Julius-Maximilians-
UNIVERSITÄT
WÜRZBURG

Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject Nanostructure Technology as a Bachelor's with 1 major

with the degree "Bachelor of Science" (180 ECTS credits)

Responsible: Faculty of Physics and Astronomy

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:

ASPO2009

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

28-Nov-2012 (2012-184) except for mandatory electives added in Fast Track procedure at a later time

04-Nov-2014 (2014-72)

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 (92 ECTS credits)								
Nanostructure Technology (NP) (10 ECTS credits)								
11-EIN-092-m01	**Introduction to Nanoscience**							
	ECTS	6	Duration	2 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise specified)					
	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.					
	Participants and allocation of places		Only as part of pool of general key skills (ASQ): 15 places. Places will be allocated by lot.					
11-HSN-122-m01	**Advanced Seminar Nanostructure Technology**							
	ECTS	4	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		talk (approx. 30 to 45 minutes) with discussion Language of assessment: German or English					
	other prerequisites		Admission prerequisite to assessment: regular attendance and successful preparation of seminar presentation. 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.					

<table>
<tr><th colspan="9">Chemistry (CH) (10 ECTS credits)</th></tr>
<tr><td rowspan="4">08-CP1-102-m01</td><td colspan="8">General Chemistry for Physics and Engineers</td></tr>
<tr><td>ECTS</td><td>10</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td colspan="2">Courses</td><td colspan="6">This module comprises 3 module components. Information on courses will be listed separately for each module component.
• 08-IOC-1-072: V (no information on SWS (weekly contact hours) and course language available)
• 08-CP1-3-072: P (no information on SWS (weekly contact hours) and course language available)
• 08-CP1-1-102: V (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td colspan="2">Method of assessment</td><td colspan="6">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.

Assessment in module component 08-IOC-1-072: Organic Chemistry for students of medicine, biomedicine, dental medicine, engineering and natural science
• 3 ECTS, Method of grading: numerical grade
• written examination (approx. 60 minutes)
Assessment in module component 08-CP1-3-072: General and Analytical Chemistry (lab)
• 2 ECTS, Method of grading: (not) successfully completed
• for each experiment: Vortestate (pre-experiment exams, approx. 10 minutes each), assessment of practical performance (log, 2 to 5 pages), Nachtestate (post-experiment exams, approx. 10 minutes each)
• Assessment offered: once a year, summer semester
• Only after successful completion of module components: Successful completion of module component 08-CP1-1 is a prerequisite for participation in module component 08-CP1-3.
Assessment in module component 08-CP1-1-102: Principles of Inorganic Chemistry for Physics and Engineering Majors
• 5 ECTS, Method of grading: numerical grade
• written examination (approx. 90 minutes)</td></tr>
</table>

Experimental Physics (EX) (32 ECTS credits)								
11-KP-092-m01	**Classical Physics (Mechanics, Thermodynamics, Waves, Oscillations, Electricity, Magnetism and Optics)**							
	ECTS	16	Duration	2 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		Klassische Physik 1 (Mechanik, Wellen, Wärme) (Classical Physics 1 (Mechanics, Waves, Heat)): V (4 weekly contact hours) + Ü (2 weekly contact hours), once a year (winter semester) Klassische Physik 2 (Elektromagnetismus, Optik) (Classical Physics 2 (Electromagnetism, Optics)): V (4 weekly contact hours) + Ü (2 weekly contact hours), once a year (summer semester)					
	Method of assessment		This module has the following assessment components 1. Topics covered in lectures and exercises in part 1 (Klassische Physik 1 (Classical Physics 1)): written examination (approx. 120 minutes). 2. Topics covered in lectures and exercises in part 2 (Klassische Physik 2 (Classical Physics 2)): written examination (approx. 120 minutes). 3. Topics covered in lectures and exercises in parts 1 and 2: oral examination of one candidate each (approx. 30 minutes, usually chosen) or written examination (approx. 120 minutes). Assessment component 3 will be offered in German; English if agreed upon with examiner(s). Successful completion of approx. 50% of practice work each is a prerequisite for admission to assessment components 1 and 2. To qualify for admission to assessment component 3, students must pass assessment component 1 and/or 2. Students are highly recommended to attend both courses Klassische Physik 1 (Classical Physics 1) and Klassische Physik 2 (Classical Physics 2). The topics discussed in these two courses will be covered in assessment component 3. Students must register for assessment components 1 through 3 online (details to be announced). To pass this module, students must first pass assessment component 1 or 2 and must then pass assessment component 3. The grade achieved in assessment component 1 or 2 (whichever is better) and the grade achieved in assessment component 3 will each count 50% towards the overall grade awarded for the module.					
	other prerequisites		Bridge course Mathematische Rechenmethoden der Physik (Mathematical Methods of Physics) for first-semester students.					

