

Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject Computational Mathematics as a Master's with 1 major with the degree "Master of Science" (120 ECTS credits)

Responsible: Institute of Mathematics

Examination regulations version: 2012

Abbreviations used: Course types: **E** = field trip, **K** = colloquium, **O** = conversatorium, **P** = placement/lab course, **R** = project, **S** = seminar, **T** = tutorial, **Ü** = exercise, **V**

= lecture

Term: **SS** = summer semester, **WS** = winter semester

Methods of grading: NUM = numerical grade, B/NB = (not) successfully completed

Regulations: (L)ASPO = general academic and examination regulations (for teaching-degree programmes), FSB = subject-specific provisions, SFB

= list of modules

Other: **A** = thesis, **LV** = course(s), **PL** = assessment(s), **TN** = participants, **VL** = prerequisite(s)

Conventions for the Unless of modules in this SFB: ditable f

Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not cre-

ditable for bonus.

Information on assessment procedures:

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

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

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

individual assessments.

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

ASP02009

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

12-Jul-2012 (2012-106)

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.

Every module will be described using the following form:

Abbreviation	Module title										
	ECTS		Duration	on (in semesters) Method of grading Module level							
	Courses		To be spe	ecified in the form X	(y) with course type >	abbreviated as specified abo	ve and number of we	ekly contact hours y			
	Method of as	ssessm	ent								
	Only after su completion of		ıl if applica	ble							
	Other prereq	uisites	if applica	if applicable							
	Participants on of places		ocati- if applica	ible							
	Additional in	format	ion if applica	if applicable							
	Referred to in	n LPO I	if applica	ble (examination re	gulations for teaching	g-degree programmes)					

Compulsory Elective	res (90 l	ECTS cre	dits)									
Compulsory Electiv	es Math	hematics	5									
Applied Mathemat	ics											
10-M=V-	Mathe	matical	Continuu	m Mec	hanics							
KOM-122-m01	ECTS	5	Duratio		1 semester	Method of grading			Modul level	graduate		
	Course				V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Metho	d of asse	essment	(60 to 2, app Asses se off	It the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination 60 to 90 minutes), b) oral examination of one candidate each (approx. 15 minutes), c) oral examination in groups (groups of approx. 20 minutes) assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. anguage of assessment: German, English							
	other p	orerequis	sites	tive don to the le	etails at the beginni assessment. If stud cturer will put their	ng of the course. Re ents have obtained registration for asse r in the subsequent	gistration for the co the qualification for ssment into effect. S	urse will be admission t Students wh	considered a d to assessment o meet all prer	nform students about the eclaration of will to seek over the course of the seequisites will be admitteents will have to obtain to	admissi- mester, d to as-	
10-M=AAAN-102-	Applie	d Analys	sis									
mo1	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade		Modul level	graduate		
	Course	es		V + Ü	(no information on S	SWS (weekly contac	t hours) and course	language av	vailable)			
	Metho	d of asse	essment	(90 to 2, app Asses se off Langu	120 minutes), b) or prox. 30 minutes) sment offered: Asse ered on demand or lage of assessment:	al examination of or essment offered in the every four semesters German, English	ne candidate each (a ne semester in whicl s.	approx. 20 n	ninutes), c) ora	essment: a) written exam l examination in groups (in the subsequent seme	(groups of ster, cour-	
	other	orerequis	sites	corda (e. g. : tails a asses turer v in the	nce with the specific successful completi It the beginning of tl sment. If students h Will put their registra	ed registration dead on of a certain perco he course. Registrat have obtained the quation for assessmen bsequent semester.	llines. Certain prerecentage of exercises) ion for the exercise valification for admistinto effect. Student	quisites mus . The lecture will be consi ssion to ass ts who meet	st be met to qua er will inform st idered a declar essment over t : all prerequisit	as announced by the lect alify for admission to ass udents about the respect ation of will to seek adm he course of the semeste es will be admitted to as ave to obtain the qualific	essment tive de- ission to er, the lec- sessment	

10-M=ANG-	Numeri	c of lar	ge System	s of E	quations							
G-102-m01	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	(no information o	SWS (weekly contact	hours) and course language av	vailable)				
	Method	d of ass		(90 to 2, app	At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English							
	other p	rerequi		corda (e. g. : tails a asses turer v in the	Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
10-M=AOP-	Basics of Optimization											
T-102-m01	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	(no information o	n SWS (weekly contact	hours) and course language av	⁄ailable)				
	Method	d of ass		(90 to 2, app Asses se off	o 120 minutes), b) prox. 30 minutes) esment offered: As ered on demand o	oral examination of on	e candidate each (approx. 20 n e semester in which the course	ninutes), c) oral	ssment: a) written examination examination in groups (groups of in the subsequent semester, cour-			
	other p	rerequi		corda (e. g. : tails a asses turer v in the	nce with the speci successful comple at the beginning of sment. If students will put their regis	fied registration deadletion of a certain perce the course. Registration have obtained the quaration for assessment subsequent semester. I	ines. Certain prerequisites mus ntage of exercises). The lecture on for the exercise will be consi alification for admission to ass into effect. Students who meet	st be met to qua er will inform stu idered a declara essment over th t all prerequisite	s announced by the lecturer in aclify for admission to assessment idents about the respective detion of will to seek admission to be course of the semester, the lects will be admitted to assessment ave to obtain the qualification for			

10-M=VN-	Numer	ic of Pa	rtial Differ	ential	Equations	,							
PE-102-m01	ECTS	10	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	!S		V + Ü	(no information o	n SWS (weekly contact	hours) and course language av	ailable)					
	Method	d of ass	essment	(90 to 2, ap Asses se off	the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination o to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of approx. 30 minutes) sessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, couroffered on demand or every four semesters. nguage of assessment: German, English								
	other p	rerequi		corda (e. g. tails a asses turer in the	nce with the spec successful compl at the beginning o ssment. If student will put their regis	cified registration deadletion of a certain perce of the course. Registration have obtained the quatration for assessment subsequent semester. I	ines. Certain prerequisites mus ntage of exercises). The lecture on for the exercise will be consi- alification for admission to asse into effect. Students who meet	t be met to qua r will inform stu dered a declara essment over th all prerequisite	s announced by the lecturer in aclify for admission to assessment dents about the respective detion of will to seek admission to be course of the semester, the lects will be admitted to assessment the to obtain the qualification for				
10-M=VOP-	Selected Topics in Optimization												
T-102-m01	ECTS	10	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	.s		V + Ü	(no information o	n SWS (weekly contact	hours) and course language av	ailable)					
	Method	d of ass	essment	(90 to	o 120 minutes), b) prox. 30 minutes)		l choose one of the following m e candidate each (approx. 20 m		ssment: a) written examination examination in groups (groups of				
	other p	rerequi		corda (e. g. tails a asses turer in the	nce with the spec successful compl at the beginning o ssment. If student will put their regis	cified registration deadletion of a certain perce of the course. Registration have obtained the quatration for assessment subsequent semester. I	ines. Certain prerequisites mus ntage of exercises). The lecture on for the exercise will be consi- alification for admission to asse into effect. Students who meet	t be met to qua r will inform stu dered a declara essment over th all prerequisite	s announced by the lecturer in aclify for admission to assessment dents about the respective detion of will to seek admission to be course of the semester, the lects will be admitted to assessment the to obtain the qualification for				

