

Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject Technology of 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: 2009

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:

ASPO2007

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

21-Jul-2009 (2009-43) except for mandatory electives added in Fast Track procedure at a later time

05-Oct-2009 (2009-84)

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 Courses (35 ECTS credits)							
11-E5T-092-m01	Mechanical and Thermal Material Properties						
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level graduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of 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)					
	other prerequisites	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	1 semester	Method of grading	numerical grade	Modul level graduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of 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, 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	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.					
08-PCM4-092-m01	Nanoscale Materials						
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level graduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment	a) written examination (approx. 90 minutes) or b) oral examination (approx. 20 minutes) or c) talk (approx. 40 minutes)					
08-SAM-092-m01	Technology of Sensor and Actor Materials including Smart Fluids						
	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 assessment	written examination (90 minutes)					

o8-PR-092-m01	Research project							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	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						
o8-MKoll-TF-092-m01	Master Thesis' Colloquium							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	K (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	final colloquium (approx. 90 minutes)						
Compulsory Electives (60 ECTS credits)								
General Compulsory Electives (30 ECTS credits)								
11-A3-072-m01	Laboratory and Measurement Technology							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	written examination (approx. 120 minutes)						
	other prerequisites	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.						
	Participants and allocation of places	Only as part of pool of general key skills (ASQ): 15 places. Places will be allocated by lot.						
11-NM-WP-072-m01	Nanomatrix insulation systems and photovoltaics							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + R (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	a) written examination (approx. 90 minutes) or b) talk (approx. 30 minutes) or c) oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or d) project report (approx. 10 pages)						
11-NM-HM-072-m01	Nanomatrix semiconductor materials							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + R (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	a) written examination (approx. 90 minutes) or b) talk (approx. 30 minutes) or c) oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or d) project report (approx. 10 pages)						

11-NM-HP-072-mo1	Nanomatrix Semiconductor Processing							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + R (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	a) written examination (approx. 90 minutes) or b) talk (approx. 30 minutes) or c) oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or d) project report (approx. 10 pages)						
11-NM-BV-072-mo1	Nanomatrix Biophysical Analyzing Systems and Processes							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + R (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	a) written examination (approx. 90 minutes) or b) talk (approx. 30 minutes) or c) oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or d) project report (approx. 10 pages)						
10-M-ODE-082-mo1	Ordinary Differential Equations							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	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.						
o8-FS5-092-mo1	Chemical Nanotechnology - Characterization Techniques and Applications							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	This module comprises 2 module components. Information on courses will be listed separately for each module component. <ul style="list-style-type: none"> o8-FS5-1-092: V (no information on SWS (weekly contact hours) and course language available) o8-FS5-2-092: V (no information on SWS (weekly contact hours) and course language available) 						
	Method of assessment	Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments. <p>Assessment in module component o8-FS5-1-092: Sol-Gel Chemistry 2: Thin Film Processing</p> <ul style="list-style-type: none"> 2 ECTS, Method of grading: numerical grade oral examination (approx. 15 minutes) <p>Assessment in module component o8-FS5-2-092: Application Oriented Charakterization of Colloidal (Molecular) Systems</p> <ul style="list-style-type: none"> 3 ECTS, Method of grading: numerical grade oral examination (approx. 20 minutes) 						
o8-FS6-092-mo1	Coating Technology based on Vapour Deposition							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V + P + E (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	written examination (90 minutes)						