11-KM-092-m01	**Condensed Matter (Quanta, Atoms, Molecules, Solid State Physics)**							
	ECTS	16	Duration	2 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		Kondensierte Materie 1 (Quanten, Atome, Moleküle) (Condensed Matter 1 (Quanta, Atoms, Molecules)): V (4 weekly contact hours) + Ü (2 weekly contact hours), once a year (winter semester) Kondensierte Materie 2 (Festkörperphysik 1) (Condensed Matter 2 (Solid State Physics)): V (4 weekly contact hours) + Ü (2 weekly contact hours), once a year (summer semester)				
	Method of assessment		This module has the following assessment components 1. Topics covered in lectures and exercises in part 1 (Kondensierte Materie 1 (Condensed Matter 1)): written examination (approx. 120 minutes). 2. Topics covered in lectures and exercises in part 2 (Kondensierte Materie 2 (Condensed Matter 2)): written examination (approx. 120 minutes). 3. Topics covered in lectures and exercises in parts 1 and 2: oral examination of one candidate each (approx. 30 minutes, usually chosen) or written examination (approx. 120 minutes). Assessment component 3 will be offered in German; English if agreed upon with examiner(s). Successful completion of approx. 50% of practice work each is a prerequisite for admission to assessment components 1 and 2. To qualify for admission to assessment component 3, students must pass assessment component 1 and/or 2. Students are highly recommended to attend both courses Kondensierte Materie 1 (Condensed Matter 1) and Kondensierte Materie 2 (Condensed Matter 2). The topics discussed in these two courses will be covered in assessment component 3. Students must register for assessment components 1 through 3 online (details to be announced). To pass this module, students must first pass assessment component 1 or 2 and must then pass assessment component 3. The grade achieved in assessment component 1 or 2 (whichever is better) and the grade achieved in assessment component 3 will each count 50% towards the overall grade awarded for the module.				

Lab Course Physics (PP) (13 ECTS credits)
Modules in this area will not factor into the overall grade of the Bachelor's degree.

11-P-PA-112-m01	**Lab Course A**							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	Auswertung von Messungen und Fehlerrechnung (Measurements and Data Analysis): V (1 weekly contact hour) + Ü (1 weekly contact hour), once a year (winter semester) Beispiele aus Mechanik, Wärmelehre und Elektrik (Examples from Mechanics, Thermodynamics and Electricity, BAM): P (2 weekly contact hours)						
	Method of assessment	This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 120 minutes) 2. Lab course: a) Preparing, performing and evaluating the experiments will be considered successfully completed if a Testat (exam) is passed. b) Talk (with discussion) to test the students' understanding of the physics-related contents of the course (approx. 30 minutes). Successful completion of approx. 50% of practice work is a prerequisite for admission to assessment component 1 . To pass assessment component 2, students must pass both elements a) and b). Students will be offered one opportunity to retake element a) and/or element b). Students must register for assessment components 1 and 2 online (details to be announced). Students must attend Auswertung von Messungen und Fehlerrechnung (Measurements and Data Analysis) before attending Beispiele aus Mechanik, Wärmelehre und Elektrik (Examples from Mechanics, Thermodynamics and Electricity). To pass this module, students must pass both assessment component 1 and assessment component 2.						
	Referred to in LPO I	§ 53 (1) 1. a) Physik Mechanik, Wärmelehre, Elektrizitätslehre, Optik, der speziellen Relativitätstheorie § 53 (1) 1. c) Physik physikalische Grundpraktika § 77 (1) 1. a) Physik "Grundlagen der Experimentalphysik" § 77 (1) 1. d) Physik "physikalische Praktika"						
11-P-NB-122-m01	**Laboratory Course Nanostructure Technology B**							
	ECTS	4	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	Preparing, performing and evaluating (lab report) the experiments will be considered successfully completed if a Testat (exam) is passed. Experiments that were not successfully completed can be repeated once. Talk (with discussion; approx. 30 minutes) to test the candidate's understanding of the physics-related contents of the module component. Talks that were not successfully completed can be repeated once. Both components of the assessment have to be successfully completed.						
	Modules successfully completed	11-P-PA						

11-P-NC-122-m01	**Advanced Laboratory Course Nanostructure Technology C**							
	ECTS	4	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		Preparing, performing and evaluating (lab report) the experiments will be considered successfully completed if a Testat (exam) is passed. Experiments that were not successfully completed can be repeated once. Talk (with discussion; approx. 30 minutes) to test the candidate's understanding of the physics-related contents of the module component. Talks that were not successfully completed can be repeated once. Both components of the assessment have to be successfully completed.					
	Modules successfully completed		11-P-PA and 11-P-NB					
Mathematics (M) (24 ECTS credits)								
10-M-NST12-092-m01	**Mathematics 1 and 2 for students in Nanostructure Technology**							
	ECTS	16	Duration	2 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		This module comprises 2 module components. Information on courses will be listed separately for each module component. • 10-M-NST12-1-092: V + Ü (no information on SWS (weekly contact hours) and course language available) • 10-M-NST12-2-092: V + Ü (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. **Assessment in module component 10-M-NST12-1-092:** Mathematics 1 for students of Nanostructure Technology Mathematics 1 for students of Nanostructure Technology • 8 ECTS, Method of grading: (not) successfully completed • written examination (approx. 90 to 120 minutes, usually chosen) or oral examination of one candidate each (approx. 20 minutes) or 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. **Assessment in module component 10-M-NST12-2-092:** Mathematics 2 for students of Nanostructure Technology Mathematics 2 for students of Nanostructure Technology • 8 ECTS, Method of grading: numerical grade • written examination (approx. 90 to 120 minutes, usually chosen) or oral examination of one candidate each (approx. 20 minutes) or 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.					
	other prerequisites		By way of exception, additional prerequisites are listed in the section on assessments.					

