

# **Annex SFB**

# Studienfachbeschreibung (subject description, SFB) for the subject Physics 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: 2010

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 U modules in this SFB:

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

Information on assessment procedures:

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

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

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

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

### ASP02009

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

## 19-Jan-2011 (2011-7)

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 Durat		Duration	(in semesters)	Method of grading		Module level					
	Courses		To be spe	o be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y								
	Method of as	ssessm	ent									
	Only after su completion of		ıl if applica	if applicable								
	Other prereq	uisites	if applica	ıble								
	Participants on of places		ocati- if applica	ible								
	Additional in	format	ion if applica	ıble								
	Referred to in	n LPO I	if applica	if applicable (examination regulations for teaching-degree programmes)								

Compulsory Cours	ses (117 ECTS credits)							
Experimental Phy	sics (36 ECTS credits)							
11-KP-092-m01	Classical Physics (Med	hanics, Thermodynamics, Waves, Oscillations, Electricity, Magnetism and Optics)						
	ECTS 16 Duration	on 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	Conder	nsed M	atter (Qua	nta, A	toms, Molecules,	Solid State Physics)						
	ECTS	16	Duration	n	2 semester	Method of grading numerical g	grade	Modul level	undergraduate			
	Course	S		hour: Kond	s) + Ü (2 weekly co Iensierte Materie :	1 (Quanten, Atome, Moleküle) (Cond ontact hours), once a year (winter se 2 (Festkörperphysik 1) (Condensed N once a year (summer semester)	emester)					
	Method	d of ass	essment	1. Topo pro 2. Topo pro 3. Topo	<ul> <li>This module has the following assessment components</li> <li>Topics covered in lectures and exercises in part 1 (Kondensierte Materie 1 (Condensed Matter 1)): written examination (approx. 120 minutes).</li> <li>Topics covered in lectures and exercises in part 2 (Kondensierte Materie 2 (Condensed Matter 2)): written examination (approx. 120 minutes).</li> <li>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).</li> </ul>							
				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 3 will each count 50% towards the overall grade awarded for the module.								
11-KET-092-m01	Nuclea	r and E	lementary		cle Physics							
	ECTS	4	Duration	n	1 semester	Method of grading numerical g	grade	Modul level	undergraduate			
	Course	S		V + Ü	(no information of	on SWS (weekly contact hours) and o	course language av	ailable)				
	Method of assessment other prerequisites			ssment written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; un specified)								
				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 (32 ECTS credits)
For students interested in participating in the FOKUS programme, module 11-TQM-F will replace module 11-TQM. Module component 11-TQM-F-2, which will prepare stu-

						Physics), will be offer ster, block course wil				cture periods of the winter and mester).	
11-STE-092-m01	Statist	ical Med	hanics, T	hermo	dynamics and Elec	trodynamics					
	ECTS	16	Duration	n 2 semester Method of grading numerical grade Mc					Modul level	undergraduate	
	Course			weekl Theor year (	Statistische Mechanik und Thermodynamik (Statistical Mechanics and Thermodynamics): V (4 weekly contact hours) + Ü (2 weekly contact hours), once a year (winter semester) Theoretische Elektrodynamik (Theoretical Electrodynamics): V (4 weekly contact hours) + Ü (2 weekly contact hours), once a year (summer semester)						
	Method	d of asse	essment	<ol> <li>This module has the following assessment components</li> <li>Topics covered in lectures and exercises in part 1 (Statistische Mechanik und Thermodynamik (Statistical Mechanics and Thermodynamics)): written examination (approx. 120 minutes).</li> <li>Topics covered in lectures and exercises in part 2 (Theoretische Elektrodynamik (Theoretical Electrodynamics)): written examination (approx. 120 minutes).</li> <li>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).</li> </ol>							
				Succe 2. Stude and Tl course Stude To pas The gr	essful completion on the are highly recon thermodynamics) and es will be covered ints must register for this module, sturade achieved in as	mmended to attend nd Theoretische Elek in assessment comp or assessment comp idents must first pass	otice work each both courses Strodynamik (Tonent 3. conents 1 throus s assessment of tor 2 (which	th is a prerequisite Statistische Mecha heoretical Electrod  1gh 3 online (details component 1 or 2 a never is better) and	for admission to the result of the result of the the the the result of t	to assessment components 1 and odynamik (Statistical Mechanics copics discussed in these two	
	other p	rerequis	sites	10-M1	10-M1-PHY and 10-M2-PHY or 10-M1-NST and 10-M2-NST						

11-TQM-092-m01	Theore	tical Me	chanics	ınd Quantum Mechani	cs						
	ECTS	16	Duratio	2 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	s	•	Theoretische Mechan	ik (Theoretical Mechanic	cs): V (4 weekly contact hours	) + Ü (2 weekly cor	ntact hours), once a year (winter			
				semester)							
				Quantenmechanik (Quantum Mechanics): V (4 weekly contact hours) + Ü (2 weekly contact hours), once a year (summer semester)							
	Method	d of asse	essment		ollowing assessment co						
				1. Topics covered in le (approx. 120 minut		part 1 (Theoretische Mechani	k (Theoretical Med	chanics)): written examination			
				2. Topics covered in le 120 minutes).	ectures and exercises in	part 2 (Quantenmechanik (Qu	uantum Mechanics	s)): written examination (approx.			
					ectures and exercises in written examination (ap	parts 1 and 2: oral examination prox. 120 minutes).	on of one candidat	e each (approx. 30 minutes,			
							Successful completio 2.	n of approx. 50% of prac	ctice work each is a prerequis	ite for admission t	o assessment components 1 and
					To qualify for admissi highly recommended tum Mechanics). The Students must registe	to attend both courses I topics discussed in thes or for assessment compo	Theoretische Mechanik (Theoret e two courses will be covered onents 1 through 3 online (det	retical Mechanics) I in assessment co ails to be annound	ced).		
				The grade achieved in	assessment componen			ass assessment component 3. eved in assessment component 3			
	other p	rerequi	sites	10-M1-PHY, 10-M2-PH	Y and 11-MPI-3 or 10-M1-	NST, 10-M2-NST and MPI-3					

11-TQM-F-092-m01	Theore	etical Me	echanics a	and Quantum Mechanics	s for FOKUS Students	1	·
	ECTS	16	Duration	2 semester	Method of grading   numerical grade	Modul level	undergraduate
	Course	es		semester) Quantenmechanik für F	k (Theoretical Mechanics): V (4 weekly contact FOKUS-Studierende (Quantum Mechanics for 1 weekly contact hour), once a year (block tau	FOKUS Students): V (4 w	eekly contact hours) + Ü (2 wee-
	Metho	d of ass		<ol> <li>Topics covered in lec (approx. 120 minutes</li> <li>Topics covered in lec KUS Students)): writt</li> <li>Topics covered in lec</li> </ol>	ollowing assessment components ctures and exercises in part 1 (Theoretische Ms).  Ctures and exercises in part 2 (Quantenmechaten examination (approx. 120 minutes).  Ctures and exercises in parts 1 and 2: oral examination (approx. 120 minutes).	anik für FOKUS-Studieren	de (Quantum Mechanics for FO-
				2. To qualify for admission highly recommended to KUS-Studierende (Quassessment component of Students must register To pass this module, storage achieved in a	of approx. 50% of practice work each is a present to assessment component 3, students must o attend both courses Theoretische Mechanik ntum Mechanics for FOKUS Students). The top 3.  If for assessment components 1 through 3 online tudents must first pass assessment component assessment component 1 or 2 (whichever is bounded to the model).	t pass assessment comp (Theoretical Mechanics pics discussed in these t ne (details to be announ ent 1 or 2 and must then poetter) and the grade ach	oonent 1 and/or 2. Students are ) and Quantenmechanik für FO- wo courses will be covered in as- ced). cass assessment component 3.
	Modul comple	es succe eted	essfully	10-M-PHY1 and 10-M-Ph	HY2 or 10-M-NST1 and 10-M-NST2 and 11-TQM	l-1, 11-KP	
	Additio	onal Info	ormation		o study the FOKUS Master's degree programm for FOKUS Students) instead of Quantenmech		

Practical Course B	raktikum (Physics Practical Course) will not factor into the overall grade of the Bachelor's degree.  Physics)
ECTS 6 Dui	ation 1 semester Method of grading (not) successfully completed Modul level undergraduate
Courses	Klassische Physik (Classical Physics, KLP): P (2 weekly contact hours) Elektrizitätslehre und Schaltungen (Electricity and Circuits, ELS): P (2 weekly contact hours)
Method of assessm	<ul> <li>This module has the following assessment components</li> <li>1. Lab course in part 1 (KLP): 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).</li> <li>2. Lab course in part 2 (ELS): 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).</li> <li>Students must register for assessment components 1 and 2 online (registration deadline to be announced).</li> <li>Students will be offered one opportunity to retake element a) and/or element b). To pass an assessment component, they must pass both elements a) and b).</li> <li>To pass this module, students must pass both assessment component 1 and assessment component 2.</li> </ul>
Modules successfu completed	ly 11-P-PA
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. d) Physik "physikalische Praktika"