10-M=VMPH-102-	Selected Topics in Mathematical Physics												
mo1	ECTS 5 Duration	1 semester	Method of grading	numerical grade	Modul level	graduate							
	Courses	V + Ü (no information	on SWS (weekly contact	hours) and course language av	ailable)								
	Method of assessment	(60 to 90 minutes), b) 2, approx. 20 minutes Assessment offered: A se offered on demand	ssessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, cour- e offered on demand or every four semesters. anguage of assessment: German, English										
	other prerequisites	Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.											
10-M=VOST-102-	Optimal Control												
mo1	ECTS 5 Duration	1 semester	Method of grading	numerical grade	Modul level	graduate							
	Courses	V + Ü (no information	on SWS (weekly contact	hours) and course language ava	ailable)								
	Method of assessment		oral examination of one)	ll choose one of the following me candidate each (approx. 15 min		ssment: a) written examination examination in groups (groups of							
	other prerequisites	cordance with the spe (e. g. successful comp tails at the beginning assessment. If studen turer will put their regi	cified registration deadle eletion of a certain perce of the course. Registration ts have obtained the quistration for assessment subsequent semester.	ines. Certain prerequisites mus ntage of exercises). The lecturer on for the exercise will be consid alification for admission to asse into effect. Students who meet	t be met to qua r will inform stu dered a declara essment over th all prerequisite	s announced by the lecturer in aclify for admission to assessment idents about the respective detion of will to seek admission to be course of the semester, the lects will be admitted to assessment ave to obtain the qualification for							

Mathematics											
10-M=VA-	Selecte	ed Topic	s in Anal	ysis							
NA-122-m01	ECTS	10	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	:S	,	V + Ü	(no information on :	SWS (weekly contact	hours) and course language a	vailable)	·		
	Method	d of ass	essment	(appronation Assesses off	At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (approx. 90 to 120 minutes; usually chosen), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups of 2 candidates (approx. 30 minutes total) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English						
	other p	rerequi	sites	tive d on to the le sessn	etails at the beginn assessment. If stud cturer will put their	ing of the course. Reg ents have obtained t registration for asses or in the subsequent	gistration for the course will be he qualification for admission sment into effect. Students w	e considered a d to assessment ho meet all prer	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-		
10-M=VGP-	Giovan	ni-Prod	i Lecture	Selecte	ed Topics (Master)			'			
C-122-m01	ECTS	10	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	:S	•	V + Ü	(no information on	SWS (weekly contact	hours) and course language a	vailable)			
	Method	d of ass	essment	(appronation Assesses off	At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (approx. 90 to 120 minutes; usually chosen), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups of 2 candidates (approx. 30 minutes total) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: English, German if agreed upon with the examiner						
	other p	rerequi	sites	tive d on to the le sessn	etails at the beginni assessment. If stud cturer will put their	ing of the course. Reg ents have obtained t registration for asses or in the subsequent :	gistration for the course will be he qualification for admission sment into effect. Students w	e considered a d to assessment ho meet all prer	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-		
10-M=ELT-	Learnir	ng by Te	eaching C	omputational Mathematics							
CM-122-m01	-	5	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S	,	Ü (no information on SWS (weekly contact hours) and course language available)							
	Method	d of ass	essment		cal examination (ap lage of assessment						

10-M=ARTH-102-	Introd	duction to	Control	Theory								
mo1	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Cours				<u>`</u>	` ,	hours) and course language av					
	Metho	od of asse	essment	oral e tes) Asses se off Langu	written examination (approx. 90 to 120 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) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German or English Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in ac-							
		prerequi		corda (e. g. tails a asses turer v in the	nce with the specific successful completion at the beginning of the sment. If students h will put their registra	ed registration deadle on of a certain perce ne course. Registration ave obtained the quation for assessment osequent semester. I	ines. Certain prerequisites mus ntage of exercises). The lecture on for the exercise will be consi alification for admission to ass into effect. Students who meet	st be met to qua er will inform stu idered a declara essment over th all prerequisite	s announced by the lecturer in aclify for admission to assessment dents about the respective detion of will to seek admission to be course of the semester, the lects will be admitted to assessment are to obtain the qualification for			
10-M=AAL-		s in Algel	ora									
G-102-m01	ECTS	10	Duratio		1 semester	Method of grading		Modul level	graduate			
	Cours				/ + Ü (no information on SWS (weekly contact hours) and course language available) At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination							
	Metho	od of asso	essment	(90 to 2, app Asses se off	o 120 minutes), b) ora orox. 30 minutes) orement offered: Asse ered on demand or e	al examination of one ssment offered in the every four semesters.	e candidate each (approx. 20 n e semester in which the course	ninutes), c) oral	ssment: a) written examination examination in groups (groups of in the subsequent semester, cour-			
	other	prerequi	sites	Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								

10-M=ADG-	Differer	ntial Ge	ometry									
M-102-m01	ECTS	10	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	S		V + Ü	(no information on S	SWS (weekly contact	hours) and course language av	vailable)				
	Method	l of asse	essment	(90 to 2, app Asses se off Langu	120 minutes), b) or prox. 30 minutes) sment offered: Asse ered on demand or e tage of assessment:	al examination of on essment offered in the every four semesters German, English	e candidate each (approx. 20 r e semester in which the course	ninutes), c) oral	essment: a) written examination examination in groups (groups of in the subsequent semester, cour-			
	other p			corda (e. g. tails a asses turer v in the	nce with the specifice successful completing the beginning of the sment. If students he will put their registra	ed registration deadle on of a certain perce ne course. Registration ave obtained the qualition for assessment osequent semester. I	ines. Certain prerequisites mus ntage of exercises). The lecture on for the exercise will be cons alification for admission to ass into effect. Students who mee	st be met to qua er will inform stu idered a declara essment over th t all prerequisite	as announced by the lecturer in ac- alify for admission to assessment udents about the respective de- ation of will to seek admission to ne course of the semester, the lec- es will be admitted to assessment ave to obtain the qualification for			
10-M=AFT-	Comple	x Analy	sis									
H-102-m01	ECTS	10	Duration		1 semester	Method of grading		Modul level	graduate			
	Courses	S		V + Ü	V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method	l of asse	essment	(90 to 2, app Asses se off	At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English							
	other p	rerequis	sites	Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								

10-M=AGMS-102-	Geome	tric Stru	ictures			'						
mo1	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	S		V + Ü	(no information or	SWS (weekly contact	hours) and course language av	vailable)				
	Method	of asse		(90 to 2, app	At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in ac-							
	other p	other prerequisites Lie Theory			nce with the speci successful comple t the beginning of sment. If students vill put their regist	fied registration deadl tion of a certain perce the course. Registration have obtained the quaration for assessment ubsequent semester. I	ines. Certain prerequisites mus ntage of exercises). The lecture on for the exercise will be cons alification for admission to ass into effect. Students who mee	st be met to qua er will inform stu idered a declara essment over th t all prerequisite	s announced by the lecturer in aclify for admission to assessment idents about the respective detion of will to seek admission to be course of the semester, the lects will be admitted to assessment ave to obtain the qualification for			
10-M=ALTH-102-	Lie The	ory						"				
mo1	ECTS	10	Duration	l	1 semester Method of grading numerical grade Modul level graduate							
	Courses	S		V + Ü	(no information or	SWS (weekly contact	hours) and course language av	/ailable)				
	Method	l of asse		(90 to 2, app Asses se offe	120 minutes), b) of the control of t	oral examination of on	e candidate each (approx. 20 r e semester in which the course	ninutes), c) oral	ssment: a) written examination examination in groups (groups of in the subsequent semester, cour-			
	other p	rerequis		cordar (e. g. s tails a asses turer v in the	nce with the speci successful comple t the beginning of sment. If students vill put their regist	fied registration deadl tion of a certain perce the course. Registration have obtained the quaration for assessment ubsequent semester. I	ines. Certain prerequisites must ntage of exercises). The lecture on for the exercise will be cons alification for admission to ass into effect. Students who mee	st be met to qua er will inform stu idered a declara essment over th t all prerequisite	s announced by the lecturer in aclify for admission to assessment idents about the respective detion of will to seek admission to be course of the semester, the lects will be admitted to assessment ave to obtain the qualification for			