11-MPI3-062-m01	**Mathematics 3 for students of Physics and Engineering**							
	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. 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.					

Theoretical Physics (TP) (16 ECTS credits)
Students interested in participating in the FOKUS programme must take modules 11-TQM-F-2, 11-STE-1 and 11-QSN-P. Module component 11-TQM-F-2, which will prepare students for studying in the Master's programme FOKUS, will be offered in the form of a block course between the lecture periods of the winter and summer semesters (for students who took up studies in winter semester, block course will be offered between third and fourth subject semester).

11-TP-N-122-m01 **Theoretical Physics for Students of Nanostructure Technology**

ECTS	16	Duration	2 semester	Method of grading	numerical grade	Modul level	undergraduate

Courses	Theoretische Physik 1 (Lehramt, Nanostrukturtechnik) (Theoretical Physics 1 (Teaching Degree, Nanostructure Technology)): V (4 weekly contact hours) + Ü (2 weekly contact hours), once a year (summer semester) Theoretische Physik 2 (Lehramt, Nanostrukturtechnik) (Theoretical Physics 2 (Teaching Degree, Nanostructure Technology)): V (4 weekly contact hours) + Ü (2 weekly contact hours), once a year (winter semester) Statistische Mechanik und Thermodynamik (Statistical Mechanics and Thermodynamics): V (4 weekly contact hours) + Ü (2 weekly contact hours), once a year (winter semester) Quantenmechanik (Quantum Mechanics): V (4 weekly contact hours) + Ü (2 weekly contact hours), once a year (summer semester) Quantenmechanik für FOKUS-Studierende (Quantum Mechanics for FOKUS Students): V (4 weekly contact hours) + Ü (2 weekly contact hours) + T (1 weekly contact hour), once a year (block taught during semester break between summer and winter semester)
Method of assessment	This module has the following assessment components 1. Topics covered in lectures and exercises in part 1 (Theoretische Physik 1 (Theoretical Physics 1)): written examination (approx. 120 minutes, usually chosen) or oral examination of one candidate each (approx. 30 minutes). 2. Topics covered in lectures and exercises in part 2 (Theoretische Physik 2 (Theoretical Physics 2)): written examination (approx. 120 minutes, usually chosen) or oral examination of one candidate each (approx. 30 minutes). 3. Topics covered in lectures and exercises in part 1 (Statistische Mechanik und Thermodynamik (Statistical Mechanics and Thermodynamics)): written examination (approx. 120 minutes, usually chosen) or oral examination of one candidate each (approx. 30 minutes). 4. Topics covered in lectures and exercises in part 2 (Quantenmechanik (Quantum Mechanics)): written examination (approx. 120 minutes, usually chosen) or oral examination of one candidate each (approx. 30 minutes). 5. Topics covered in lectures and exercises in part 2 (Quantenmechanik für FOKUS-Studierende (Quantum Mechanics for FOKUS Students)): written examination (approx. 120 minutes, usually chosen) or oral examination of one candidate each (approx. 30 minutes). 6. Topics covered in lectures and exercises in parts 1 and 2 (assessment in modules Theoretische Physik (Theoretical Physics) 1 and 2): oral examination of one candidate each (approx. 30 minutes, usually chosen) or written examination (approx. 120 minutes). 7. Topics covered in lectures and exercises in parts 1 and 2 (assessment in module Theoretische Physik für Studierende der Nanostrukturtechnik (Theoretical Physics for Students of Nanostructure Technology)): oral examination of one candidate each (approx. 30 minutes, usually chosen) or written examination (approx. 120 minutes). Successful completion of approx. 50% of practice work each is a prerequisite for admission to assessment components 1 through 5. To qualify for admission to assessment component 6, students must pass assessment component 1 and/or 2. To qualify for admission to assessment component 7, students must pass assessment component 3 and/or 4 and/or 5. Students are highly recommended to attend both courses Theoretische Physik 1 (Theoretical Physics 1) and Theoretische Physik 2 (Theoretical Physics 2) or, respectively, both courses Statistische Mechanik (Statistical Mechanics) and Thermodynamik und Quantenmechanik (Thermodynamics and Quantum Mechanics). The topics discussed in these courses will be covered in assessment component 6 or, respectively, assessment component 7.

	To pass this module, students must first pass assessment component 1 or 2 and must then pass assessment component 6 or students must first pass assessment component 3, 4 or 5 and must then pass assessment component 7. The grade achieved in assessment component 1 or 2 (whichever is better) or, respectively, in assessment component 3, 4 or 5 (whichever is the best) and the grade achieved in assessment component 6 or, respectively, assessment component 7 will each count 50% towards the overall grade awarded for the module.

Compulsory Electives (30 ECTS credits)
Students interested in participating in the FOKUS programme must take modules 11-TM and 11-ED in the sub-area Theoretische Physik (Theoretical Physics).