11-P-PC-P-092-m01	Practic	al Cours	e C (Phys	sics)		1						
	ECTS	6	Duration	ı	1 semester	Method of g	rading	(not) successfu	lly completed	Modul level	undergraduate	
	Course	S		Atom-	Wellenoptik (Physical Optics, WOP): P (2 weekly contact hours) Atom- und Kernphysik (Atomic and Nuclear Physics, AKP): P (2 weekly contact hours) Computer und Messtechnik (Computers and Measurement Technology, CMT): P (2 weekly contact hours)							
	Method	d of asse	essment	1. Lab Tes cou 2. Lab a Te the Stude Stude must To pas	tat (exam) is pass urse (approx. 30 m o course in part 2: estat (exam) is pas course (approx. 3	a) Preparing, peed. b) Talk (with inutes). b) Preparing, peesed. b) Talk (wio minutes). b) Talk (wio minutes). b) Talk (wio minutes). b) Talk (wio minutes). c)	rforming discus rforming th discu compor y to reta	g and evaluating sion) to test the g and evaluating and evaluating assion) to test the nents 1 and 2 on ake element a) ally complete two	students' und g the experime ne students' un uline (registrational/or element o out of the thre	erstanding of the nts will be considerstanding of on deadline to be to). To pass an ee courses.	assessment component, they	
	Module comple	es succe eted	ssfully	11-P-PA and 11-P-PB-P								
	Referred to in LPO I			§ 53 (1) 1. a) Physik Mechanik, Wärmelehre, Elektrizitätslehre, Optik, der speziellen Relativitätstheorie § 53 (1) 1. b) Physik Aufbau der Materie § 77 (1) 1. b) Physik "Fortgeschrittene Experimentalphysik"								

11-P-PA-092-m01	Practic	al Cours	se A	,						
	ECTS	5	Duration	1	semester	Method of grading	(not) successfully con	npleted	Modul level	undergraduate
	Course	S		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	d of asso		1. Topics 2. Lab co (exam	s covered in lectur ourse: a) Preparin	ig, performing and ev	itten examination (appalation) itten examination (appalating the experiment	nts will b	e considered su	ccessfully completed if a Testat ics-related contents of the course
				To pass retake el Students Students Beispiele	assessment complement a) and/or s must register for s must attend Ause aus Mechanik, \	ponent 2, students melement b). It assessment composwertung von Messul Wärmelehre und Elek	nust pass both element nents 1 and 2 online (c	ts a) and details to ing (Meas echanics	b). Students wi be announced) surements and I , Thermodynam	Data Analysis) before attending ics and Electricity).
	Referre	d to in l		§ 53 (1) 1	1. c) Physik physik	anik, Wärmelehre, El kalische Grundprakti iikalische Praktika"	ektrizitätslehre, Optik, ka	der spez	iellen Relativitä	tstheorie

Mathematics (32 E	CTS cred	lits)									
10-M-PHY12-092-	Mather	natics :	and 2 fo	r stude	nts in Physics						
mo1	ECTS	16	Duratio	n	2 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Course	S		This module comprises 2 module components. Information on courses will be listed separately for each module component.  • 10-M-PHY12-1-092: V + Ü (no information on SWS (weekly contact hours) and course language available)  • 10-M-PHY12-2-092: V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Courses		essment	Asses stated Asses Physic • • • • • • • • • • • • • • • • • • •	sment in this modile of the wisten examination of varieties about the assessment at a least sement in module of the witten examination of varieties who meet assessment at a least sement in module of the written examination of varieties about the adeclaration of varieties who meet assessment at a least sement in module of the written examination of varieties about the adeclaration of varieties who meet a declaration of varieties who meet a dents who meet a dents who meet a dents who meet a	component 10-M-PHY1 of grading: (not) succession (approx. 90 to 120 real examination in groups: Certain prerequisite he respective details awill to seek admission the course of the sen all prerequisites will be later date, students wi component 10-M-PHY1 of grading: numerical gion (approx. 90 to 120 real examination in groups: Certain prerequisite he respective details awill to seek admission of the sen all prerequisites will be the respective details awill to seek admission the course of the sen all prerequisites will be respectives will be sent all prerequisites will be selected.	essments in the individe module will require seemodule seemod	dual module component uccessful completion of a for Students in Physics en) or oral examination of x. 30 minutes) and the examiner ify for admission to assess course. Registration for dents have obtained the l put their registration for nent in the current or in ualification for admission and the course. So for admission to assess end, and the examiner ify for admission to assess course. Registration for dents have obtained the l put their registration for dents have obtained the l put their registration for the examiner if years and the light their registration for the examiner if years and the light their registration for the examiner if years and the light their registration for the examiner if years and the light their registration for the light their registration for the examiner if years and the light their registration for the examiner if years and the light their registration for the examiner if years and the light their registration for the examiner if years and the light their registration for the examiner if years and the light their registration for the examiner if years and the light their registration for the examiner if years and the light their registration for the examiner if years and the light their registration for the examiner if years and the light their registration for the examiner if years and the light their registration for the examiner if years and the light their registration for the examiner if years are registration for the examiner	s as specified below. Unless all individual assessments.  Mathematics 1 for Students in of one candidate each (approx.  Sesment. The lecturer will inform the course will be considered qualification for admission to or assessment into effect. Stuthe subsequent semester. For n to assessment anew.  Mathematics 2 für Students in of one candidate each (approx.  Sesment. The lecturer will inform the course will be considered qualification for admission to or assessment into effect. Stuthe subsequent semester. For		
	other p	rerequi	sites	By wa	y of exception, add	ditional prerequisites	are listed in the section	n on assessments.			

11-DFS-092-m01	Mathe	matics 3	and 4 fo	r Physic	cists and Engineers			'	
	ECTS	16	Duratio	n	2 semester	Method of grading	numerical grade	Modul level	undergraduate
	Course	es							a year (winter semester) a year (summer semester)
	Metho	d of ass	essment	1. Top tes) 2. Top	ics covered in lectur	es and exercises in	part 1 (Mathematik 3 (M		examination (approx. 120 minu-
								nination of one candidat	e each (approx. 30 minutes,
								d upon with examiner(s). equisite for admission to	o assessment components 1 and
				highly discus	recommended to at ssed in these two co	tend both courses A urses will be covere	Mathematik 3 (Mathema d in assessment compo	atics 3) and Mathematik onent 3.	onent 1 and/or 2. Students are 4 (Mathematics 4). The topics
				To pas The gr	ss this module, stud ade achieved in ass	ents must first pass essment componen	assessment componen	etter) and the grade achi	eed). ass assessment component 3. eved in assessment component 3
Compulsory Electiv	es (33 E	CTS cre	dits)	·					

Of a total of 33 ECTS credits in the area of mandatory electives, a total of 10 ECTS credits achieved in modules with numerical grading will factor into the overall grade of the Bachelor's degree.

### **Chemistry, Computer Science, Numerical Mathematics**

Abbr.: CIN. Modules covering fundamental principles of chemistry, computer science and numerical mathematics.

10-M-NM1-082-	Numer	ical Mat	thematics	1	_	_					
mo1	ECTS	8	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Course	es		V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Metho	d of ass	essment	written examination (approx. 90 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English if agreed upon with the examiner							
	other prerequisites  Certain prerequisites must be met to qualify for admission to assessment. The lecturer will info tive details at the beginning of the course. Registration for the course will be considered a dec on to assessment. If students have obtained the qualification for admission to assessment ov the lecturer will put their registration for assessment into effect. Students who meet all prerequisites must be met to qualify for admission to assessment on the course will be considered a decon to assessment into effect. Students who meet all prerequisites must be met to qualify for admission to assessment. The lecturer will info tive details at the beginning of the course. Registration for admission to assessment into effect. Students who meet all prerequisites must be met to qualify for admission to assessment into effect. Students who meet all prerequisites must be met to qualify for admission to assessment and admission to assessment and the course will be considered a decon to assessment into effect. Students who meet all prerequisites must be met to qualify for admission to assessment into effect. Students who meet all prerequisites must be met to qualify for admission to assessment into effect. Students who meet all prerequisites must be met to qualify for admission to assessment into effect.								eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as-		
	Referre	ed to in I	LPO I	§ 73 (1) 5. Mathematik Angewandte Mathematik							

10-M-NM2-082- mo1	Numer	ical Ma	thematics	2								
mo1	ECTS	5	Duration	า	1 semester	Method of grading	numerical grade		Modul level	undergraduate		
	Course	es		V + Ü	(no information or	n SWS (weekly contac	t hours) and course l	anguage av	ailable)			
	Metho	d of ass	essment	exam	written examination (approx. 90 minutes); if announced by the lecturer, the written examination can be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English if agreed upon with the examiner							
	other prerequisites			tive d on to the le sessn	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
	Referre	ed to in	LPO I	§ 73 (	1) 5. Mathematik A	Angewandte Mathema	tik					
10-M-PRG-082-	Progra	mming	course fo	stude	ents of Mathematic	cs and other subjects						
mo1	ECTS 3 Duratio			 1	1 semester	Method of grading	(not) successfully	completed	Modul level	undergraduate		
	Courses			P (no	(no information on SWS (weekly contact hours) and course language available)							
	Metho	d of ass	essment			ogramming exercises nt: German, English if			f the course)			
	other prerequisites			Admi: abser		to assessment: regul	ar attendance (attend	dance monit	tored, a maxim	um of one incident of unexcused		
	Referred to in LPO I			§ 73 (	1) 5. Mathematik A	Angewandte Mathema	tik					
10-M-COM-082-	Computeroriented Mathematics											
mo1	ECTS	3	Duration	1	1 semester	Method of grading	(not) successfully	completed	Modul level	undergraduate		
	Course	es		V + Ü	V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Metho	Method of assessment			project in the form of programming exercises (as specified at the beginning of the course) Assessment offered: once a year, summer semester Language of assessment: German, English if agreed upon with the examiner							
	other p	orerequi	isites		Admission prerequisite to assessment: regular attendance of exercises (attendance monitored, a maximum of one incident unexcused absence).							
		ed to in				Angewandte Mathema	tik					
10-I-EIN-072-m01	Introd	uction t	o Compute	er Scie	nce for Students o	f all Faculties						
	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade		Modul level	undergraduate		
	Course	es		V + Ü	+ Ü (no informatio	n on SWS (weekly cor	ntact hours) and cou	rse language	e available)			
	Metho	d of ass	essment		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2: 30 minutes, groups of 3: 40 minutes)							
	other p	orerequi	isites	Admi: cours	•	to assessment: acade	emic requirements to	be met in e	exercises as sp	ecified at the beginning of the		