10-M=AST-	Stocha	stical P	rocesses									
P-102-m01	ECTS	10	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	S		V + Ü	(no information or	n SWS (weekly contact	hours) and course language a	ıvailable)				
	Method	of asse		(90 to 2, app	At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination 90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English							
	other prerequisites Topology			corda (e. g. s tails a asses turer v in the	nce with the speci successful comple at the beginning of sment. If students will put their regist	fied registration deadletion of a certain perce the course. Registration have obtained the quarration for assessment subsequent semester.	ines. Certain prerequisites mu ntage of exercises). The lectur on for the exercise will be con- alification for admission to as into effect. Students who med	ust be met to qua rer will inform stu sidered a declara sessment over th et all prerequisite	s announced by the lecturer in ac- lify for admission to assessment idents about the respective de- ition of will to seek admission to be course of the semester, the lec- es will be admitted to assessment ave to obtain the qualification for			
10-M=A-	Topology											
TOP-102-m01	ECTS	10	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	S		V + Ü (no information on SWS (weekly contact hours) and course language available)								
	Method	l of asse		(90 to 2, app Asses se offe	o 120 minutes), b) prox. 30 minutes) sment offered: As ered on demand o	oral examination of on	e candidate each (approx. 20 e semester in which the cours	minutes), c) oral	ssment: a) written examination examination in groups (groups of in the subsequent semester, cour-			
	otherp	rerequis		corda (e. g. s tails a asses turer v in the	nce with the speci successful comple it the beginning of sment. If students will put their regist	fied registration deadletion of a certain perce the course. Registration have obtained the quarration for assessment subsequent semester.	ines. Certain prerequisites mu ntage of exercises). The lectur on for the exercise will be con- alification for admission to as into effect. Students who med	ust be met to qua rer will inform stu sidered a declara sessment over the et all prerequisite	s announced by the lecturer in ac- lify for admission to assessment idents about the respective de- ition of will to seek admission to be course of the semester, the lec- es will be admitted to assessment ave to obtain the qualification for			

10-M=AZTH-102-	Numbe	r Theory	<i>y</i>			'						
mo1	ECTS	10	Duration)	1 semester	Method of grading	numerical grade	1	Modul level	graduate		
	Course	S		V + Ü	(no information on	SWS (weekly contac	t hours) and course langu	uage avai	lable)			
	Method	l of asse		(90 to 2, app Asses se off	At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination go to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups of 2, approx. 30 minutes) Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course offered on demand or every four semesters. Language of assessment: German, English							
	other p	rerequis		corda (e. g. tails a asses turer v in the	nce with the speci successful comple at the beginning of sment. If students will put their regist	fied registration dead tion of a certain perco the course. Registrat have obtained the qual ration for assessmen ubsequent semester.	lines. Certain prerequisit entage of exercises). The ion for the exercise will b ualification for admission t into effect. Students wh	ites must be lecturer voe conside n to asses ho meet al	be met to qual will inform stu- ered a declara ssment over th ll prerequisite	s announced by the lecturer in aclify for admission to assessment dents about the respective detion of will to seek admission to e course of the semester, the lecs will be admitted to assessment we to obtain the qualification for		
10-M=AGP-	Giovanni-Prodi Lecture (Master)											
C-102-m01	ECTS	5	Duration)	1 semester	Method of grading	numerical grade	1	Modul level	graduate		
	Course	S		V + Ü	(no information on	SWS (weekly contac	t hours) and course langu	uage avai	lable)			
	Method	l of asse		(60 to 2, app	o 90 minutes), b) or orox. 20 minutes)	ral examination of on		ox. 15 minu		ssment: a) written examination xamination in groups (groups of		
	other p	rerequis	Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lect cordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to as (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respectable at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admassessment. If students have obtained the qualification for admission to assessment over the course of the semest turer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to as in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification to assessment anew.							lify for admission to assessment dents about the respective de- tion of will to seek admission to e course of the semester, the lec- s will be admitted to assessment		

10-M=VGDS-102-	Groups	and th	eir Repres	entati	ons							
mo1	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	(no information or	SWS (weekly contact	hours) and course language av	ailable)				
	Method	d of ass		(appronation Asses se offe	the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination pprox. 90 to 120 minutes; usually chosen), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups of 2 candidates (approx. 30 minutes total) assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent semester, course of assessment: German, English assessment: German, English assessment of the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in ac-							
		rerequi		corda (e. g. s tails a asses turer v in the admis	nce with the speci successful comple at the beginning of sment. If students will put their regist current or in the s ssion to assessme	fied registration dead etion of a certain perce the course. Registrati have obtained the quaration for assessment ubsequent semester.	lines. Certain prerequisites musentage of exercises). The lecture on for the exercise will be consibilities for admission to asset into effect. Students who meet	it be met to qua r will inform stu dered a declara essment over th all prerequisite	is announced by the lecturer in actilify for admission to assessment udents about the respective detion of will to seek admission to ne course of the semester, the lectes will be admitted to assessment ave to obtain the qualification for			
10-M=VDS-	Dynam	ical Sys	tems and	Contro	ol							
R-102-m01	ECTS	5	Duration		1 semester	Method of grading		Modul level	graduate			
	Course	S		V + Ü	V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method	d of ass		(60 to 2, app Asses se offe	o 90 minutes), b) o orox. 20 minutes) osment offered: As ered on demand o	ral examination of one	e candidate each (approx. 15 mine semester in which the course	nutes), c) oral e	ssment: a) written examination examination in groups (groups of in the subsequent semester, cour-			
	other p	rerequi		Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								

10-M=VMB-	Mathematical Imaging												
V-102-m01	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	es		V + Ü	(no information o	n SWS (weekly contact	hours) and course language av	ailable)					
	Metho	d of ass	essment	(60 to	o 90 minutes), b) o prox. 20 minutes)		ll choose one of the following me candidate each (approx. 15 mi		ssment: a) written examination xamination in groups (groups of				
	otherp	orerequi	sites	Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assessment (e. g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective details at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
10-M=V-	Non-Li	near An	alysis										
NAN-102-m01	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	es		V + Ü	(no information o	n SWS (weekly contact	hours) and course language av	ailable)					
	Metho	d of ass	essment	(60 to	o 90 minutes), b) o prox. 20 minutes)		l choose one of the following me candidate each (approx. 15 mi		ssment: a) written examination xamination in groups (groups of				
	otherp	orerequi	sites	corda (e. g. tails a asses turer v in the	nce with the spec successful complo at the beginning of sment. If students will put their regis	ified registration deadletion of a certain perce face the course. Registration have obtained the quatration for assessment subsequent semester. I	ines. Certain prerequisites mus ntage of exercises). The lecture on for the exercise will be consi- alification for admission to asso into effect. Students who meet	It be met to qua r will inform stu dered a declara essment over th all prerequisite	s announced by the lecturer in aclify for admission to assessment dents about the respective detion of will to seek admission to e course of the semester, the lecs will be admitted to assessment ve to obtain the qualification for				