Nanostructure Technology

11-A2-092-m01	**Electronics**							
	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. 90 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 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.					
	Participants and allocation of places		Only as part of pool of general key skills (ASQ): 15 places. Places will be allocated by lot.					
11-SPD-102-m01	**Semiconductor Physics and Devices**							
	ECTS	6	Duration	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		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 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.					

11-HLF-092-m01	**Semiconductor Lasers - Principles and Current Research**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (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. 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 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.					
11-HNS-092-m01	**Semiconductor Nanostructures**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (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. 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 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.					

11-QTH-102-m01	**Quantum Transport in Semiconductor Nanostructures**							
	ECTS	6	Duration	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		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 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.					
11-NAN-092-m01	**Nanoanalytics**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (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. 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 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.					

11-IEM-111-m01	**Introduction to Electron Microscopy**							
	ECTS	4	Duration	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		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 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.					
11-SPI-102-m01	**Spintronics**							
	ECTS	6	Duration	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		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 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.					
11-BXN5-112-m01	**Current Topics in Nanostructure Technology**							
	ECTS	5	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					

11-BXN6-112-m01	**Current Topics in Nanostructure Technology**							
	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					
11-BXN8-112-m01	**Current Topics in Nanostructure Technology**							
	ECTS	8	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					
11-BXP5-112-m01	**Current Topics in Physics**							
	ECTS	5	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					
11-BXP6-112-m01	**Current Topics in Physics**							
	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					

11-BXP8-112-m01	**Current Topics in Physics**							
	ECTS	8	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					
Energy and Material Science Research								
11-ENT-092-m01	**Principles of Energy Technologies**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (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. 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 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.					
11-NTE-092-m01	**Nanotechnology in Energy Research**							
	ECTS	4	Duration	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		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.					
	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.					

11-TDO-092-m01	**Thermodynamics and Economics**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (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. 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 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.					
11-TMS-102-m01	**Introduction to Functional Materials**							
	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. 120 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 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.					

11-BVG-092-m01	**Coating Technologies based on Vapour Deposition**							
	ECTS	5	Duration	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		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.					
	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.					
11-ZMB-112-m01	**Methods for non-destructive Characterization of Materials and Components**							
	ECTS	4	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) 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 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.					

11-ZDR-111-m01	**Principles of two- and threedimensional Röntgen imaging**							
	ECTS	6	Duration	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		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.					
	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.					
11-ASL-092-m01	**Applied Superconduction**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (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. 8 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: once a year, winter semester Language of assessment: German, English					
	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.					
08-EEW-122-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		placement report / fieldwork report / report on practical training / report on practical course / project report / report on technical course (approx. 5 pages) and 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). Should a module component comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise specified; should the lecturer want to make changes to the way in which assessments are weighted, he or she must do so by two weeks after the start of the course at the latest and must communicate this to students in an appropriate manner.					
	other prerequisites		Admission prerequisite to assessment: regular attendance of lab course (a maximum of one incident of unexcused absence).					

08-CT-122-m01	**Molecular Materials (Lecture and practical course)**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		This module comprises 2 module components. Information on courses will be listed separately for each module component. • 08-CT-1-122: V + Ü (no information on SWS (weekly contact hours) and course language available) • 08-CT-2-122: P (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. **Assessment in module component 08-CT-1-122:** Molecular Materials (Lecture) Molecular Materials (Lecture) • 5 ECTS, Method of grading: numerical grade • presentation (approx. 30 minutes) and 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). Should a module component comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise specified; should the lecturer want to make changes to the way in which assessments are weighted, he or she must do so by two weeks after the start of the course at the latest and must communicate this to students in an appropriate manner. • Language of assessment: German or English • Other prerequisites: Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence). **Assessment in module component 08-CT-2-122:** Molecular Materials (Practical course) • 5 ECTS, Method of grading: (not) successfully completed • Vortestate (pre-experiment exams, approx. 15 minutes each) and logs (approx. 5 pages each) • Assessment offered: once a year, winter semester • Language of assessment: German or English • Other prerequisites: Admission prerequisite to assessment: regular attendance (minimum 80%) of courses.					
	other prerequisites		By way of exception, additional prerequisites are listed in the section on assessments.					
	Participants and allocation of places		Information on the allocation of places will be listed separately for each module component. • 08-CT-1-122: -- • 08-CT-2-122: Students from the Faculty of Chemistry: no restrictions. Nanostrukturtechnik (Nanostructure Technology): 4. Should there be more than 4 applications from students of Nanostrukturtechnik (Nanostructure Technology), places will be allocated among these applicants as follows: (1) Places will be allocated by lot. (2) 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. (3) A waiting list will be maintained and places re-allocated as they become available.					