08-CP1-102-m01	Genera	l Chem	istry for P	hysics a	and Engineers								
	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	S							ely for each module component.				
							S (weekly contact hours) and						
							'S (weekly contact hours) and S (weekly contact hours) and						
	Method	d of ass	essment						ts as specified below. Unless				
	Wethor	a 01 u33	Coomen				e module will require succes						
				Assessment in module component o8-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 o8-CP1-3-072: General and Analytical Chemistry (lab)									
						of grading: (not) succe							
				• for each experiment: Vortestate (pre-experiment exams, approx. 10 minutes each), assessment of practical performance (log a to 5 pages). Nachtestate (past experiment exams, approx. 40 minutes each).									
					mance (log, 2 to 5 pages), Nachtestate (post-experiment exams, approx. 10 minutes each)  • Assessment offered: once a year, summer semester								
					<ul> <li>Only after successful completion of module components: Successful completion of module component o8-CP1-1 is a</li> </ul>								
				prerequisite for participation in module component o8-CP1-3.									
				<b>Assessment in module component o8-CP1-1-102:</b> Principles of Inorganic Chemistry for Physics and Engineering Majors  • 5 ECTS, Method of grading: numerical grade									
				<ul> <li>5 EC15, Method of grading: numerical grade</li> <li>written examination (approx. 90 minutes)</li> </ul>									
11-BXE5-112-m01	Current	t Topics	in Experi	mental Physics									
	ECTS	5	Duration	1 semester Method of grading numerical grade Modul level undergraduate									
	Course				V + R (no information on SWS (weekly contact hours) and course language available)								
	Method	d of ass							r oral examination in groups (ap-				
				prox. 3 on/sen		: 1 to 4 weeks) or d) presentati-							
	other p	rerequi	sites	Approval by examination committee required.									
11-BXE6-112-m01	Current	t Topics	in Experi	mental	Physics								
	ECTS	6	Duration	1 :	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	S		V + R (r	no information or	SWS (weekly contact	hours) and course language	e available)					
į	Method	d of ass	essment						r oral examination in groups (ap-				
				prox. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentati-									
				on/seminar presentation (approx. 30 minutes) Language of assessment: German or English									
				Approval by examination committee required.									
	other prerequisites			Approv	ai by examinatio	ii committee required	•						

11-BXE8-112-m01	Current	t Topics	in Experi	menta	l Physics		<u> </u>					
	ECTS	8	Duration	ı	1 semester	Method of grading numerical grade	Modul level	undergraduate				
	Course	S		V + R	V + R (no information on SWS (weekly contact hours) and course language available)							
	Method	d of asso	essment	prox. on/se	30 minutes per can minar presentation	pprox. 120 minutes) or b) oral examination of one cadidate) or c) project report (approx. 8 to 10 pages, ti (approx. 30 minutes) : German or English						
	other p	rerequi	sites	Appro	pproval by examination committee required.							
11-BXT5-112-m01	Current	t Topics	in Theore	etical F	hysics							
	ECTS	5	Duration	1	1 semester	Method of grading   numerical grade	Modul level	undergraduate				
	Courses			V + R	(no information on	SWS (weekly contact hours) and course language av	ailable)					
	Method of assessment			prox. on/se	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 p	rerequi	sites	Appro	val by examination	committee required.	1					
11-BXT6-112-m01	Current Topics in Theoretical Physics											
	ECTS 6 Duration		Duration	n 1 semester		Method of grading numerical grade	Modul level	undergraduate				
	Course	S		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								
11-BXT8-112-m01	Current	t Topics	in Theore	etical F	hysics		,					
	ECTS	8	Duration	า	1 semester	Method of grading numerical grade	Modul level	undergraduate				
	Course	S		V + R	(no information on	SWS (weekly contact hours) and course language av	ailable)					
	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 p	rerequi	sites	Appro	val by examination	committee required.						

<b>Applied Physics ar</b> Modules offered by	nd Metrology the Faculty in	n the area o	f Ange	wandte Physik und <i>I</i>	Messtechnik (Applied	d Physics and Measureme	ent Technology).		
11-A3-072-m01	Laboratory a				· · · · · · · · · · · · · · · · · · ·	,	<u> </u>		
	ECTS 6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate	
	Courses		V + Ü	(no information on :	SWS (weekly contact	hours) and course langua	age available)		
	Method of a	ssessment	writte	en examination (app	rox. 120 minutes)		- <del>-</del>		
	other prereq	uisites	to qu cours obtai for as quen ew.						
	Participants cation of pla	ces			neral key skills (ASQ)	: 15 places. Places will be	e allocated by lot.		
11-MOE-092-m01	Opto-electro	nic Materia	al Prop	erties					
	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses		V + Ü	(no information on S	SWS (weekly contact	hours) and course langua	age available)		
	Method of as	ssessment	prox.	30 minutes per cand	didate, for modules v		lits approx. 20 minute:	oral examination in groups (aps) or c) project report (approx. 10 ninutes)	
	other prereq	uisites	to qu cours obtai for as	alify for admission to e. Registration for the ned the qualification sessment into effec	o assessment. The le ne course will be con n for admission to as t. Students who mee	cturer will inform student sidered a declaration of w sessment over the course t all prerequisites will be	ts about the respective vill to seek admission e of the semester, the l admitted to assessme	ertain prerequisites must be met e details at the beginning of the to assessment. If students have ecturer will put their registration ent in the current or in the subsefor admission to assessment an-	
11-0HL-092-m01	Organic Sen	niconductor							
	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses	<b>'</b>	V + Ü	(no information on s	SWS (weekly contact	hours) and course langua	age available)	·	
	Method of a	ssessment	prox.	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)					
	other prereq	uisites	to qu cours obtai for as	alify for admission to e. Registration for the ned the qualification sessment into effec	o assessment. The le ne course will be con n for admission to as t. Students who mee	cturer will inform student sidered a declaration of w sessment over the course t all prerequisites will be	ts about the respective vill to seek admission e of the semester, the l admitted to assessme	ertain prerequisites must be met e details at the beginning of the to assessment. If students have ecturer will put their registration ent in the current or in the subsefor admission to assessment an-	

11-ASI-092-m01	Reprod	lucing S	ensors in	Infrar	ed							
	ECTS	3	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	S		V + R	(no information on	SWS (weekly contact	hours) and course language av	ailable)				
	Method	d of ass	essment	prox. to 10 Asses nound 2009.	Language of assessment: German, English							
	other p	rerequi	sites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-ASL-092-m01	Applied Superconduction											
	ECTS	6	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		R + V	R + V (no information on SWS (weekly contact hours) and course language available)							
	Method 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			tive d on to the le sessn	etails at the begin assessment. If stu cturer will put thei nent in the current	ning of the course. Reg dents have obtained t r registration for asses	gistration for the course will be he qualification for admission t sment into effect. Students wh	considered a de to assessment o o meet all prere	form students about the respec- claration of will to seek admissi- ver the course of the semester, quisites will be admitted to as- nts will have to obtain the quali-			

11-EBV-092-m01	Princip	les of Image Pro	cessin	g								
	ECTS	3 Duratio	n	1 semester	Method of grading num	nerical grade	Modul level	undergraduate				
	Courses			<u>`</u>	SWS (weekly contact hour	<u>,                                      </u>						
	Method	l of assessment	prox. to 10 Asses nound	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 p	rerequisites	tive d on to the le sessn	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-ENT-092-m01	Principles of Energy Technologies											
	ECTS	6 Duratio	n	1 semester	Method of grading nun	nerical grade	Modul level	graduate				
	Courses	5	R + V	(no information or	SWS (weekly contact hour	s) and course language av	ailable)					
	Method	l of assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in group prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (apto 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 nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulati 2009.  Language of assessment: German, English									
	other p	rerequisites	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-EPP-092-m01	Introdu	ction to Plas	naphysic	:s							
	ECTS	6 Dura	tion	1 semester	Method of grading numerical grade		Modul level	graduate			
	Courses	s	V + R	(no information o	on SWS (weekly contact hours) and course	language av	ailable)				
	Method	l of assessme	prox. to 10 Asse nour	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 p	rerequisites	tive on to the lo	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 Dura	tion	1 semester	Method of grading numerical grade		Modul level	graduate			
	Courses	S	R + V	(no information o	on SWS (weekly contact hours) and course	language av	ailable)				
	Method	l of assessme	prox. to 10 Asse nour	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulatio 2009.  Language of assessment: German, English							
	other p	rerequisites	tive on to the lo sess	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-KVM-092-m01	Principle	s of Classificat	ion of Pa	atterns									
	ECTS 3	Duration	n	1 semester	Method of grading numerical grade		Modul level	undergraduate					
	Courses				n SWS (weekly contact hours) and course								
	Method o	f assessment	minute ges, tir Assess nounce 2009.	Language of assessment: German, English									
	other pre	requisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.										
11-LVW-092-m01	Introduct	Introduction to LabVIEW  CCTC A Duration to Appendix to the state of t											
	ECTS 6	Duration	n	1 semester	Method of grading numerical grade		Modul level	graduate					
	Courses		V + Ü (ı	no information o	n SWS (weekly contact hours) and course	language av	ailable)						
	Method o	f assessment	prox. 3 to 10 p prox. 6 Assess nounce 2009.	go minutes per ca pages, time to con go minutes) sment offered: Wh ed in due form un	(approx. 90 minutes) or b) oral examination indidate, for modules with less than 4 ECT inplete: 1 to 4 weeks) or d) presentation/sethen and how often assessment will be offer observance of Section 32 Subsection int: German, English	S credits ap eminar prese ered depend	prox. 20 minute entation (approx Is on the metho	es) or c) project report (approx. 8 x. 30 minutes) or e) project (apd of assessment and will be an-					
	other pre	requisites	tive de on to a the lec sessme	etails at the begin assessment. If stu cturer will put thei ent in the current	ust be met to qualify for admission to assining of the course. Registration for the coudents have obtained the qualification for ir registration for assessment into effect. So or in the subsequent semester. For asses assessment anew.	urse will be admission t Students who	considered a de to assessment o o meet all prere	eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as-					