Workshops and	Seminars										
10-M=GMN-	Study (Group 1	Nathemat	ics in t	he Sciences						
W-122-m01	ECTS	10	Duratio	n	1 semester		Method of grading	numerical gra	ade	Modul level	graduate
	Course	S		V + S	no information (on S\	WS (weekly contac	t hours) and co	urse language av	ailable)	
	Method	d of ass	sessment	tation 120 m tes), 6 Asses se off Langu	(approx. 60 to 1 inutes, c) written e) oral examinations are sment offered: A ered on demand lage of assessments	n exa on in Asses or event: (ninutes), b) written amination (approx. I groups of 2 candi ssment offered in t very four semester German, English	elaboration of 90 to 120 minu dates (approx. ; ne semester in s.	contents equival utes), d) oral exan 30 minutes) which the course	ent to a semina nination of one is offered and	of assessment: a) seminar presen- ar presentation of approx. 60 to candidate each (approx. 20 minu- in the subsequent semester, cour-
	other p	rerequi	isites	corda	nce with the spe	cifie	d registration dead	lines. Some se	minars or worksh	ops might only	s announced by the lecturer in ac- be open for students with pre- the class schedule.
10-M=SMN-	Semina	ar in Ma	thematic	s in the	Sciences						
W-122-m01	ECTS	5	Duratio	n	1 semester		Method of grading	numerical gra	ade	Modul level	graduate
	Course										
	Method	d of ass	sessment	tation minut Asses se off	(approx. 60 to 1 es sment offered: A	l20 m Asses or ev	ninutes), b) written ssment offered in t very four semester	elaboration of ne semester in	contents equival	ent to a semina	of assessment: a) seminar presen- ar presentation of approx. 60 to 90 in the subsequent semester, cour-
	other p	rerequi	isites	corda	nce with the spe	cifie	d registration dead	lines. Some se	minars or worksh	ops might only	is announced by the lecturer in ac- be open for students with pre- the class schedule.
10-M=GN-	Study (Group N	lumerical	Mathe	matics and Appl	ied A	Analysis				
MA-102-m01	ECTS	10	Duratio	n	1 semester		Method of grading	numerical gra	ade	Modul level	graduate
	Course	S		V + S	(no information o	on S\	WS (weekly contac	t hours) and co	urse language av	ailable)	
	Method	d of ass	sessment	tation 120 m tes), 6	approx. 60 to 1) inutes, c) writter	120 m n exa on in	ninutes), b) written amination (approx. a groups (groups of	elaboration of 90 to 120 minu	contents equival ıtes), d) oral exan	ent to a semina	of assessment: a) seminar presen- ar presentation of approx. 60 to candidate each (approx. 20 minu-
	other p	rerequi	isites	corda	nce with the spe	cifie	d registration dead	lines. Some se	minars or worksh	ops might only	s announced by the lecturer in ac- be open for students with pre- the class schedule.

10-M=GRO-	Study	Group R	obotic, O	ptimiz	ation and Control	Theory					
K-102-m01	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	!S		V + S	(no information o	n SWS (weekly contact	hours) and course langu	uage available)			
	Method	d of ass	essment	tation 120 m tes), e	n (approx. 60 to 12 ninutes, c) written e) oral examinatio	20 minutes), b) written e	elaboration of contents e 90 to 120 minutes), d) or	equivalent to a semina	of assessment: a) seminar presen- r presentation of approx. 60 to candidate each (approx. 20 minu-		
	other p	rerequi	sites	corda	gistration for the seminar must be made via SB@home at the beginning of the course or as announced by the lecturer in dance with the specified registration deadlines. Some seminars or workshops might only be open for students with pre- us knowledge and/or skills in certain areas. Where applicable, details will be specified in the class schedule.						
10-M=SGP-	Giovan	ni-Prod	i Seminar	(Mast	er)						
C-102-m01	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	:S		S (no	information on S\	WS (weekly contact hou	irs) and course language	e available)			
	Method	d of ass	essment	tation minut	At the beginning of the course, the lecturer will choose one or two of the following methods of assessment: a) seminar preser tation (approx. 60 to 120 minutes), b) written elaboration of contents equivalent to a seminar presentation of approx. 60 to 9 minutes Language of assessment: English, German if agreed upon with the examiner						
	other p	rerequi	sites	Registration for the seminar must be made via SB@home at the beginning of the course or as announced by the lecture cordance with the specified registration deadlines. Some seminars or workshops might only be open for students with vious knowledge and/or skills in certain areas. Where applicable, details will be specified in the class schedule.							
10-M=SID-	Interdi	sciplina	ry Semina	ar				,			
Z-102-m01	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	.S		S (no	information on S\	WS (weekly contact hou	irs) and course language	e available)			
	Method	d of ass	essment	At the beginning of the course, the lecturer will choose one or two of the following methods of assessment: a) seminar presentation (approx. 60 to 120 minutes), b) written elaboration of contents equivalent to a seminar presentation of approx. 60 to 90 minutes Language of assessment: German, English							
	other p	other prerequisites			Registration for the seminar must be made via SB@home at the beginning of the course or as announced by the lecturer in accordance with the specified registration deadlines. Some seminars or workshops might only be open for students with previous knowledge and/or skills in certain areas. Where applicable, details will be specified in the class schedule.						

10-M=SN-	Semina	Seminar in Numerical Mathematics and Applied Analysis											
MA-102-m01	ECTS	5	Duration	1	1 semester	Method of grad	ing numerical grade		Modul level	graduate			
	Courses	5		S (no	information on S	WS (weekly contact	hours) and course lan	iguage availa	ble)				
	Method	of asse	ssment	At the	beginning of the	course, the lecture	will choose one or tw	o of the follo	wing methods	of assessment: a) seminar presen-			
						20 minutes), b) writt	en elaboration of con	tents equivale	ent to a semina	r presentation of approx. 60 to 90			
				minut Langu		ent: German, English							
	other pr	rereguis	ites					beginning of	the course or a	s announced by the lecturer in ac-			
	•	,		corda	nce with the spe	cified registration de		ars or worksh	ops might only	be open for students with pre-			
10-M=SOP-	Semina	r in Opt	imizatior	1									
T-102-m01	ECTS	5	Duration	1	1 semester	Method of grad	ing numerical grade		Modul level	graduate			
	Courses	5				<u>.</u>	hours) and course lan						
	Method	of asse	essment	tation minut	(approx. 60 to 1 es	20 minutes), b) writt	en elaboration of con	tents equival	ent to a semina	of assessment: a) seminar presen- ir presentation of approx. 60 to 90			
				se off Langu	Assessment offered: Assessment offered in the semester in which the course is offered and in the subsequent sen se offered on demand or every four semesters. .anguage of assessment: German, English								
	other pr	rerequis	ites	corda	nce with the spe	cified registration de		ars or worksh	ops might only	s announced by the lecturer in ac- be open for students with pre- the class schedule.			
Application-oriente	d Subjec	ct											
Application-oriente	ed Subjec	ct Biolog	gy										
Topics: Bioinforma	tics												
07-MBI-B-121-m01	Bioinfo	rmatics	В										
	ECTS	5	Duration	1	1 semester	Method of grad	ing (not) successfully	y completed	Modul level	graduate			
	Courses	5		V (no	information on S	WS (weekly contact	hours) and course lan	iguage availa	ble)				
	Method	Method of assessment Students will be informed about the method, length and scope of the assessment prior to the course. a) written examination of one candidate each (30 to 60 minutes) oral examination in groups of up to 3 candidates (30 to 60 minutes)						e course. a) written examination late each (30 to 60 minutes) or c)					
07-MS2BI-102-	Bioinfo	rmatics	(Lecture	and Se	eminar)								
mo1	ECTS	CTS 10 Duration 1 semester Method of grading numerical grade Modul level graduate							graduate				
	Courses	5		S + V (no information on SWS (weekly contact hours) and course language available)									
	Method	of asse	essment	wing	options will be ch n of one candidat	nosen: a) written exa	mination (30 to 60 mi	inutes, includ	ling multiple ch	e course. Usually, one of the follo- loice questions) or b) oral exami- candidates (approx. 30 to 60 mi-			