08-CTO-122-m01	**Molecular Materials for Students of Nanostructure Technology**							
	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		presentation (approx. 30 minutes) and 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). Should a module component comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise specified; should the lecturer want to make changes to the way in which assessments are weighted, he or she must do so by two weeks after the start of the course at the latest and must communicate this to students in an appropriate manner. Language of assessment: German or English					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					
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. • 08-NT-1-122: V (no information on SWS (weekly contact hours) and course language available) • 08-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. **Assessment in module component 08-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 08-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-PCM3-102-m01	**Nanoscale Materials**							
	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) or oral examination of one candidate each (20 minutes) or talk (30 minutes) Language of assessment: German or English					
08-FS1-122-m01	**Material Science 1 (basic introduction)**							
	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) 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					

<table>
<tr><td>08-FS2-122-m01</td><td colspan="8">Material Science 2 (the material groups)</td></tr>
<tr><td></td><td>ECTS</td><td>5</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>graduate</td></tr>
<tr><td></td><td colspan="3">Courses</td><td colspan="5">V + Ü (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td></td><td colspan="3">Method of assessment</td><td colspan="5">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</td></tr>
<tr><td>08-FS5-101-m01</td><td colspan="8">Chemical Nanotechnology: Analytics and Applications</td></tr>
<tr><td></td><td>ECTS</td><td>5</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>graduate</td></tr>
<tr><td></td><td colspan="3">Courses</td><td colspan="5">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)</td></tr>
<tr><td></td><td colspan="3">Method of assessment</td><td colspan="5">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.

Assessment in module component 08-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 08-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)</td></tr>
<tr><td></td><td colspan="3">Participants and allocation of places</td><td colspan="5">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 re-allocated as they become available.</td></tr>
<tr><td></td><td colspan="3">Additional Information</td><td colspan="5">The course is offered as a block course at the end of the semester.</td></tr>
<tr><td>11-BXN5-112-m01</td><td colspan="8">Current Topics in Nanostructure Technology</td></tr>
<tr><td></td><td>ECTS</td><td>5</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td></td><td colspan="3">Courses</td><td colspan="5">V + R (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td></td><td colspan="3">Method of assessment</td><td colspan="5">a) written examination (approx. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)
Language of assessment: German, English</td></tr>
<tr><td></td><td colspan="3">other prerequisites</td><td colspan="5">Approval by examination committee required.</td></tr>
</table>

11-BXN6-112-m01	**Current Topics in Nanostructure Technology**							
	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					
11-BXN8-112-m01	**Current Topics in Nanostructure Technology**							
	ECTS	8	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					
11-TDOE-141-m01	**Thermodynamics and Economics**							
	ECTS	3	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	graduate
	Courses		V (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. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)					
11-BSV-122-m01	**Image and Signal Processing in Physics**							
	ECTS	6	Duration	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		a) written examination (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. 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.					
	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.					

11-BXP5-112-m01	**Current Topics in Physics**							
	ECTS	5	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					
11-BXP6-112-m01	**Current Topics in Physics**							
	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					
11-BXP8-112-m01	**Current Topics in Physics**							
	ECTS	8	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					
11-BSV-131-m01	**Image and Signal Processing in Physics**							
	ECTS	6	Duration	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		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. 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 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 semesters.					

11-PMM-132-m01	**Physics of Advanced Materials**							
	ECTS	6	Duration	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		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. 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					
Life Science								
11-BMT-092-m01	**Biophysical Measurement Technology in Medical Science**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (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. 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 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.					

<table>
<tr><td>11-LMB-092-m01</td><td colspan="8">Laboratory and Measurement Technology in Biophysics</td></tr>
<tr><td></td><td>ECTS</td><td>6</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>graduate</td></tr>
<tr><td></td><td>Courses</td><td colspan="7">R + V (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td></td><td>Method of assessment</td><td colspan="7">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</td></tr>
<tr><td></td><td>other prerequisites</td><td colspan="7">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.</td></tr>
<tr><td>03-NS-FBM-102-m01</td><td colspan="8">Functional Biomaterials for Students of Nanostructure Technology and Science</td></tr>
<tr><td></td><td>ECTS</td><td>5</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td></td><td>Courses</td><td colspan="7">This module comprises 2 module components. Information on courses will be listed separately for each module component.
03-NS-FBM-1-102: V (no information on SWS (weekly contact hours) and course language available)
03-NS-FBM-2-102: V + P (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td></td><td>Method of assessment</td><td colspan="7">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.

Assessment in module component 03-NS-FBM-1-102: Functional Biomaterials for Students of Nanostructure Technology and Science
3 ECTS, Method of grading: numerical grade
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes)
Assessment in module component 03-NS-FBM-2-102: Special Topics in Functional Biomaterials Special Topics in Functional Biomaterials
2 ECTS, Method of grading: (not) successfully completed
placement report / fieldwork report / report on practical training / report on practical course / project report / report on technical course (approx. 10 to 20 pages)</td></tr>
</table>

<table>
<tr><td rowspan="6">07-4BFM-Z5N-102-m01</td><td colspan="8">Biotechnology 1 for Nanostructure Technology</td></tr>
<tr><td>ECTS</td><td>5</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td>Courses</td><td colspan="7">This module comprises 2 module components. Information on courses will be listed separately for each module component.
• 07-4BFMZ5N-1-102: P (no information on SWS (weekly contact hours) and course language available)
• 07-4BFMZ5N-2-102: S (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td>Method of assessment</td><td colspan="7">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.