11-TDO-092-m01	Thermo	odynami	cs and Ed	onomi	cs							
	ECTS	6	Duration	1	graduate							
	Courses			R + V	R + V (no information on SWS (weekly contact hours) and course language available)							
				a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English								
	other prerequisites			tive do on to the le sessm	etails at the beginnir assessment. If stude cturer will put their r	ng of the course. Regents have obtained the gents have obtained the gistration for asses in the subsequent s	istration for the course will be c ne qualification for admission to sment into effect. Students who	considered a de o assessment o o meet all prere	form students about the respec- claration of will to seek admissi- ver the course of the semester, quisites will be admitted to as- nts will have to obtain the quali-			

07-4S1M-	Basics in Lig	ght- and Ele	ctron-l	Microscopy		1	
Z1-102-m01	ECTS 5	Duratio	n	1 semester	Method of grading numerical grade	Modul level	undergraduate
	Courses		V + Ü	(no information on	SWS (weekly contact hours) and course langua	ge available)	
	Method of a	ssessment	writte	en examination (app	orox. 30 to 60 minutes)		
	other prerec	quisites	Admi as sp	ssion prerequisite t ecified at the begin	to assessment: regular attendance of exercises aning of the course.	and successful comp	oletion of the respective exercises
	Participants cation of pla		follow dits. Bach will b Bach of the ber of from re will pone cessf waitin prima ked a studi them ding to the lated the sc (5%): achie achie amor catio	ws: Places will prima Should the module elor's degree subject e allocated to stude elor's degree subject e application-oriente f places available in the other quota. Should the a uniform regul nt that are concernefully completed at leng list will be maintairly be allocated according to the nunes or of all module of atik (Mathematics)) to their average grade ir total number of East he sum of these ame ranking, places are ranking, places e Places will be allocated in modules/	nould the number of applications exceed the number of applications exceed the number of be used in other subjects, there will be two quoon of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits and 5 ents of the Bachelor's degree subject Biologie (Ects Computational Mathematics and point of the subject Biology (as well as potentially to study on one quota exceed the number of applications, ould there be, within one module component, so lation for the courses of one module component of the respectance of the allocated in a standardised procedure east one other module component of the respectance and places re-allocated as they become a coording to the applicants' previous academic according to the application. This will be done as de weighted according to the number of ECTS credits achieved (quantitative ranking). The two rankings, and places will be allocated according to the qualitative ranking to the following quotas: Quota a cated according to the following quotas: Quota and allocated by lot. Quota 2 (25% of places): number of subject semesters, places we module be used only in the Bachelor's degree and ording to the selection process of group 1.	degree subject Biologitas: 95% of places visco of places (a mining Biology) with 60 ECTS k (Mathematics), each dents of other 'import the remaining places between a courses with the second this case, places in this procedure, at ive module will be grailable. Selection procedure with the remaining Chemie (follows: First, applicated the conding to this third reach and the conding or otherwise or displaces): to ong applicants with the per of subject semestable allocated by lower services and the condition of the c	gie (Biology) with 180 ECTS crevill be allocated to students of the mum of one participant in total) S credits and to students of the ch with 180 ECTS credits, as part ring' subjects). Should the numes will be allocated to applicants a restricted number of places, these on all courses of a module comapplicants who already have sucgiven preferential consideration. A process group 1 (95%): Places will be purpose, applicants will be randall assessments taken during their (Chemistry), Physik (Physics), Manants will be ranked, firstly, accornking) and, secondly, according in a third ranking will be calculating. Among applicants with by lot. Selection process group 2 tal number of ECTS credits already the same number of ECTS credits ters of the respective applicant; ot. Quota 3 (25% of places): allo-

07-4S1M-Methods in Biotechnology Z4-102-m01 **ECTS** 5 Duration 1 semester Method of grading | numerical grade Modul level undergraduate This module comprises 2 module components. Information on courses will be listed separately for each module component. Courses • 07-4S1MZ4-1-102: V (no information on SWS (weekly contact hours) and course language available) • o7-4S1MZ4-2-102: S (no information on SWS (weekly contact hours) and course language available) Assessment in this module comprises the assessments in the individual module components as specified below. Unless Method of assessment stated otherwise, successful completion of the module will require successful completion of all individual assessments. Assessment in module component 07-4\$1MZ4-1-102: Methods in Biotechnology (lecture) • 3 ECTS, Method of grading: numerical grade • written examination (approx. 30 minutes) Assessment in module component 07-451MZ4-2-102: Methods in Biotechnology - Seminar • 2 ECTS, Method of grading: (not) successfully completed presentation (approx. 15 to 20 minutes) Number of places: 25. Should the number of applications exceed the number of available places, places will be allocated as Participants and allofollows: Places will primarily be allocated to students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS crecation of places dits. Should the module be used in other subjects, there will be two quotas: 95% of places will be allocated to students of the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits and 5% of places (a minimum of one participant in total) will be allocated to students of the Bachelor's degree subject Biologie (Biology) with 60 ECTS credits and to students of the Bachelor's degree subjects Computational Mathematics and Mathematik (Mathematics), each with 180 ECTS credits, as part of the application-oriented subject Biology (as well as potentially to students of other 'importing' subjects). Should the number of places available in one quota exceed the number of applications, the remaining places will be allocated to applicants from the other quota. Should there be, within one module component, several courses with a restricted number of places, there will be a uniform regulation for the courses of one module component. In this case, places on all courses of a module component that are concerned will be allocated in a standardised procedure. In this procedure, applicants who already have successfully completed at least one other module component of the respective module will be given preferential consideration. A waiting list will be maintained and places re-allocated as they become available. Selection process group 1 (95%): Places will primarily be allocated according to the applicants' previous academic achievements. For this purpose, applicants will be ranked according to the number of ECTS credits they have achieved and their average grade of all assessments taken during their studies or of all module components in the subject of Biologie (Biology) (excluding Chemie (Chemistry), Physik (Physics), Mathematik (Mathematics)) at the time of application. This will be done as follows: First, applicants will be ranked, firstly, according to their average grade weighted according to the number of ECTS credits (qualitative ranking) and, secondly, according to their total number of ECTS credits achieved (quantitative ranking). The applicants' position in a third ranking will be calculated as the sum of these two rankings, and places will be allocated according to this third ranking. Among applicants with the same ranking, places will be allocated according to the qualitative ranking or otherwise by lot. Selection process group 2 (5%): Places will be allocated according to the following quotas: Quota 1 (50% of places): total number of ECTS credits already achieved in modules/module components of the Faculty of Biology; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25% of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25% of places): allocation by lot. Should the module be used only in the Bachelor's degree subject Biologie (Biology) with 180 ECTS credits, places will be allocated according to the selection process of group 1.

07-4S1M-	Special Bioin	formatics :	1				-				
Z6-102-m01	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses		V + Ü	(no information on S	SWS (weekly contact	hours) and course language av	ailable)				
	Method of as	sessment		pprox. 10 to 20 page age of assessment:							
	other prerequ	iisites	Admis as spe	Admission prerequisite to assessment: regular attendance of exercises and successful completion of the respective exercises as specified at the beginning of the course.							
	Participants a cation of place		follow dits. See Bache will be Bache of the ber of from the re will poner cessful waitin prima ked as studies them adding the to the lated the sa (5%): achievachievamon cation	rs: Places will prima should the module belor's degree subject allocated to stude application-oriente places available in he other quota. Shows that are concerned ally completed at least will be maintainly be allocated according to the numbers or of all module contains and the sum of these are ranking, places places will be allocated in modules/modules, places will be allocated in modules/modules, places will be allocated in modules/modules, places will be allocated, places will be allocated. Should the places will be allocated applicants with the places will be allocated applicants with the places.	rily be allocated to stope used in other subject Biologie (Biology) was to fit be achelor's at Computational Mark d subject Biology (as one quota exceed the ould there be, within cation for the courses of will be allocated in east one other module ined and places re-altording to the application of ECTS credits the omponents in the subject of the time of application at the time of application and the time of application at the time of application at the time of application and the time of application at	udents of the Bachelor's degreets, there will be two quotas: gith 180 ECTS credits and 5% of degree subject Biologie (Biologic Hematics and Mathematik (Mawell as potentially to students and module component, severally of one module component. In the astandardised procedure. In the component of the respective notated as they become availants' previous academic achievely have achieved and their available of Biology; (quantitative ranking). The appaces will be allocated according to the qualitative ranking following quotas: Quota 1 (50% he Faculty of Biology; among a 2 (25% of places): number of bject semesters, places will be in the Bachelor's degree subject semesters.	se subject Biology 5% of places with foliaces (a miningy) with 60 ECTS athematics), each of other 'importemaining places al courses with a his case, places his procedure, a module will be globle. Selection premaining Chemie (ws: First, applications) for this third range of the position of the series of the series of places): tot plicants with the subject semester allocated by lo	aces, places will be allocated as gie (Biology) with 180 ECTS crevill be allocated to students of the num of one participant in total) acredits and to students of the ch with 180 ECTS credits, as part ting' subjects). Should the nums will be allocated to applicants a restricted number of places, the on all courses of a module complicants who already have suciven preferential consideration. A rocess group 1 (95%): Places will applicants who already have suciven preferential consideration. A rocess group 1 (95%): Places will applicants will be randled and will be randled and will be randled and will be randled and will be calculated and secondly, according in a third ranking will be calculated and second process group 2 allowed and second places and second places are number of ECTS credits already the same number of ECTS credits ers of the respective applicant; t. Quota 3 (25% of places): allology) with 180 ECTS credits, places			