07-MS2BIF1-102-	Bioinfo	Bioinformatics (Practical Course and Seminar 1)									
mo1	ECTS	10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	S	,	S + P	no information on	SWS (weekly contact h	nours) and course language av	vailable)			
	Method	l of asse	essment	tions pages	will be chosen: a) v s) or c) oral examin	written examination (30	o to 60 minutes, including mu each (30 to 60 minutes) or d)	ltiple choice qu	Usually, one of the following opestions) or b) log (approx. 10 to 30 on in groups of up to 3 candidates		
07-MS2BIF2-102-	Bioinfo	rmatics	(Practica	l Cour	se and Seminar 2)						
mo1	ECTS	15	Duratio	1	1 semester	Method of grading	(not) successfully completed	Modul level	graduate		
	Courses	S		S + P	(no information on	SWS (weekly contact h	nours) and course language av	vailable)			
	Method	l of asse	essment	tions pages (appr	will be chosen: a) or c) or c) oral examin ox. 30 to 60 minut	written examination (30 ation of one candidate es) or e) presentation (o to 60 minutes, including mu each (30 to 60 minutes) or d) 20 to 45 minutes)	ltiple choice que oral examinatio	Usually, one of the following opestions) or b) log (approx. 10 to 30 on in groups of up to 3 candidates		
	other p	rerequis	sites			to assessment: regular eginning of the course		successful com	pletion of the respective exerci-		
Topics: System Bio	logy										
07-MS-B-121-m01	System	s Biolog	gy B								
	ECTS	5	Duratio	1	1 semester	Method of grading	(not) successfully completed	Modul level	graduate		
	Courses		V (no information on SWS (weekly contact hours) and course language available)								
	Method	l of asse	essment	Students will be informed about the method, length and scope of the assessment prior to the course. a) written examing to 60 minutes, including multiple choice questions or b) oral examination of one candidate each (30 to 60 minutes) oral examination in groups of up to 3 candidates (30 to 60 minutes)							
07-MS3S-102-m01	System	Biology	y (Lecture	and S	ieminar)						
	ECTS	10	Duratio		1 semester	Method of grading		Modul level	graduate		
	Courses						nours) and course language a				
	Method	Method of assessment Students will be informed about the method, length and scope of the assessment prior to the course. Usually, on wing options will be chosen: a) written examination (30 to 60 minutes, including multiple choice questions) or b) nation of one candidate each (30 to 60 minutes) or c) oral examination in groups of up to 3 candidates (approx. 3 nutes)					oice questions) or b) oral exami-				
07-MS3SYF1-102-	System	Biology	y (Practio	al Cou	rse and Seminar 1)						
mo1	ECTS	10	Duratio								
	Courses	S		P + S (no information on SWS (weekly contact hours) and course language available)							
	Method	l of asse	essment	tions pages	will be chosen: a) v s) or c) oral examin	written examination (30	o to 60 minutes, including mu each (30 to 60 minutes) or d)	ltiple choice qu	Usually, one of the following opestions) or b) log (approx. 10 to 30 on in groups of up to 3 candidates		

07-MS3SYF2-102-	System	n Biolog	y (Practic	al Cou	rse and Seminar 2	2)						
mo1	ECTS	15	Duration	1	1 semester	Method of grading	(not) successfully completed	Modul level	graduate			
	Course	·S		P + S	no information or	SWS (weekly contact	hours) and course language av	/ailable)	•			
	Method	d of ass	essment	tions pages	will be chosen: a) s) or c) oral examir	written examination (3	o to 60 minutes, including mu e each (30 to 60 minutes) or d)	ltiple choice que	Usually, one of the following opestions) or b) log (approx. 10 to 30 in groups of up to 3 candidates			
	other p	rerequi	sites		Admission prerequisite to assessment: regular attendance of lab course and successful completion of the respective exercises as specified at the beginning of the course.							
Application-oriente	ed Subje	ct Chen	nistry									
Theoretical Chemis	stry											
08-TCM2-102-m01	Compu	tationa	l Chemist	ry								
	ECTS	5	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	to the second control of the second control										
	Method	d of ass	essment		vritten examination (90 minutes) .anguage of assessment: German or English							
	other p	rerequi	sites	Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the ning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually 70% of exercises).								
08-TCM1-102-m01	Theore	tical Ch	emistry									
	ECTS	5	Duration	<u> </u>	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		S + Ü	(no information o	n SWS (weekly contact	hours) and course language a	vailable)				
	Method	d of ass	essment		n examination (90 lage of assessmer	o minutes) nt: German or English						
	other p	rerequi	sites	ning	of the course (usua		be successfully completed) a		classes as specified at the begin- rattendance of exercises (usually			
08-TCM3-102-m01	Progra	mming	in Theore	tical C	nemistry							
	ECTS	5	Duration		1 semester	Method of grading		Modul level	graduate			
	Course			S + Ü (no information on SWS (weekly contact hours) and course language available)								
	Method	d of ass	essment			sion of approx. 5 progra nt: German or English	amming exercises as well as ta	lk (approx. 45 m	inutes)			

08-TCAP-102-m01	Theoret	tical Ch	emistry -	- Project work									
	ECTS	10	Duration	ı	1 semester	Method of g	grading	(not) successfu	lly completed	Modul level	graduate		
	Courses	5		•	08-TCAP-1-102: 08-TCAP-2-102:	nponents; inform P (no informatio P (no informatic P (no informatic	n on lang on on lang	guage and numl guage and num	ber of weekly c ber of weekly c	ontact hours av contact hours av	vailable) vailable)		
	Method	l of ass	essment		nodule has the f		sment co	mponents. To p	pass the modul	e as a whole st	udents must pass to	wo out of the-	
				Asses onsme	nik 5 ECTS credits, presentation (a Language of as sment compone ethoden 5 ECTS credits,	method of gradii pprox. 30 minute sessment: Germ	ng: (not) ses) an or Eng mponent ng: (not) s	successfully co lish 08-TCAP-2-102	mpleted		sgruppenpraktikum ' sgruppenpraktikum	·	
				Asses nalthe	Language of as sment compone corie 5 ECTS credits, presentation (a Language of as	sessment: Germant to module cor method of gradin pprox. 30 minute sessment: Germa	an or Eng mponent ng: (not) s es) an or Eng	o8-TCAP-3-102 successfully co		Chemie Arbeits	sgruppenpraktikum	Dichtefunktio-	
	Additio	nal Info	rmation	Additi	Additional information on module duration: 4 weeks								
Physical Chemistry	•												
08-PCM1-102-m01	Advanc	ed Phy	sical Cher	nistry									
	ECTS	10	Duration	n	1 semester	Method of g	grading	numerical grade	e	Modul level	graduate		
	Courses	S		•	08-PCM1-1-102	s 2 module com S + Ü (no inform : P (no information	nation on	SWS (weekly co	ontact hours) a	ınd course lang		component.	
	Method	l of ass	essment	Asses Asses	sment in modul 5 ECTS, Method written examina Language of as sment in modul 5 ECTS, Method Vortestate (pre pages)	e component o8- I of grading: numation (90 minute sessment: Germate component o8- I of grading: (not	-PCM1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	module will requals to the control of the control o	quire successfu etroscopy Laser 20 minutes) Physical Chem d	I completion of Spectroscopy	ts as specified belo f all individual asses	ssments.	
Master's with 1 major Cor	nnutational	Mathamat	ticc (2012)					IMII Würzburg	generated 26-Aug-20	24 e evam reg data	record 88 f24 - - H 2012	nage 20 / 42	