Assessment in module component 07-4BFMZ5N-1-102: Biotechnology 1 Laboratory Practice for Nanostructure Technology
• 4 ECTS, Method of grading: numerical grade
• placement report / fieldwork report / report on practical training / report on practical course / project report / report on technical course (approx. 10 to 20 pages)
• Assessment offered: once a year, summer semester
• Other prerequisites: Admission prerequisite to assessment: regular attendance of placement.
Assessment in module component 07-4BFMZ5N-2-102: Biotechnology 1 Seminar für Nanostructure Technology
• 1 ECTS, Method of grading: (not) successfully completed
• presentation/seminar presentation (approx. 20 to 30 minutes)
• Assessment offered: once a year, summer semester</td></tr>
<tr><td>other prerequisites</td><td colspan="7">By way of exception, additional prerequisites are listed in the section on assessments.</td></tr>
<tr><td>Participants and allocation of places</td><td colspan="7">Number of places: 2. Should the number of applications exceed the number of available places, places will be allocated by lot. 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. When places are allocated by lot, 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.</td></tr>
<tr><td rowspan="6">07-4BF-PS2N-102-m01</td><td colspan="8">Membrane Biology for advanced students for Nanostructure Technology</td></tr>
<tr><td>ECTS</td><td>5</td><td>Duration</td><td>1 semester</td><td>Method of grading</td><td>numerical grade</td><td>Modul level</td><td>undergraduate</td></tr>
<tr><td>Courses</td><td colspan="7">V + Ü (no information on SWS (weekly contact hours) and course language available)</td></tr>
<tr><td>Method of assessment</td><td colspan="7">a) written examination (approx. 60 minutes) or b) log (approx. 10 to 20 pages) or c) oral examination of one candidate each (approx. 30 minutes) or d) oral examination in groups of up to 3 candidates (approx. 60 minutes) or e) presentation (approx. 20 to 30 minutes)</td></tr>
<tr><td>other prerequisites</td><td colspan="7">Admission prerequisite to assessment: regular attendance of exercises as well as successful completion of the respective exercises.</td></tr>
<tr><td>Participants and allocation of places</td><td colspan="7">Number of places: 2. Should the number of applications exceed the number of available places, places will be allocated by lot. 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. When places are allocated by lot, 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.</td></tr>
</table>

07-4S1M-Z4N-102-m01	**Methods in Biotechnology for Nanostructure Technology**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		This module comprises 2 module components. Information on courses will be listed separately for each module component. • 07-4S1MZ4N-1-102: V (no information on SWS (weekly contact hours) and course language available) • 07-4S1MZ4N-2-102: S (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. **Assessment in module component 07-4S1MZ4N-1-102:** Methods in Biotechnology for Nanostructure Technology • 3 ECTS, Method of grading: numerical grade • written examination (approx. 20 minutes) **Assessment in module component 07-4S1MZ4N-2-102:** Seminar Methods in Biotechnology for Nanostructure Technology • 2 ECTS, Method of grading: (not) successfully completed • presentation/seminar presentation (approx. 15 to 20 minutes) • Assessment offered: once a year, summer semester					
	Participants and allocation of places		Number of places: 2. Should the number of applications exceed the number of available places, places will be allocated by lot. 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. When places are allocated by lot, 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.					
07-4S1M-Z5N-102-m01	**Molecular Biotechnology for Nanostructure Technology**							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		This module comprises 2 module components. Information on courses will be listed separately for each module component. • 07-4S1MZ5N-1-102: V (no information on SWS (weekly contact hours) and course language available) • 07-4S1MZ5N-2-102: S (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. **Assessment in module component 07-4S1MZ5N-1-102:** Aspects of Modern Biotechnology for Nanostructure Technology • 3 ECTS, Method of grading: numerical grade • written examination (approx. 30 minutes) **Assessment in module component 07-4S1MZ5N-2-102:** Seminar Modern Biotechnology for Nanostructure Technology • 2 ECTS, Method of grading: (not) successfully completed • presentation/seminar presentation (approx. 15 to 20 minutes) • Assessment offered: once a year, summer semester					
	Participants and allocation of places		Number of places: 2. Should the number of applications exceed the number of available places, places will be allocated by lot. 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. When places are allocated by lot, 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.					

07-BTNST-102-m01	**Basics in Biotechnology**							
	ECTS	2	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		written examination (approx. 30 minutes)					
	other prerequisites		According to Section 22 Subsection 8 ASPO (general academic and examination regulations), written examinations can consist entirely or partly of multiple choice questions. If the selected method of assessment includes multiple choice questions, students will have to be informed about this in due time. A minimum of two examiners will compile the set of questions and answers in accordance with Section 16 Subsection 1 ASPO (general academic and examination regulations). They will also determine which answers are to be considered correct. The part of the examination consisting of multiple choice questions will be considered successfully completed if a) a total of a minimum of 60% of the questions asked was answered correctly or if b) a minimum of 50% of questions was answered correctly and the number of questions answered correctly by the examination candidate is no more than 15% lower than the average number of questions answered correctly by students that took the respective examination for the first time. Examination candidates that have correctly answered the minimum number of questions required for successful completion of the examination as specified in sentence 5 will be awarded, in the part of the examination consisting of multiple choice questions, the grade sehr gut (excellent) if they have correctly answered a minimum of 75%, the grade gut (good) if they have correctly answered a minimum of 50% but less than 75%, the grade befriedigend (satisfactory) if they have correctly answered a minimum of 25% but less than 50%, the grade ausreichend (sufficient) if they have correctly answered less than 25% of the rest of the questions asked. When students are informed about the results of the examination, the number of correctly answered questions that was required for successful completion of the examination, the number of questions asked and the average number of questions answered correctly by the reference group mentioned under b) must be communicated to them via the University's notice boards or in another appropriate manner.						