11-A2-092-m01	Electro	nics	1		-			,					
	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul leve	el undergraduate				
	Course	!S		V + Ü	(no information or	n SWS (weekly contac	t hours) and course la	inguage available)					
	Metho	d of ass	essment	Asses noun	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.								
	otherp	prerequi	sites	tive d on to the le sessn	etails at the begin assessment. If stu cturer will put thei nent in the current	ning of the course. Re dents have obtained r registration for asse	egistration for the cou the qualification for a ssment into effect. St	rse will be considered a dmission to assessme udents who meet all pi	Il inform students about the respec- a declaration of will to seek admissi- nt over the course of the semester, rerequisites will be admitted to as- udents will have to obtain the quali-				
	Participants and allocation of places						()): 15 places. Places w	rill be allocated by lot.					
11-ZDR-111-m01			_		eedimensional Röntgen imaging								
	ECTS	6	Duratio	,	1 semester		numerical grade	Modul leve	el graduate				
	Course	!S		V + R	V + R (no information on SWS (weekly contact hours) and course language available) a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (ap-								
	Method of assessment			prox. to 10 Asses	prox. 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 relive details at the beginning of the course. Registration for the course will be considered a declaration of will to seek acon to assessment. If students have obtained the qualification for admission to assessment over the course of the seme the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to sessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the fication for admission to assessment anew.									
11-BXE5-112-m01	Curren	t Topics	s in Experi	menta	l Physics								
	ECTS	5	Duratio	1	1 semester	Method of grading	numerical grade	Modul leve	el undergraduate				
	Course	!S		V + R	(no information or	SWS (weekly contac	t hours) and course la	nguage 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 p	rerequ	isites	Appro	oval by examinatio	n committee required							

11-BXE6-112-mo1	Current Topics in Experimental Physics										
	ECTS 6	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses	·	V + R (no informati	on on SWS (weekly contact	hours) and course language av	/ailable)					
	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) presentati-							
						ime to complete	: 1 to 4 weeks) or d) presentati-				
				itation (approx. 30 minutes sment: German or English	5)						
	other prere	equisites		pproval by examination committee required.							
11-BXE8-112-m01	<u> </u>		mental Physics								
	ECTS 8	Duration		Method of grading	numerical grade	Modul level	undergraduate				
	Courses		V + R (no informati		t hours) and course language av	vailable)	1				
	Method of	assessment	prox. 30 minutes p on/seminar preser	written examination (approx. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (aprox. 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) anguage of assessment: German or English							
	other prere		<u>'''</u>	nation committee required	•						
11-BXT5-112-m01		pics in Theore									
	ECTS 5	Duration		Method of grading		Modul level	undergraduate				
	Courses				hours) and course language av	<u> </u>					
	Method of	assessment 	prox. 30 minutes p on/seminar preser	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 prere	quisites	Approval by examination committee required.								
11-BXT6-112-m01	Current Topics in Theoretical Physics										
	ECTS 6	Duration		Method of grading		Modul level	undergraduate				
	Courses				thours) and course language av						
	Method of		prox. 30 minutes p on/seminar preser	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							
11-BXT8-112-mo1	Current Top	pics in Theore	tical Physics			'					
	ECTS 8	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses				hours) and course language av						
	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 prere	quisites	Approval by examination committee required.								

11-TDOE-141-m01	Thermo	odynam	ics and E	onom	ics				1			
	ECTS	3	Duration	า	1 semester	Method of gradir	ng (not) successfull	y completed	Modul level	graduate		
	Course	S		V (no	(no information on SWS (weekly contact hours) and course language available)							
	Method	Method of assessment			30 minutes per ca		ct report (approx. 8 to			oral examination in groups (ap: 1 to 4 weeks) or d) presentati-		
11-BSV-122-m01	Image and Signal Processing in Physics											
	ECTS 6 Duration			า	1 semester	Method of gradir	ng numerical grade		Modul level	graduate		
	Course	S	·	V + R	no information or	n SWS (weekly conta	act hours) and course	e language av	ailable)	•		
	Method	l of ass	essment	minut prese Asses	written examination (90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 inutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar resentation (approx. 30 minutes) assessment offered: When and how often assessment will be offered depends on the method of assessment and will be anounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations)							
	other p	rerequi	sites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-BSV-131-m01	Image and Signal Processing in Physics											
	ECTS	6	Duration	ı	1 semester	Method of gradir	ng numerical grade		Modul level	graduate		
	Course	S		V + R	V + R (no information on SWS (weekly contact hours) and course language available)							
	Method	l of ass	essment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) 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 p	rerequi	sites	tive d on to the le	etails at the begin assessment. If stu cturer will put the	ining of the course. F udents have obtained	Registration for the co d the qualification fo sessment into effect.	ourse will be or admission t	considered a de to assessment o	nform students about the respec- eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as-		

08-BC-132-m01	Princip	les of B	iochemis	try							
	ECTS	6	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Course	S			08-BC-1-132: V +	Ü (no information on	s. Information on courses SWS (weekly contact hour SWS (weekly contact hour	s) and course languag			
	Method of assessment			state	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 o8-BC-1-132: Principles of Biochemistry 1 Principles of Biochemistry 1  • 3 ECTS, Method of grading: numerical grade  • written examination (approx. 60 to 90 minutes)  Assessment in module component o8-BC-2-132: Principles of Biochemistry 2 Principles of Biochemistry 2  • 3 ECTS, Method of grading: numerical grade						
				•		on (approx. 60 to 90					
08-BC-LAGY-092-	Bioche	mistry (	teaching	degre	e for secondary scl			,			
mo1	ECTS 3 Duration			1	1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Course	S	•	V + Ü	(no information or	SWS (weekly contac	t hours) and course langua	age available)			
	Method of assessment			each c) ora Lang	a) 1 to 3 written examinations (1 written examination: approx. 90 minutes; 2 written examinations: approx. 60 or 90 minutes each; 3 written examinations: approx. 60 minutes each) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes)  Language of assessment: German or English						
	other prerequisites			ning	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	§ 62 (1) 2. Chemie "Organische und Bioorganische Chemie"						
	ced Bacl	nelor's s	students o		<u> </u>	n regard to preparation	n for Bachelor's thesis an	d specialisation in Ma	ster's programme.		
11-MOE-092-m01	<u> </u>		ic Materia		erties	_					
	ECTS	5	Duration		1 semester		numerical grade	Modul level	graduate		
	Course						t hours) and course langua	<u> </u>			
	Method	d of ass	essment	prox.	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)						
	other prerequisites			to que cours obtain for as	alify for admission se. Registration for ned the qualification ssessment into effe	to assessment. The l the course will be con on for admission to a ect. Students who me	ecturer will inform student isidered a declaration of w issessment over the course tall prerequisites will be	ts about the respective will to seek admission as of the semester, the admitted to assessments.	Certain prerequisites must be met e details at the beginning of the to assessment. If students have lecturer will put their registration ent in the current or in the subsetor admission to assessment an-		

11-ASL-092-m01	Applied Superconduction										
	ECTS	6	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S	R	2 + V (	no information on	SWS (weekly contact	hours) and course language av	ailable)			
	Method	l of asse	p p A L	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							
	·	rerequis	ti o th so fi	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		
	Course	S	R	2 + V (	no information on	SWS (weekly contact	hours) and course language av	ailable)			
	Method	l of asse	p to A n 2	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 p	rerequis	ti o th	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-AHL-092-m01	Applied Semiconductor Physics											
	ECTS	6 Durat	on	1 semester	Method of grading numerical gra	de	Modul level	graduate				
	Courses	s	R + V	(no information o	n SWS (weekly contact hours) and cou	ırse language av	ailable)					
	Method	l of assessmer	prox. to 10 Asse noun 2009	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 p	rerequisites	tive on to the le	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-FK2-092-m01	Solid State Physics 2											
	ECTS	8 Durat	on	1 semester	Method of grading numerical gra	de	Modul level	graduate				
	Courses	S	R + V	(no information o	n SWS (weekly contact hours) and cou	ırse language av	ailable)					
	Method	l of assessmer	prox. to 10 Asse noun 2009	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 p	rerequisites	tive on to the le	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								