08-PCM2-102-m01	Chemic	al Dyna	mics						-			
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	5		S + Ü	(no information on	SWS (weekly contact	hours) and course la	nguage available)				
	Method	l of asse	essment			minutes) or oral exam : German or English	ination of one candid	late each (20 minutes) or	talk (30 minutes)			
08-PCM3-102-m01	Nanosc	alo Mat	rorials	Langu	age of assessment	. definall of Linguish		1				
08-FCM3-102-11101		5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		Duration			SWS (weekly contact			graduate			
			essment	writte	n examination (90 i			late each (20 minutes) or	talk (30 minutes)			
08-PCM4-102-m01	Ultrafas	st spect	roscopy	and qu	antum-control	-		,				
,	ECTS	5	Duration	<u> </u>	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	5		S + Ü	(no information on	SWS (weekly contact	hours) and course la	nguage available)				
	Method	l of asse	written examination (90 minutes) or oral examination of one candidate each (20 minutes) or talk (30 minutes) Language of assessment: German or English									
08-PCM5-102-m01	Physica	al chem	istry of s	pramo	lecular assemblies	5						
	ECTS	5	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	5	•	S + Ü	(no information on	SWS (weekly contact	hours) and course la	nguage available)	•			
	Method	l of asse	essment		written examination (90 minutes) and/or oral examination of one candidate each (20 minutes) and/or talk (30 minutes) Language of assessment: German or English							
08-PCM6-102-m01	Physica	l Chem	istry (Adv									
	ECTS	5	Duration	n	1 semester	Method of grading	(not) successfully co	mpleted Modul level	graduate			
	Courses	5	•	P (no	information on SWS	S (weekly contact hou	rs) and course langua	age available)				
	Method	l of asse	essment		ntation (20 minutes lage of assessment	s) : German or English						
Application-oriente	d Subje	ct Medi	cine									
03-Ma-	Applied	Mathe	matics ar	nd Med	licine							
Med1-122-mo1		10	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	5		V + S	(no information on	SWS (weekly contact	_		10			
	Method	l of asse			pprox. 60 to 120 m	` '	,	, , , , , , , , , , , , , , , , , , ,				
			_		age of assessment							
оз-Ма-	Practica	al Resea	arch Cour	ourse Medicine and Computational Mathematics								
Med2-122-m01					ion 1 semester Method of grading numerical grade Modul level graduate							
	Courses	5		R (no	R (no information on SWS (weekly contact hours) and course language available)							
	Method	Method of assessment talk (approx. 60 to 120 minutes) and project report (approx. 10 to 20 pages) Language of assessment: German, English										

Application-oriente	d Subjec	t Comp	uter Scie	nce								
10-I-AGT-122-m01	Algorith	mic Gr	aph Theo	ry								
	ECTS	5	Duration	า	1 semester	Method of grading num	erical grade	Modul level	undergraduate			
	Courses	;		V + Ü	(no information on	SWS (weekly contact hours	s) and course language a	vailable)				
	Method	of asse	essment	writte didate Langu	n examination can e each: 15 minutes, lage of assessment	be replaced by an oral exa groups of 2: 20 minutes, g : English, German if agreed	mination of one candidat roups of 3: 25 minutes) I upon with the examiner	e each or an oral	orior to the examination date, the l examination in groups (one can-			
	other pr	erequis	ites	Where	e applicable, prerec	uisites as specified by the	lecturer at the beginning	g of the course (e	.g. completion of exercises).			
10-I-DB-102-m01	Databas	ses				<u> </u>			_			
	ECTS	5	Duration		1 semester	Method of grading num		Modul level	undergraduate			
	Courses				Ü (no information on SWS (weekly contact hours) and course language available)							
				if ann exam tes, g Langu	ounced by the lectuination of one cand roups of 3: 25 minuinge of assessment	idate each or an oral exam tes) : German, English if agreec	ination in groups (one ca I upon with the examiner	ındidate each: 15	ation can be replaced by an oral minutes, groups of 2: 20 minu-			
	other pr	•		Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).								
	Referred	d to in LPO I § 49 (1) 1. b) Datenbanksysteme und Softwaretechnologie § 69 (1) 1. b) Datenbanksysteme und Softwaretechnologie										
10-I-WBS-102-m01	Knowled	dge-bas	sed Syste	ems								
	ECTS	5	Duration	1	1 semester	Method of grading num	erical grade	Modul level	undergraduate			
	Courses	j		V + Ü	(no information on	SWS (weekly contact hours	s) and course language a	vailable)				
	Method	of asse	essment	if ann exam tes, g	ounced by the lectuination of one cand roups of 3: 25 minu	idate each or an oral exam	ination in groups (one ca	ındidate each: 15	ation can be replaced by an oral minutes, groups of 2: 20 minu-			
10-I-DM-102-m01	Data Mi											
	ECTS	5	Duration	1	1 semester	Method of grading num	erical grade	Modul level	undergraduate			
	Courses				`	SWS (weekly contact hours	, ,					
	Method	of asse	essment	writte didate	n examination can each: 15 minutes,		mination of one candidat roups of 3: 25 minutes)	e each or an oral	orior to the examination date, the l examination in groups (one can-			
	other prerequisites Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the begin course).					cturer at the beginning of the						

10-I-KT-102-m01	Theory of Con	nplexity									
	ECTS 5	Duration	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses		V + Ü	(no information or	SWS (weekly contact	hours) and course lan	guage available)				
	Method of ass	sessment	writte didat	n examination car e each: 15 minutes	be replaced by an or groups of 2: 20 minu		candidate each or an ora inutes)	orior to the examination date, the l examination in groups (one can-			
	other prerequ		cours	e).	to assessment: exerc	ses (type and scope to	be announced by the le	cturer at the beginning of the			
10-I-AR-102-m01	Automation a	nd Control	Techr	ology							
	ECTS 8	Duratio	Ouration 1 semester Method of grading numerical grade Modul level undergrade								
	Courses		V + Ü	(no information or	n SWS (weekly contact	thours) and course lan	guage available)				
	Method of ass	sessment	writte 90 m (appr	n examination car inute written exam ox.) oral examinati	be replaced by an or ination is equivalent to ion in groups of 2 and	al examination of one	candidate each or an ora) oral examination of on oral examination in grou	prior to the examination date, the l examination in groups. A 80 to e candidate each, a 30 minute ups of 3.			
	other prerequ	isites	course).								
10-I-RK-102-m01		iter Networks and Communication Systems									
	ECTS 8	Duration	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses		V + Ü	(no information or	SWS (weekly contact	thours) and course lan	guage available)				
	Method of ass	sessment	writte 90 m	n examination car inute written exam ox.) oral examinati	be replaced by an or ination is equivalent to on in groups of 2 and	al examination of one one of a 20 minute (approx.	candidate each or an ora) oral examination of on oral examination in grou	prior to the examination date, the l examination in groups. A 80 to e candidate each, a 30 minute ups of 3.			
	other prerequ	isites	Admi cours		to assessment: exerc	ses (type and scope to	be announced by the le	cturer at the beginning of the			
10-l=Kl-102-m01	Artificial Inte	lligence	,				,				
	ECTS 8	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		V + Ü (no information on SWS (weekly contact hours) and course language available)								
	Method of ass	sessment	writte didat	n examination car e each: 15 minutes	be replaced by an or groups of 2: 20 minu		candidate each or an ora inutes)	prior to the examination date, the I examination in groups (one can-			
	other prerequ	isites	Wher	e applicable, prere	quisites as specified	by the lecturer at the b	eginning of the course (e	e. g. completion of exercises).			