08-PS3-092-m01	Applied Spectroscopy 3							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	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 examinations (approx. 60 minutes each) or oral examination of one candidate each (approx. 20 minutes) or oral examination in groups (groups of 2, approx. 30 minutes)						
08-IOC4-092-m01	Organic Chemistry for students of engineering							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	written examination (90 minutes)						
other prerequisites	Registration for assessment: Yes, as specified.							
03-SP1A1-092-m01	Basic principles of cell biology and tissue regeneration							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
Method of assessment	written examination							
03-SP1A2-092-m01	Basics of tissue engineering and quality management							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S + Ü (no information on SWS (weekly contact hours) and course language available)						
Method of assessment	written examination (90 minutes)							
03-SP2A1-092-m01	Materials used for surgical implants							
	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 assessment	written examination (60 minutes) and log (approx. 5 pages), weighted 3:1							
03-SP2A2-092-m01	Materials for biosensors, tissue engineering and tissue regeneration							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S + P (no information on SWS (weekly contact hours) and course language available)						
Method of assessment	written examination (60 minutes) and log (approx. 5 pages), weighted 3:1							
03-SP3A1-092-m01	Carrier materials and devices for therapeutic compounds							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
Method of assessment	written examination (90 minutes)							
03-SP3A2-092-m01	Microsystems for biological and medical applications							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S + P (no information on SWS (weekly contact hours) and course language available)						
Method of assessment	written examination (60 minutes) and log (approx. 5 pages), weighted 3:1							

11-OHL-092-m01	Organic Semiconductor							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of 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, 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	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.							
08-PW1-092-m01	Polymeric Materials 1: Technology of Modifying Polymers							
	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 assessment	written examination (90 minutes)						
08-PW2-092-m01	Polymeric Materials 2: Technology of Modifying Fillers for Polymers							
	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 assessment	written examination (90 minutes)						
08-EEW-092-m01	Electrochemical Energy Storage and Conversion							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V + P + E (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	written examination (90 minutes) and lab report (approx. 5 pages)						
08-MW-092-m01	Structure and Properties of Modern Materials: Experiments and Simulations							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V + S (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	talk (approx. 45 minutes)						
08-OF-092-m01	Organic functional materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	written examination (90 minutes)						
10-I-DB2-092-m01	Data bases 2							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	written examination (50 minutes) or oral examination (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes)						

10-I-EL-092-m01	E-Learning							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	written examination (50 minutes) or oral examination (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes)						
10-I-IR-092-m01	Information Retrieval							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	a) written examination (approx. 50 minutes) or b) oral examination (one candidate each: approx. 15 minutes, groups of 2: approx. 20 minutes, groups of 3: approx. 25 minutes)						
99-HIS-092-m01	Materials for high voltage insulation and high voltage systems							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	unknown
	Courses	V + Ü + P (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	written examination (approx. 90 minutes)						
99-MSTS-092-m01	Modelling and simulation for technology systems							
	ECTS	5	Duration	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)						
10-M-FAN-072-m01	Introduction to Functional Analysis							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	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.						
	Referred to in LPO I	§ 73 (1) 1. Mathematik Analysis						

10-M-COMg-o82-mo1	Computational Mathematics, advanced							
	ECTS	4	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	Ü + V (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	project in the form of programming exercises (type and expenditure of time to be specified by the lecturer 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	§ 73 (1) 5. Mathematik Angewandte Mathematik							
10-M-NM1-o82-mo1	Numerical Mathematics 1							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	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.						
Referred to in LPO I	§ 73 (1) 5. Mathematik Angewandte Mathematik							
10-M-NM2-o82-mo1	Numerical Mathematics 2							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	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.						
Referred to in LPO I	§ 73 (1) 5. Mathematik Angewandte Mathematik							

10-M-PRG-082-m01	Programming course for students of Mathematics and other subjects							
	ECTS	3	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	P (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	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 prerequisites	Admission prerequisite to assessment: regular attendance (attendance monitored, a maximum of one incident of unexcused absence).						
Referred to in LPO I	§ 73 (1) 5. Mathematik Angewandte Mathematik							
10-M-COM-082-m01	Computeroriented Mathematics							
	ECTS	3	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	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	§ 73 (1) 5. Mathematik Angewandte Mathematik							
08-PCM5-102-m01	Physical chemistry of supramolecular assemblies							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	S + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	written examination (90 minutes) and/or oral examination of one candidate each (20 minutes) and/or talk (30 minutes) Language of assessment: German or English						
08-NT-122-m01	Chemically and bio-inspired Nanotechnology for Material Synthesis							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	This module comprises 2 module components. Information on courses will be listed separately for each module component. <ul style="list-style-type: none"> o8-NT-1-122: V (no information on SWS (weekly contact hours) and course language available) o8-NT-2-122: V (no information on SWS (weekly contact hours) and course language available) 						
	Method of assessment	Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments. <p>Assessment in module component o8-NT-1-122: Sol-Gel Chemistry 1: Fundamentals</p> <ul style="list-style-type: none"> 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) <p>Assessment in module component o8-NT-2-122: From Biomineralisation to biologically inspired Materials Synthesis</p> <ul style="list-style-type: none"> 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) 						