11-FKS-092-m01	Solid State Spectroscopy											
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		R + V	(no information on	SWS (weekly contact l	nours) and course language av	vailable)				
	Method	d of asse		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, 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 p	rerequis		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-FKT-092-m01	Transport Phenomena in Solids											
	ECTS 6 Duratio			1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		R + V	(no information on	SWS (weekly contact l	nours) and course language av	vailable)				
	Method	d of asse		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, 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 p	rerequis		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	Semico	nducto	r Physics			'							
	ECTS	6	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		R + V	(no information o	n SWS (weekly contact	hours) and course language av	ailable)					
	Method	l of asse	essment	prox. to 10   Asses nound 2009.	) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (aprox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 or 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 anounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) oog.  anguage of assessment: German, English								
	other p	rerequis	sites	tive do on to the le sessm	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respecive 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, he 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 qualication for admission to assessment anew.								
11-HNS-092-m01	Semico	Semiconductor Nanostructures											
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		R + V	(no information o	n SWS (weekly contact	hours) and course language av	ailable)					
	Method	d of asse	essment	prox. to 10   Asses nound 2009.	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 p	rerequis	sites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-LHQ-092-m01	Lithography in Semiconductor Technology and Theory of Quantum Transport										
	ECTS	6	Duration	)	1 semester	Method of grading r	numerical grade	Modul level	graduate		
	Course	S		R + V	(no information o	n SWS (weekly contact h	ours) and course language ava	ailable)			
	Method	d of asse		prox. to 10 p Asses nound 2009.	anguage of assessment: German, English						
	other p	rerequis		tive do on to the le	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.						
11-MAG-092-m01	Magnetism										
	ECTS	6	Duration	1	1 semester	Method of grading r	numerical grade	Modul level	graduate		
	Course	S		R + V	(no information o	n SWS (weekly contact h	ours) and course language ava	ailable)			
	Method	d of asse	essment	prox. to 10 p Asses nound 2009.	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (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 p	rerequis		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-MST-092-m01	Magnetism and Spin Transport											
	ECTS	6 Du	ration	2 semester	Method of grading numerical grade		Modul level	graduate				
	Courses	s	V +	R + V (no informati	on on SWS (weekly contact hours) and course	e language	available)					
	Method	l of assessn	pro to Ass no 20	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 p	rerequisites	tive on the ses	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 Duratio			1 semester	Method of grading   numerical grade		Modul level	graduate				
	Courses	S	R +	R + V (no information on SWS (weekly contact hours) and course language available)								
	Method	l of assessn	pro to Ass no 20	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 p	rerequisites	tive on the ses	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-NDS-092-m01	Low-Dimensional Structures										
	ECTS	4	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		R + V	(no information on	SWS (weekly contact	hours) and course language ava	ailable)			
	Method	l of asse		prox. to 10 p Asses nound 2009.	anguage of assessment: German, English						
	other p	rerequis		on to the le	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, he 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-NEL-092-m01	Nanoelectronics										
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		R + V	(no information on	SWS (weekly contact	hours) and course language ava	ailable)			
	Method	l of asse	essment	prox. to 10   Asses nounc 2009. Langu	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English						
	other p	rerequis		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-NOP-092-m01	Nano-Optics											
	ECTS	4	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course				`		nours) and course language av					
	Method	l of asse		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, 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 p	rerequis		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	Quantu	m Mech	anics II									
	ECTS	8	Duration		1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	s		R + V (	(no information on	SWS (weekly contact h	nours) and course language av	ailable)				
	Method	l of asse		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, 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 p	rerequis		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-QPM-092-m01	Quantum	Phenomena ir	electr	onic correlated N	aterials							
	ECTS 6	Duratio	n	1 semester	Method of grad	ing numerical grad	de	Modul level	graduate			
	Courses		R + V	(no information o	n SWS (weekly conf	tact hours) and cou	rse language ava	ailable)				
	Method o	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 pre	requisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-QVTP-092-m01	Many Body Quantum Theory											
	ECTS 8	B Duratio	n	1 semester	Method of grad	ing numerical grad	de	Modul level	graduate			
	Courses		R + V	(no information o	n SWS (weekly con	tact hours) and cou	rse language ava	ailable)				
	Method o	of assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (ap prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 30 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)  Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be an nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations)  2009.  Language of assessment: German, English						es) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be an-			
	other pre	requisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-RMS-092-m01	Relativ	istic Eff	ects in Me	esosco	pic Systems	,					
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		R + V (	(no information o	n SWS (weekly contact	hours) and course language ava	ailable)			
	Method	d of asso		prox. to 10 p Asses nounc 2009.	Language of assessment: German, English						
	other p	rerequi		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
11-TFK-092-m01	Theore	tical So	lid State I	Physics	5			-			
	ECTS	8	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		R + V (	(no information o	n SWS (weekly contact	hours) and course language ava	ailable)			
	Method	d of asso	essment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)  Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be an nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations)  2009.  Language of assessment: German, English							
	other p	rerequi		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							

11-TSL-092-m01	Theory of Superconduction											
	ECTS 5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Courses	R + '	V (no information on :	SWS (weekly contact	hours) and course language av	ailable)						
	Method of a	prox to 10 Assi nou 200	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)  Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations)  2009.  Language of assessment: German, English									
	other prereq	tive on t the sess	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-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 av	ailable)						
	Method of a	30 r ges, Ass nou 200	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 ges, 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 an nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
	other prereq	tive on t the sess	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-QTH-102-m01	Quantum	Transport in S	emicon	ductor Nanostru	ctures							
	ECTS 6	Duratio	n :	1 semester	Method of gradi	ng numerical grade		Modul level	graduate			
	Courses		V + R (r	no information o	n SWS (weekly conta	act hours) and course lang	guage ava	ailable)				
	Method o	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 pre	requisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-RMFT-102-m01	Renormalization Group Methods in Field Theory											
	ECTS 6	Duratio	n :	1 semester	Method of gradi	ng numerical grade		Modul level	graduate			
	Courses		V + R (r	no information o	n SWS (weekly conta	act hours) and course lang	guage ava	ailable)				
	Method o	of assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulation 2009.  Language of assessment: German, English						es) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be an-			
	other pre	requisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-SPI-102-m01	Spintro	nics											
	ECTS	6	Duration	1	1 semester	Method of grading	g numerical grade		Modul level	graduate			
	Courses	5		V + R	(no information o	n SWS (weekly contac	ct hours) and course la	anguage av	ailable)				
	Method	l of asso	essment	prox. to 10 Asses nound 2009	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			Certa tive d on to the le	in prerequisites metails at the beging assessment. If stocturer will put the nent in the curren	nust be met to qualify nning of the course. Rudents have obtained ir registration for asse	egistration for the cou the qualification for a essment into effect. S	irse will be o admission t tudents who	considered a do to assessment o o meet all prere	nform students about the respec- eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- ents will have to obtain the quali-			
11-IEM-111-m01	Introdu	ction to	Electron	Micro	scopy								
	ECTS 4 Duration			1	1 semester	Method of grading	g numerical grade		Modul level	graduate			
	Courses	5		V + R	V + R (no information on SWS (weekly contact hours) and course language available)								
	Method of assessment			prox. to 10 Asses nound 2009 Langu	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)  Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.  Language of assessment: German, English								
	other 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 admiss on 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 qual fication for admission to assessment anew.									
11-BXE5-112-m01	Current	Topics	in Experi	menta	l Physics								
	ECTS	5	Duration	1	1 semester	Method of grading	g numerical grade		Modul level	undergraduate			
	Courses	5		V + R	(no information o	n SWS (weekly contac	ct hours) and course la	anguage av	ailable)				
	Method of assessment		essment	prox. on/se	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			Appro	oval by examination	on committee required	d.						

11-BXE6-112-mo1	Current Topics in Experimental Physics											
	ECTS 6	Duration	ı semester	Method of grading	numerical grade	Modul level	undergraduate					
	Courses	·	V + R (no informati	on on SWS (weekly contact	hours) and course language av	/ailable)						
	Method of	assessment					r oral examination in groups (ap-					
					report (approx. 8 to 10 pages, ti	ime to complete	: 1 to 4 weeks) or d) presentati-					
				itation (approx. 30 minutes sment: German or English	5)							
	other prere	equisites		nation committee required			-					
11-BXE8-112-m01	<u> </u>		mental Physics	Tation committee required	•	,						
	ECTS 8	Duration		Method of grading	numerical grade	Modul level	undergraduate					
	Courses		V + R (no informati		t hours) and course language av	vailable)	'					
	Method of	assessment	prox. 30 minutes p on/seminar preser	written examination (approx. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (apox. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentativeseminar presentation (approx. 30 minutes) nguage of assessment: German or English								
	other prere		<u>'''</u>	proval by examination committee required.								
11-BXT5-112-m01		Current Topics in Theoretical Physics										
	ECTS 5	Duration		Method of grading		Modul level	undergraduate					
_	Courses				thours) and course language av	<u> </u>						
	Method of	assessment	prox. 30 minutes p on/seminar preser		report (approx. 8 to 10 pages, ti		r oral examination in groups (ap: 1 to 4 weeks) or d) presentati-					
	other prere	quisites	Approval by examination committee required.									
11-BXT6-112-m01	Current Top	pics in Theore	tical Physics									
	ECTS 6	Duration		Method of grading		Modul level	undergraduate					
	Courses				thours) and course language av							
	Method of assessment		a) written examination (approx. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (a prox. 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									
11-BXT8-112-m01	Current Top	pics in Theore	tical Physics									
	ECTS 8	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Courses				hours) and course language av							
	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 prere	quisites	Approval by exami	nation committee required								

11-PMM-132-mo1	Physics of Ad	vanced Ma	terials				,				
	ECTS 6	Duratio	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		V + R	(no information on S	SWS (weekly contact	hours) and course lang	guage available)				
	Method of ass	sessment	prox. on/se Asses nound 2009.								
			Langu	age of assessment:	German, English						
	for advanced E	Bachelor's	studer	nts offered by the Fa	culty with regard to p	reparation for Bachelo	r's thesis and specialis	ation in Master's programme.			
11-A4-072-m01	Astrophysics	_									
	ECTS 6	Duratio		1 semester	Method of grading		Modul level	undergraduate			
	Courses			<u>`</u>		hours) and course lang	guage available)				
	Method of ass			n examination (app	· · · · · · · · · · · · · · · · · · ·			Certain prerequisites must be met			
	Participants a		obtain for as quent ew.	course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students has obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registrat for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subquent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment ew.  Only as part of pool of general key skills (ASQ): 15 places. Places will be allocated by lot.							
11-ASM-131-mo1	Astronomical		ļ								
	ECTS 6	Duratio	 1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		V + R	(no information on S	SWS (weekly contact	hours) and course lang	guage available)				
	Method of ass	sessment	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 prerequ	isites	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-EPP-092-m01	Introdu	ction to F	Plasmaph	ysics							
	ECTS	6 1	Duration		1 semester	Method of grac	ing numerical gra	ide	Modul level	graduate	
	Courses	s	١	/ + R (	(no information o	n SWS (weekly con	tact hours) and coι	urse language ava	ailable)		
	Method	d of asses	t A r	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 p	rerequisit	t t	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-AKM-092-m01	Cosmology										
	ECTS	6 I	Duration		1 semester	Method of grac	ing numerical gra	ide	Modul level	graduate	
	Courses	S	F	R + V (	no information o	n SWS (weekly con	tact hours) and cou	urse language ava	ailable)		
	Method	d of asses	t A r	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)  Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations 2009.  Language of assessment: German, English						es) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be an-	
	other p	rerequisit	t c t	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-APL-092-m01	Plasma	-Astrophysics	1									
	ECTS	6 Durati	on	1 semester	Method of grading   nur	nerical grade	Modul level	graduate				
	Courses	s	R + V	(no information or	SWS (weekly contact hou	rs) and course language av	ailable)					
	Method	l of assessmen	prox. to 10 Asses noun 2009	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (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 p	rerequisites	tive of on to the le	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-ASP-092-m01	Introduction to Space Physics											
	ECTS	6 Durati	on	1 semester	Method of grading nur	nerical grade	Modul level	graduate				
	Courses	S	R + V	(no information or	SWS (weekly contact hou	rs) and course language av	ailable)					
	Method	l of assessmen	prox. to 10 Asses noun 2009	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulation 2009.  Language of assessment: German, English								
	other p	rerequisites	tive of on to the le	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								