10-l=EL-102-m01	E-Learn	ing				"		"		
	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses	;		V + Ü	(no information or	SWS (weekly contact	hours) and course languag	e available)		
	Method	of asse	essment	writte didate	n examination can e each: 15 minutes	be replaced by an ora groups of 2: 20 minu		date each or an ora s)	orior to the examination date, the l examination in groups (one can-	
	other pr	rerequis	ites	Where	e applicable, prere	quisites as specified b	y the lecturer at the beginn	ing of the course (e	e. g. completion of exercises).	
10-l=Ml-102-m01	Medical	l Inform	atics							
	ECTS	5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses	5	-	V + Ü	(no information or	SWS (weekly contact	hours) and course languag	e available)		
	Method	of asse	essment	writte didate Langu	n examination can e each: 15 minutes lage of assessmen	be replaced by an ora f, groups of 2: 20 minu t: German, English if a	I examination of one candi tes, groups of 3: 25 minute greed upon with the exami	date éach or an ora s) ner	orior to the examination date, the l examination in groups (one can-	
	other pr	erequis	sites	Where	applicable, prere	quisites as specified b	y the lecturer at the beginn	ing of the course (e	e. g. completion of exercises).	
10-I=DDB-102-m01	Deducti	ve Data								
	ECTS	8	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses	5		V + Ü	(no information or	SWS (weekly contact	hours) and course languag	e available)		
	Method	of asse	essment	writte 90 mi (appr	n examination can nute written exam ox.) oral examinati	he replaced by an ora ination is equivalent to on in groups of 2 and	l examination of one candi	date each or an ora l examination of on examination in grou	prior to the examination date, the l examination in groups. A 80 to e candidate each, a 30 minute ups of 3.	
	other pr	erequis	sites	Where	applicable, prere	quisites as specified b	by the lecturer at the beginn	ing of the course (e	e. g. completion of exercises).	
10-l=DB2-102-m01	Databas	ses II								
	ECTS	5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses	5	•	V + Ü	(no information or	SWS (weekly contact	hours) and course languag	e available)		
	Method	of asse	essment	written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner						
	other pr	erequis	sites	Where	e applicable, prere	quisites as specified b	y the lecturer at the beginn	ing of the course (e	e. g. completion of exercises).	

10-l=ST-102-m01	Simula	tion Tec	hniques	or Per	formance Evaluati	on		1			
	ECTS	8	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	S		V + Ü	(no information or	SWS (weekly contact	hours) and course language av	vailable)			
	Method	l of asse	essment	writte 90 mi (appro	tten examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination examination can be replaced by an oral examination of one candidate each or an oral examination in grounte written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a oprox.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. In guage of assessment: German, English if agreed upon with the examiner						
	other p	rerequi	sites	Where	applicable, prere	quisites as specified b	y the lecturer at the beginning	of the course (e	e. g. completion of exercises).		
10-l=KT2-102-m01	Advanc	ed Topi	ics in Com	putati	onal Complexity						
	ECTS	8	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	ses $V + \ddot{U}$ (no information on SWS (weekly contact hours) and course language available)									
				writte 90 mi (appro Langu	ritten examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination ritten examination can be replaced by an oral examination of one candidate each or an oral examination in groups of minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 pprox.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. anguage of assessment: German, English if agreed upon with the examiner						
	other p	rerequi	equisites Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).								
10-l=KD-102-m01		ography and Data Security									
	ECTS	5	Duration		1 semester	Method of grading		Modul level	graduate		
	Courses						hours) and course language av				
	Method	l of asse	essment	writte didate	n examination can e each: 15 minutes	be replaced by an ora , groups of 2: 20 minu			orior to the examination date, the l examination in groups (one can-		
	other p	rerequi	sites	Where	applicable, prere	quisites as specified b	y the lecturer at the beginning	of the course (e	e. g. completion of exercises).		
10-l=AG-102-m01	Compu	tationa	l Geometr	у							
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses V + Ü (no information on SWS (weekly contact hours) and course language available)										
	Method	d of assessment written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one can didate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner									
	other p	other prerequisites Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e.g. completion of exercises)					e. g. completion of exercises).				

10-l=APA-102-m01	Approx	imation	Algorith	ms								
	ECTS	5	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	(no information or	SWS (weekly contact	hours) and course language av	/ailable)	-			
	Method	d of asso	essment	writte didate	written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner							
	other p	rerequi	sites	Where	Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e.g. completion of exercises).							
10-l=A-	Algorit	hms for	Geograp	hic Inf	ormation Systems							
GIS-102-m01	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	(no information or	SWS (weekly contact	hours) and course language av	/ailable)	-			
	Method				itten examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the itten examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) nguage of assessment: German, English if agreed upon with the examiner							
	other p	rerequi	sites	Where	applicable, prere	quisites as specified l	by the lecturer at the beginning	of the course (e	e.g. completion of exercises).			
10-l=CB-102-m01	Compil	Compiler Construction										
	ECTS	8	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	(no information or	SWS (weekly contact	hours) and course language av	vailable)				
	Method	d of asso	essment	writte 90 mi (appr	n examination can nute written exam ox.) oral examinati	be replaced by an ora ination is equivalent t on in groups of 2 and		e each or an ora amination of on				
	other p	rerequi	sites	Where	Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e.g. completion of exercises).							
10-l=PA-102-m01	Progra	m Desig	n and An	alysis								
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	(no information or	SWS (weekly contact	hours) and course language av	vailable)				
	Method of assessment			writte didate	written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner							
	other prerequisites			Where	e applicable, prere	quisites as specified l	by the lecturer at the beginning	of the course (e	e.g. completion of exercises).			

10-I=RAM-102-m01	Compu	ter Aritl	hmetic		-					-		
	ECTS	5	Duration	ı	1 semester	Method of gra	ding numerical gr	ade	Modul level	graduate		
	Course	s	•	V + Ü	(no information of	on SWS (weekly co	ntact hours) and co	ourse language av	ailable)			
	Method	d of asso	essment	writte didat	en examination ca e each: 15 minute		n oral examinatior minutes, groups of	n of one candidate f 3: 25 minutes)		orior to the examination date, the I examination in groups (one can-		
	other p	rerequi	sites	Wher	here applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).							
10-l=AUT-102-m01	Automa	ata The	ory									
	ECTS 5 Duratio			1	1 semester	Method of gra	ding numerical gr	ade	Modul level	graduate		
	Course	S		V + Ü	(no information of	on SWS (weekly co	ntact hours) and co	ourse language av	ailable)			
	Method of assessment			writte didat	vritten examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the vritten examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) anguage of assessment: German, English if agreed upon with the examiner							
	other p	rerequi	sites		Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).							
10-I=BER-102-m01	Compu	Computability Theory										
	ECTS 5 Duratio			1	1 semester	Method of gra	ding numerical gr	ade	Modul level	graduate		
	Course	S			V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method of assessment			writte didat	written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one of didate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner							
	other p	rerequi	sites	Admi		e to assessment: e	xercises (type and	scope to be anno	unced by the le	cturer at the beginning of the		
10-l=ML-102-m01	Mather	matical	Logic									
	ECTS	5	Duration	1	1 semester	Method of gra	ding numerical gr	ade	Modul level	graduate		
	Course	S		V + Ü	(no information of	on SWS (weekly co	ntact hours) and co	ourse language av	ailable)			
	Method of assessment			writte didat	written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one candidate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner							
	other prerequisites			Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).								