07-4S1M-Z6-102-m01	**Special Bioinformatics 1**							
	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		log (approx. 10 to 20 pages) Language of assessment: German or English					
	other prerequisites		Admission prerequisite to assessment: regular attendance of exercises and successful completion of the respective exercises as specified at the beginning of the course.					
	Participants and allocation of places		Number of places: 20. Should the number of applications exceed the number of available places, places will be allocated as follows: Places will primarily be allocated to students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits. 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.						

07-4S1M-Z1-102-m01	**Basics in Light- and Electron-Microscopy**							
	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. 30 to 60 minutes)					
	other prerequisites		Admission prerequisite to assessment: regular attendance of exercises and successful completion of the respective exercises as specified at the beginning of the course.					
	Participants and allocation of places		Number of places: 18. Should the number of applications exceed the number of available places, places will be allocated as follows: Places will primarily be allocated to students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits. 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.						

07-5S2M-Z4-102-m01	**Specific Biotechnology 2**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		Ü + S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		methods of assessment: a) written examination (approx. 45 to 60 minutes) or b) log (approx. 10 to 20 pages) or c) oral examination of one candidate each (approx. 30 minutes) or d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate) or e) presentation (approx. 20 to 30 minutes); students will be informed about the method and length of the assessment prior to the course					
	other prerequisites		Admission prerequisite to assessment: regular attendance of exercises and seminar as well as successful completion of the respective exercises as specified at the beginning of the course.					
	Participants and allocation of places		Number of places: 18. Should the number of applications exceed the number of available places, places will be allocated as follows: Places will primarily be allocated to students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits. 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.					

08-BC-092-m01	**Biochemistry**							
	ECTS	6	Duration	2 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V + Ü + V + Ü (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		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)					
	other prerequisites		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					
08-BC-LAGY-092-m01	**Biochemistry (teaching degree for secondary schools)**							
	ECTS	3	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) 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		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).					
	Referred to in LPO I		§ 62 (1) 2. Chemie "Organische und Bioorganische Chemie"					
11-BXN5-112-m01	**Current Topics in Nanostructure Technology**							
	ECTS	5	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					
11-BXN6-112-m01	**Current Topics in Nanostructure Technology**							
	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					

11-BXN8-112-m01	**Current Topics in Nanostructure Technology**							
	ECTS	8	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					
11-BXP5-112-m01	**Current Topics in Physics**							
	ECTS	5	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					
11-BXP6-112-m01	**Current Topics in Physics**							
	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					
11-BXP8-112-m01	**Current Topics in Physics**							
	ECTS	8	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					

Experimental Physics								
11-PKS-092-m01	**Physics of Complex Systems**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (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. 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 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.					
11-MSS-102-m01	**Methods in Surface Spectroscopy**							
	ECTS	4	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		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 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.					

11-FKS-092-m01	**Solid State Spectroscopy**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (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. 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 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.					
11-HLP-092-m01	**Semiconductor Physics**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (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. 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 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.					

11-MAG-092-m01	**Magnetism**							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (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. 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 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.					
11-BXN5-112-m01	**Current Topics in Nanostructure Technology**							
	ECTS	5	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					
11-BXN6-112-m01	**Current Topics in Nanostructure Technology**							
	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					
11-BXN8-112-m01	**Current Topics in Nanostructure Technology**							
	ECTS	8	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					

11-BXP5-112-m01	**Current Topics in Physics**							
	ECTS	5	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					
11-BXP6-112-m01	**Current Topics in Physics**							
	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					
11-BXP8-112-m01	**Current Topics in Physics**							
	ECTS	8	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					
Theoretical Physics								
11-TM-092-m01	**Theoretical Mechanics**							
	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. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise specified) 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 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.					