11-AWP-092-m01	Atmosp	here and	Space Phys	ics							
	ECTS	6 [	uration	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S	R + \	/ (no information or	n SWS (weekly contact hours) and course language	available)					
	Method	d of assess	prox nar į Asse noui 200	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 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 or English							
	other p	rerequisito	tive on to the l sess	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-GRT-092-m01	Group 1	Theory									
	ECTS	6 C	uration	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S	R + \	/ (no information or	n SWS (weekly contact hours) and course language	available)					
	Method	d of assess	prox to 10 Asse noui	. 30 minutes per ca o pages, time to con essment offered: Wh nced in due form un 9.	(approx. 90 minutes) or b) oral examination of one ndidate, for modules with less than 4 ECTS credits inplete: 1 to 4 weeks) or d) presentation/seminar pen and how often assessment will be offered depoder observance of Section 32 Subsection 3 ASPO int: German, English	approx. 20 minute resentation (appro ends on the metho	es) or c) project report (approx. 8 x. 30 minutes) od of assessment and will be an-				
	other prerequisites			details at the begin o assessment. If stu ecturer will put thei ment in the current	ust be met to qualify for admission to assessment ning of the course. Registration for the course will idents have obtained the qualification for admission registration for assessment into effect. Students to rin the subsequent semester. For assessment are assessment anew.	be considered a do on to assessment o who meet all prere	eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as-				

11-NMA-092-m01	Numeri	ical Met	hods in As	stroph	ysics						
	ECTS	6	Duration		1 semester	Method of grading numerical g	rade	Modul level	graduate		
	Course				<u>`                                    </u>	SWS (weekly contact hours) and c					
	Method	d of asse		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, 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 p	rerequis		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-QFT2-092-m01	Quantum Field Theory II										
	ECTS	6	Duration		1 semester	Method of grading numerical g	rade	Modul level	graduate		
	Course	S		R + V	(no information on	SWS (weekly contact hours) and co	ourse language av	ailable)			
	Method	d of asse		prox. to 10   Asses nound 2009.	30 minutes per car pages, time to com sment offered: Wh ced in due form un	approx. 90 minutes) or b) oral examedidate, for modules with less than aplete: 1 to 4 weeks) or d) presentation and how often assessment will der observance of Section 32 Subset: German, English	4 ECTS credits ap tion/seminar prese be offered depend	prox. 20 minute entation (approx Is on the metho	es) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be an-		
	other p	rerequis		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-RNT-092-m01	Renorm	nalization Theo	y									
	ECTS	6 Durati	on	1 semester	Method of grading In	umerical grade	Modul level	graduate				
	Courses	s	R + V	(no information o	n SWS (weekly contact ho	urs) and course language av	ailable)					
	Method	l of assessmen	prox. to 10 Asse noun 2009	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 p	rerequisites	tive of on to the le	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-RQFT-092-m01	Relativistical Quantumfield Theory											
	ECTS	8 Durati	on	1 semester	Method of grading in	umerical grade	Modul level	graduate				
	Courses	S	R + V	(no information o	n SWS (weekly contact ho	urs) and course language av	ailable)					
	Method	l of assessmen	prox. to 10 Asse noun 2009	30 minutes per ca pages, time to con ssment offered: W iced in due form un ).	indidate, for modules with mplete: 1 to 4 weeks) or d hen and how often assess	n less than 4 ECTS credits ap I presentation/seminar prese sment will be offered depend	prox. 20 minute entation (approx s on the metho	oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations)				
	other p	rerequisites	tive on to the le	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								

11-RTT-092-m01	Theory	of Relativity			,							
	ECTS	6 Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5	R + V	(no information or	SWS (weekly contact	hours) and course language	available)					
	Method	of assessment	prox. to 10 Asses nound 2009	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 pr	rerequisites	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-TEP-092-m01	Theoretical Elementary Particle Physics											
	ECTS	8 Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5	R + V	(no information or	SWS (weekly contact	hours) and course language	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 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)  Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations 2009.  Language of assessment: German, English									
	other pr	rerequisites	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-TPE-092-m01	Experime	ntal Particle P	hysics									
	ECTS 4	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses		R + V	(no information or	SWS (weekly contac	t hours) and course language a	vailable)					
	Method o	f assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, 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 pre	requisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-TPS-092-m01	Particle Physics (Standard Model)											
	ECTS 8	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses		R + V	(no information or	SWS (weekly contac	t hours) and course language a	ıvailable)					
	Method o	f assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be an nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
	other pre	requisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-SUS-092-m01	Supers	ymmet	ry I and II									
	ECTS	6	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + R	(no information o	n SWS (weekly contact	hours) and course language av	vailable)				
	Method	d of ass	sessment	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			tive d on to the le sessn	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
11-AST-092-m01	Theore	tical As	strophysic	S								
	ECTS	6	Duration	<u> </u>	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		R + V	(no information o	n SWS (weekly contact	: hours) and course language av	vailable)				
	Method of assessment		written examination (approx. 120 minutes)									
11-WWB-102-m01	Strong	Interac	ction in Ac	celera	celerator Experiments							
	ECTS	3	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + R	V + R (no information on SWS (weekly contact hours) and course language available)							
				prox. to 10 Asses nound 2009 Langu	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English							
	other 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-APP-111-m01	Practic	al Cours	e Astroph	nysics							
	ECTS	6	Duration	)	1 semester	Method of grading	(not) successfully compl	leted	Modul level	graduate	
	Course	S		P (no	P (no information on SWS (weekly contact hours) and course language available)						
	Method	d of asse		a) Preparing, performing and evaluating the experiments will be considered successfully completed if a Testat (exam) is passed. Experiments that were not successfully completed can be repeated once. Or b) discussion to test the candidate's understanding of the physics-related contents and results of the experiment (approx. 20 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 p	rerequis		on to the le	etails at the beginni assessment. If stud cturer will put their	ng of the course. Re ents have obtained t registration for asses r in the subsequent	gistration for the course w the qualification for admis ssment into effect. Studen	vill be o ssion to nts who	considered a de o assessment o o meet all prere	form students about the respec- claration of will to seek admissi- ver the course of the semester, quisites will be admitted to as- nts will have to obtain the quali-	
11-DTS-111-m01	Particle Radiation Detectors										
	ECTS	4	Duration	)	1 semester	Method of grading	numerical grade		Modul level	graduate	
	Course	S		V + Ü	no information on :	SWS (weekly contact	hours) and course langua	age ava	ailable)		
	Method	d of asse		prox. to 10 p Asses nounce 2009.	30 minutes per cano pages, time to comp sment offered: Whe ced in due form und	didate, for modules volete: 1 to 4 weeks) on and how often asservance of Sec	with less than 4 ECTS cred or d) presentation/seminar sessment will be offered do	lits app r prese epend:	orox. 20 minute ntation (approx s on the metho	oral examination in groups (aps) or c) project report (approx. 8 c. 30 minutes) d of assessment and will be anand examination regulations)	
	other prerequisites			on to the le	etails at the beginni assessment. If stud cturer will put their	ng of the course. Re ents have obtained t registration for asses r in the subsequent	gistration for the course w the qualification for admis ssment into effect. Studen	vill be o ssion to nts who	considered a de coassessment o comeet all prere	form students about the respec- claration of will to seek admissi- ver the course of the semester, quisites will be admitted to as- nts will have to obtain the quali-	

11-ART-112-mo1	General TI	heory of Relat	ivity								
	ECTS 4	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	<u>.</u>	V + R	(no information on	SWS (weekly contact	hours) and course lang	guage 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 prer	equisites	tive d on to the le sessn	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
11-SRT-112-m01	Special Th	eory of Relati	vity				,				
	ECTS 4	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		V + R	(no information on	SWS (weekly contact	hours) and course lang	guage 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 prer	equisites	tive d on to the le sessn	etails at the begin assessment. If stu cturer will put thei nent in the current	ning of the course. Reg dents have obtained t r registration for asses	gistration for the course he qualification for adr ssment into effect. Stud	e will be considered a denission to assessment of Hents who meet all prere	nform students about the respececlaration of will to seek admissiover the course of the semester, equisites will be admitted to asents will have to obtain the quali-			
11-BXE5-112-m01	Current To	pics in Experi	menta	l Physics							
	ECTS 5	Duratio		1 semester	Method of grading	_	Modul level	undergraduate			
	Courses		V + R	(no information or	SWS (weekly contact	hours) and course lang	guage 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 prer	equisites	Appro	oval by examinatio	n committee required.						