Focus Area (30 ECTS credits)							
Focus Topic A: Bio-compatible materials (30 ECTS credits)							
03-SP1A1-092-m01	Basic principles of cell biology and tissue regeneration						
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level graduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)					
Method of assessment		written examination					
03-SP1A2-092-m01	Basics of tissue engineering and quality management						
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level graduate
	Courses	S + Ü (no information on SWS (weekly contact hours) and course language available)					
Method of assessment		written examination (90 minutes)					
03-SP2A1-092-m01	Materials used for surgical implants						
	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 assessment		written examination (60 minutes) and log (approx. 5 pages), weighted 3:1					
03-SP2A2-092-m01	Materials for biosensors, tissue engineering and tissue regeneration						
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level graduate
	Courses	S + P (no information on SWS (weekly contact hours) and course language available)					
Method of assessment		written examination (60 minutes) and log (approx. 5 pages), weighted 3:1					
03-SP3A1-092-m01	Carrier materials and devices for therapeutic compounds						
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level graduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)					
Method of assessment		written examination (90 minutes)					
03-SP3A2-092-m01	Microsystems for biological and medical applications						
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level graduate
	Courses	S + P (no information on SWS (weekly contact hours) and course language available)					
Method of assessment		written examination (60 minutes) and log (approx. 5 pages), weighted 3:1					
Focus Topic B: Technical Materials (30 ECTS credits)							
11-NM-WP-072-m01	Nanomatrix insulation systems and photovoltaics						
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level undergraduate
	Courses	V + R (no information on SWS (weekly contact hours) and course language available)					
Method of assessment		a) written examination (approx. 90 minutes) or b) talk (approx. 30 minutes) or c) oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or d) project report (approx. 10 pages)					

11-NM-HM-072-mo1	Nanomatrix semiconductor materials							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V + R (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	a) written examination (approx. 90 minutes) or b) talk (approx. 30 minutes) or c) oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or d) project report (approx. 10 pages)						
11-OHL-092-mo1	Organic Semiconductor							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of 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, 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	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.							
o8-PW1-092-mo1	Polymeric Materials 1: Technology of Modifying Polymers							
	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 assessment	written examination (90 minutes)							
o8-PW2-092-mo1	Polymeric Materials 2: Technology of Modifying Fillers for Polymers							
	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 assessment	written examination (90 minutes)							
o8-EEW-092-mo1	Electrochemical Energy Storage and Conversion							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V + P + E (no information on SWS (weekly contact hours) and course language available)						
Method of assessment	written examination (90 minutes) and lab report (approx. 5 pages)							
o8-MW-092-mo1	Structure and Properties of Modern Materials: Experiments and Simulations							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V + S (no information on SWS (weekly contact hours) and course language available)						
Method of assessment	talk (approx. 45 minutes)							
o8-OF-092-mo1	Organic functional materials							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	V (no information on SWS (weekly contact hours) and course language available)						
Method of assessment	written examination (90 minutes)							

Thesis (25 ECTS credits)								
o8-MT-TF-092-m01	Master-Thesis							
	ECTS	25	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses	no courses assigned						
	Method of assessment	written thesis Language of assessment: German, English						
	other prerequisites	Registration for assessment on a continuous basis as agreed upon with supervisor.						