11-ED-092-m01	**Theoretical Electrodynamics**							
	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. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise specified) 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 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.					
11-QM2-092-m01	**Quantum Mechanics II**							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		R + V (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. 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 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.					
11-BXN5-112-m01	**Current Topics in Nanostructure Technology**							
	ECTS	5	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					

11-BXN6-112-m01	**Current Topics in Nanostructure Technology**							
	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					
11-BXN8-112-m01	**Current Topics in Nanostructure Technology**							
	ECTS	8	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					
11-BXP5-112-m01	**Current Topics in Physics**							
	ECTS	5	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					
11-BXP6-112-m01	**Current Topics in Physics**							
	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					

11-BXP8-112-m01	**Current Topics in Physics**							
	ECTS	8	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					
Technical Lab Course and Computer-aided Methods								
11-A2-092-m01	**Electronics**							
	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. 90 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 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.					
	Participants and allocation of places		Only as part of pool of general key skills (ASQ): 15 places. Places will be allocated by lot.					
11-PPT-092-m01	**Practical Course Physical Technology of Material Synthesis**							
	ECTS	5	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		Preparing the experiment will be considered successfully completed if an oral test (duration: approx. 15 minutes) prior to the experiment is passed. Performing and evaluating the experiment will be considered successfully completed if a Testat (exam) is passed. An experiment log (approx. 8 pages) is to be prepared. Each component of the assessment can be repeated once in the respective semester. Only if both components of the assessment have been successfully completed in the same semester will the module component be considered successfully completed. Assessment offered: once a year, winter semester					
	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.					

11-A1-092-m01	**Computational Physics**							
	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) 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 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.					
	Participants and allocation of places		Only as part of pool of general key skills (ASQ): 15 places. Places will be allocated by lot.					
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.					
10-M-NUW-122-m01	**Numerical Mathematics 1 for Economathematics**							
	ECTS	10	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 to 180 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.					

10-M-PRG-122-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 (type and expenditure of time to be specified by the lecturer at the beginning of the course) 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.					
10-I-EIN-111-m01	**Introduction to Computer Science for Students of all Faculties**							
	ECTS	10	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 (80 to 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or oral examination in groups of 2 or 3 candidates (30 or 40 minutes respectively)					
	other prerequisites		Admission prerequisite to assessment: academic requirements to be met in exercises as specified at the beginning of the course.					
10-M-COM-122-m01	**Computational Mathematics**							
	ECTS	4	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 (type and expenditure of time to be specified by the lecturer at the beginning of the course) 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.					

10-M-MWR-122-m01	**Modelling and Computational Science**							
	ECTS	10	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 to 180 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.					
11-MPI4-062-m01	**Mathematics 4 for Students of Physics and Engineering**							
	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. 120 minutes)					
11-BXN6-112-m01	**Current Topics in Nanostructure Technology**							
	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					
11-BXN5-112-m01	**Current Topics in Nanostructure Technology**							
	ECTS	5	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					

11-BXN8-112-m01	**Current Topics in Nanostructure Technology**							
	ECTS	8	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English					
	other prerequisites		Approval by examination committee required.					
11-BXP5-112-m01	**Current Topics in Physics**							
	ECTS	5	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					
11-BXP6-112-m01	**Current Topics in Physics**							
	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					
11-BXP8-112-m01	**Current Topics in Physics**							
	ECTS	8	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. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German or English					
	other prerequisites		Approval by examination committee required.					

11-SDC-131-m01	**Statistics, Data Analysis and Computer Physics**							
	ECTS	4	Duration	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		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. 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 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 semesters.					
11-SDC-092-m01	**Statistics, Data Analysis and Computer Physics**							
	ECTS	4	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate
	Courses		R + V (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. 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 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.					
Thesis (20 ECTS credits) The grade awarded for the thesis will count double in the calculation of the overall grade of the Bachelor's degree.								
11-BA-N-072-m01	**Bachelor Thesis Nanostructure Technology**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		no courses assigned					
	Method of assessment		written thesis (approx. 25 pages)					

Subject-specific Key Skills (16 ECTS credits)								
11-P-MR-092-m01	**Mathematical Methods of Physics**							
	ECTS	6	Duration	2 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		Mathematische Rechenmethoden 1 (Mathematical Methods 1): V (2 weekly contact hours) + Ü (1 weekly contact hour), once a year (winter semester) Mathematische Rechenmethoden 2 (Mathematical Methods 2): V (2 weekly contact hours) + Ü (1 weekly contact hour), once a year (summer semester)					
	Method of assessment		This module has the following assessment components 1. Topics covered in lectures and exercises in part 1 (Mathematische Rechenmethoden 1 (Mathematical Methods 1)): exercises or talk (approx. 15 minutes, usually chosen) or written examination (approx. 60 minutes) 2. Topics covered in lectures and exercises in part 2 (Mathematische Rechenmethoden 2 (Mathematical Methods 2)): exercises or talk (approx. 15 minutes, usually chosen) or written examination (approx. 60 minutes) Successful completion of approx. 50% of practice work each is a prerequisite for admission to assessment components 1 and 2. Students must register for assessment components 1 and 2 online (details to be announced). To pass this module, students must pass both assessment component 1 and assessment component 2.					
	Referred to in LPO I		§ 53 (1) 1. a) Physik Mechanik, Wärmelehre, Elektrizitätslehre, Optik, der speziellen Relativitätstheorie § 77 (1) 1. a) Physik "Grundlagen der Experimentalphysik"					
11-IP-092-m01	**Industrial Practical Course Nanostructure Technology**							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		P + S (no information on SWS (weekly contact hours) and course language available)					
	Method of assessment		a) placement report and b) presentation/seminar presentation (approx. 30 to 90 minutes), weighted 1:4 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.					
	Modules successfully completed		11-EIN and 11-KP					
	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.					