11-BXE6-112-mo1	Current Top	pics in Experi	mental Physics			-					
	ECTS 6	Duration	ı semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses	·	V + R (no informati	on on SWS (weekly contact	hours) and course language av	/ailable)					
	Method of	assessment					r oral examination in groups (ap-				
					report (approx. 8 to 10 pages, ti	ime to complete	: 1 to 4 weeks) or d) presentati-				
				itation (approx. 30 minutes sment: German or English	5)						
	other prere	equisites		nation committee required			-				
11-BXE8-112-m01	<u> </u>		mental Physics	Tation committee required	•	,					
	ECTS 8	Duration		Method of grading	numerical grade	Modul level	undergraduate				
	Courses		V + R (no informati		t hours) and course language av	vailable)	'				
	Method of	assessment	prox. 30 minutes p on/seminar preser	written examination (approx. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (aprox. 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) anguage of assessment: German or English							
	other prere		<u>'''</u>	proval by examination committee required.							
11-BXT5-112-m01		pics in Theore									
	ECTS 5	Duration		Method of grading		Modul level	undergraduate				
	Courses				thours) and course language av	<u> </u>					
	Method of	assessment	prox. 30 minutes p on/seminar preser		report (approx. 8 to 10 pages, ti		r oral examination in groups (ap: 1 to 4 weeks) or d) presentati-				
	other prere	quisites	Approval by examination committee required.								
11-BXT6-112-m01	Current Topics in Theoretical Physics										
	ECTS 6	Duration		Method of grading		Modul level	undergraduate				
	Courses				thours) and course language av						
	Method of		prox. 30 minutes p on/seminar preser		report (approx. 8 to 10 pages, ti		r oral examination in groups (ap: 1 to 4 weeks) or d) presentati-				
11-BXT8-112-m01	Current Top	pics in Theore	tical Physics								
	ECTS 8	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses				hours) and course language av						
	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								
			Approval by exami	nation committee required							

11-DTS-131-m01	Particle	Radiati	on Detecto	ors							
	ECTS	4	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	;	V	+ Ü (no information o	on SWS (weekly contact	hours) and course language av	vailable)	•			
	Method	of asse	p oi A no	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.							
	for adva	nced Ba			Faculty with regard to p	oreparation for Bachelor's thes	is and specialisa	ation in Master's programme.			
11-NOP-092-m01	Nano-O	ptics		Mathadata and Mathadata and Anna and An							
		4	Duration	1 semester	Method of grading		Modul level	graduate			
	Courses					hours) and course language av					
	Method	of asse	p to A no	rox. 30 minutes per c o 10 pages, time to co ssessment offered: V	andidate, for modules v mplete: 1 to 4 weeks) o /hen and how often ass nder observance of Sec	vith less than 4 ECTS credits ap r d) presentation/seminar pres	prox. 20 minute entation (approx ds on the metho	d of assessment and will be an-			
	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-BMT-092-m01	Biophys	ical Measurem	ent Tec	hnology in Medi	al Science							
	ECTS	6 Duratio	n	1 semester	Method of grading n	umerical grade	Modul level	graduate				
	Courses		R + V	(no information o	on SWS (weekly contact ho	urs) and course language ava	ailable)					
	Method	of assessment	prox. to 10 Asses nound 2009.	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 pre	erequisites	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-LMB-092-m01	Laboratory and Measurement Technology in Biophysics											
	ECTS	6 Duratio	n	1 semester	Method of grading n	umerical grade	Modul level	graduate				
	Courses		R + V	(no information o	n SWS (weekly contact ho	urs) and course language ava	ailable)					
	Method	of assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approto 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)  Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations 2009.  Language of assessment: German, English									
	other pro	erequisites	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-PKS-092-m01	Physic	s of Cor	nplex Sys	tems									
	ECTS	6	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		R + V	(no information on	SWS (weekly contact	hours) and course language av	ailable)					
	Method	d of ass	essment	prox. to 10   Asses nound 2009.	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 p	orerequi	sites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-QIC-092-m01	Quanti	Quantum Information and Quantum Computing											
	ECTS	5	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		R + V	(no information on	SWS (weekly contact	hours) and course language av	ailable)					
	Method of assessment			a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (all prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)  Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be all nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations)  2009.  Language of assessment: German, English									
	other p	orerequi	sites	tive do on to the le sessm	etails at the begini assessment. If stu cturer will put thei nent in the current	ning of the course. Reg dents have obtained t r registration for asses	gistration for the course will be on the qualification for admission to sment into effect. Students who	considered a de o assessment o o meet all prere					

11-SDC-092-m01	Statistics	s, Data Analys	is and Computer Physi	cs							
	ECTS 4	Duratio	n 1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses		R + V (no information	on SWS (weekly contact	hours) and course language a	available)					
	Method o	of assessment	prox. 30 minutes per to 10 pages, time to of Assessment offered: nounced in due form 2009.	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							
	·	requisites	tive details at the beg on to assessment. If the lecturer will put the sessment in the curre fication for admission	ertain 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, se 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 qualication for admission to assessment anew.							
11-BXE5-112-m01		<u> </u>	imental Physics	ental Physics							
	ECTS 5	Duratio		Method of grading		Modul level	undergraduate				
	Courses				hours) and course language a						
	Method o	of assessment	prox. 30 minutes per on/seminar presenta	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 pre	requisites	Approval by examina	tion committee required.							
11-BXE6-112-m01	Current T	opics in Expe	imental Physics								
	ECTS 6	Duratio	n 1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses		V + R (no information	on SWS (weekly contact	hours) and course language a	available)					
	Method o	f assessment	prox. 30 minutes per on/seminar presenta	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 pre	requisites	Approval by examina	tion committee required.		'					
11-BXE8-112-mo1	Current T	opics in Expe	imental Physics			,					
	ECTS 8	Duratio	n 1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses		V + R (no information	on SWS (weekly contact	hours) and course language a	available)					
	Method o	f assessment	prox. 30 minutes per on/seminar presenta Language of assessm	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 examina	tion committee required.							

11-BXT5-112-m01	Current	Topics	in Theore	etical F	Physics							
	ECTS	5	Duration	า	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	S		V + R	V + R (no information on SWS (weekly contact hours) and course language available)							
	Method	d of asso	essment	prox. on/se	30 minutes per cand	didate) or c) project r (approx. 30 minutes)	eport (approx. 8 to 10 pages, tir		r oral examination in groups (ap: 1 to 4 weeks) or d) presentati-			
	other p	rerequi	sites	Appro	Approval by examination committee required.							
11-BXT6-112-mo1	Current	Topics	in Theore	etical F	hysics							
	ECTS 6 Duration			1	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	S		V + R	R (no information on SWS (weekly contact hours) and course language available)							
	Method	d of asso	essment	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								
11-BXT8-112-m01	Current	Current Topics in Theoretical Physics										
	ECTS	8	Duration		1 semester	Method of grading		Modul level	undergraduate			
	Course	S		V + R	(no information on S	SWS (weekly contact	hours) and course language av	ailable)				
	Method	d of asso	essment	prox. on/se	30 minutes per cand	didate) or c) project r (approx. 30 minutes)	eport (approx. 8 to 10 pages, tir		r oral examination in groups (ap: 1 to 4 weeks) or d) presentati-			
	other p	rerequi	sites	Approval by examination committee required.								
Thesis (10 ECTS cree The grade awarded		hesis w	ill count o	double	in the calculation o	f the overall grade of	the Bachelor's degree.					
11-BA-P-072-m01	Bachel	or Thesi	is Physics	5								
	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	S		no courses assigned								
	Method of assessment			written thesis (approx. 25 pages) Language of assessment: German or English								

Subject-specific Ke	ey Skills (16 EC	TS credits	)							
Compulsory Course Modules 11-P-MR a			sfully c	ompleted.						
11-HS-092-m01	Advanced Ser	minar Exp	eriment	tal/Theoretical Phys	sics					
	ECTS 4	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Courses		S (no	information on SWS	(weekly contact hou	rs) and course language availa	able)			
	Method of as	sessment	Asses	talk (approx. 30 to 45 minutes) with discussion 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 Admission prerequisite to assessment: regular attendance and successful preparation of seminar presentation.									
11-P-MR-092-m01	Mathematica	l Methods	of Phy	sics						
	ECTS 6	Duratio	n	2 semester	Method of grading	(not) successfully completed	Modul level	undergraduate		
	Courses		year ( Math	winter semester)	•	,		Ü (1 weekly contact hour), once a Ü (1 weekly contact hour), once a		
	Method of as:		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.							
				§ 53 (1) 1. a) Physik Mechanik, Wärmelehre, Elektrizitätslehre, Optik, der speziellen Relativitätstheorie § 77 (1) 1. a) Physik "Grundlagen der Experimentalphysik"						

Compulsory Elective				nu oloc	tivos							
11-A3-072-m01	Laboratory and Measurement Technology											
	ECTS 6 Duratio				1 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			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 allo- cation of places			Only as part of pool of general key skills (ASQ): 15 places. Places will be allocated by lot.								
11-BSQ5-112-m01	Key Qualifications											
	ECTS 5 Duratio			1	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-BSQ6-112-m01	Key Qualifications											
	ECTS	6	Duratio	1	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-A2-092-m01	Electronics											
	ECTS 6 Duration		า	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	Courses			V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method	d of ass	essment	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.								
		oants ar		Only as part of pool of general key skills (ASQ): 15 places. Places will be allocated by lot.								
11-A1-092-m01	Computational Physics											
	ECTS 6 Duration			1	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	Courses			V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method	d of ass	essment	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 p	rerequi	sites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
		oants ar		Only as part of pool of general key skills (ASQ): 15 places. Places will be allocated by lot.								