grade Abschlusskolloquium (approx. 60 minutes) bestehend aus talk (approx. 30 minutes) and anschließender Diskussion (approx. 30 minutes) Language of assessment: German, English Only after succ. compl. of module component(s): Successful completion of module component o8-MT-TF-1 is a prerequisite for partizipation in module component o8-MT-TF-2. Assessment component to module component o8-MT-TF-1-122: Master-Arbeit 25 ECTS credits, method of grading: numerical grade Master thesis (approx. 50-70 pages) 							
	Additional Information			dditional information lis 08-MT-TF-1-122: Ad 08-MT-TF-2-122:		ch module component. on module duration: 6 mont	hs.				