Application-oriente	ed Subject Aerospace Co	omputer Science						
10-I-AR-102-m01	Automation and Contro	rol Technology						
	ECTS 8 Duration	ion 1 semester Method of grading numerical grade Modul level undergraduate						
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment		written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner					
	other prerequisites	Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).						
10-I-RAK-102-m01	Computer Architecture	e						
	ECTS 5 Duration	ion 1 semester Method of grading numerical grade Modul level undergraduate						
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination day written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (or didate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner						
	other prerequisites	Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).						
	Referred to in LPO I	§ 69 (1) 1. c) Informatik Technische Informatik						
10-I-RK-102-m01	Computer Networks an	nd Communication Systems						
	ECTS 8 Duration							
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination day written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 min (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner	4 8o to					
	other prerequisites	Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of course).	the					
10-l=ES-102-m01	Embedded Systems							
	ECTS 8 Duration	ion 1 semester Method of grading numerical grade Modul level graduate						
	Courses	V + Ü (no information on SWS (weekly contact hours) and course language available)						
	Method of assessment	written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 go minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner						
	other prerequisites	Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e.g. completion of exercises).						
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10-I=RO-102-m01	Robotics	5								
	ECTS 8	8 C	Ouration	1	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses			V + Ü	(no information on	SWS (weekly contact	hours) and course lar	nguage available)		
	Method	of assess	sment	written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, t written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 t 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3. Language of assessment: German, English if agreed upon with the examiner						
	other pre	erequisit	es	Wher	e applicable, prere	quisites as specified l	by the lecturer at the b	eginning of the course (e. g. completion of exercises).	
10-l=SSD-102-m01	Spacecra	aft Syste	ms Des	ign	,			'		
	ECTS 8 Duration			1	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Courses			V + Ü	(no information on	SWS (weekly contact	hours) and course lar	nguage available)		
				writte 90 mi (appr Langu	n examination can nute written exam ox.) oral examinati uage of assessmen	be replaced by an ora ination is equivalent to on in groups of 2 and t: German, English if a	al examination of one one a 20 minute (approx a 40 minute (approx.) agreed upon with the o	candidate each or an ora a.) oral examination of or oral examination in grou examiner		
	other pre	erequisit	es	Wher	e applicable, prere	quisites as specified l	by the lecturer at the b	eginning of the course (e.g. completion of exercises).	
10-l=AA-102-m01		Advanced Automation								
	ECTS 8	8 [Ouration		1 semester	Method of grading		Modul level	graduate	
	Courses					SWS (weekly contact		<u> </u>		
	Method of assessment			writte 90 mi (appr	n examination can nute written exam ox.) oral examinati	be replaced by an ora ination is equivalent to	al examination of one o a 20 minute (approx a 40 minute (approx.)	candidate each or an ora a.) oral examination of or oral examination in grou	prior to the examination date, the all examination in groups. A 80 to the candidate each, a 30 minute ups of 3.	
	other pre	erequisit	es	Wher	e applicable, prere	quisites as specified l	by the lecturer at the b	eginning of the course (e. g. completion of exercises).	
10-l=RO2-102-m01	Robotics	s II: Netw	orked F	Robots						
	ECTS 8	8 [Ouration		1 semester	Method of grading		Modul level	graduate	
	Courses			V + Ü	(no information on	SWS (weekly contact	hours) and course lar	nguage available)		
	Method of assessment			writte 90 mi (appr	n examination can nute written exam ox.) oral examinati	be replaced by an ora ination is equivalent to	al examination of one o a 20 minute (approx a 40 minute (approx.)	candidate each or an ora a.) oral examination of or oral examination in grou	prior to the examination date, the all examination in groups. A 80 to the candidate each, a 30 minute ups of 3.	
	other pre	erequisit	es	Wher	e applicable, prere	quisites as specified l	by the lecturer at the b	eginning of the course (e. g. completion of exercises).	

Application-orient	Application-oriented Subject Physics											
Solid State Physic	Solid State Physics and Nanostructures (Experiment)											
11-HLF-092-m01	Semiconductor Lasers	Principles and Current Research										
	ECTS 6 Duration	on 1 semester Method of grading numerical grade Modul level graduate										
	Courses	R + V (no information on SWS (weekly contact hours) and course language available)										
	Method of assessment	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. 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-FK2-092-m01	Solid State Physics 2											
	ECTS 8 Duration	on 1 semester Method of grading numerical grade Modul level graduate										
	Courses	R + V (no information on SWS (weekly contact hours) and course language available)										
		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English										
	other prerequisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.										

11-FKS-092-m01	Solid S	tate Sp	ectroscop					1				
	ECTS	6	Duration	1	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	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	rerequi	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. Reg Idents have obtained t Ir registration for asses	gistration for the course will be the qualification for admission to sment into effect. Students who	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- ents will have to obtain the quali-			
11-HLP-092-m01	Semico	Semiconductor Physics										
	ECTS 6 Duratio			1	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	d 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, 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	rerequi	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. Reg Idents have obtained t Ir registration for asses	gistration for the course will be the qualification for admission to sment into effect. Students who	considered a de to assessment o o meet all prere				

11-HNS-092-m01	Semiconductor Nanostructures											
	ECTS	6	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		R + V ((no information on	SWS (weekly contact	hours) and course language av	ailable)				
	Method	d of ass		prox. 3 to 10 p Asses nounc 2009.	Language of assessment: German, English							
	other p	rerequi		tive de on to a the lea sessm	etails at the beginn assessment. If stud cturer will put their	ing of the course. Reg lents have obtained the registration for asses or in the subsequent s	gistration for the course will be on the qualification for admission to sment into effect. Students who	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-SPD-102-m01	Semiconductor Physics and Devices											
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + R ((no information on	SWS (weekly contact	hours) and course language av	ailable)				
	Method	d of ass		written examination (approx. 90 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English								
	other p	rerequi		tive de on to a the lea sessm	etails at the beginn assessment. If stud cturer will put their	ing of the course. Reg lents have obtained the registration for asses or in the subsequent s	gistration for the course will be a he qualification for admission t ssment into effect. Students who	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-			

Astrophysics and F	Particle I	Physics	(Experim	ent)							
11-A4-072-m01	Astrop	hysics									
	ECTS	6	Duratio	1	1 semester	Method of grading numerical grad	le	Modul level	undergraduate		
	Course	es	`	V + S	(no information o	n SWS (weekly contact hours) and cour	rse language av	ailable)			
	Metho	d of asse	essment	writte	written examination (approx. 120 minutes)						
	other p	rerequis	sites	to qua course obtain for as							
	Participants and allo- cation of places			Only a	as part of pool of	general key skills (ASQ): 15 places. Plac	ces will be alloc	ated by lot.			
11-AWP-092-m01	Atmosphere and Space Physics										
	ECTS 6 Duratio			า	1 semester	Method of grading numerical grad	le	Modul level	graduate		
	Courses			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) 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	orerequis	sites	tive do on to the le sessm	etails at the begir assessment. If st cturer will put the nent in the curren	nust be met to qualify for admission to a nning of the course. Registration for the udents have obtained the qualification ir registration for assessment into effect t or in the subsequent semester. For as so assessment anew.	course will be for admission tot. Students who	considered a de o assessment c o meet all prere	eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as-		

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	R + V (no information on SWS (weekly contact hours) and course language available)							
	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. 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.								

Complex Systems,	Quantu	m Conti	ol and Bio	ophysi	ics (Experiment)						
11-SDC-092-m01	Statist	ics, Dat	a Analysi:	s and (Computer Physics						
	ECTS	4	Duratio	n	1 semester	Method of gradin	g numerical grade	Modul level	graduate		
	Course	S	•	R + V	R + V (no information on SWS (weekly contact hours) and course language available)						
	Method	d of ass	essment	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			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.							
Solid State Physics				eory)							
11-QM2-092-m01	Quantum Mechanics II										
	ECTS	8	Duratio	,	1 semester		g numerical grade	Modul level	undergraduate		
	Course	S		R + V	R + V (no information on SWS (weekly contact hours) and course language available)						
	Method	d of ass	essment	prox. to 10 Asses noun 2009	30 minutes per ca pages, time to con ssment offered: Wh ced in due form un o.	ndidate, for module oplete: 1 to 4 weeks) oen and how often a	s with less than 4 ECTS cro or d) presentation/semir ssessment will be offered	edits approx. 20 minutonar presentation (appro I depends on the metho	roral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) od of assessment and will be anand 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-TFK-092-m01	Theoret	ical Solid State	Physic	S			,			
	ECTS	8 Duratio	n	1 semester	Method of grading nu	merical grade	Modul level	graduate		
	Courses	5	R + V	(no information or	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 (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-TSL-092-m01	Theory of Superconduction									
	ECTS	5 Duratio	n	1 semester	Method of grading nu	merical grade	Modul level	graduate		
	Courses	5	R + V	(no information or	SWS (weekly contact ho	urs) 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 (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.							

Astrophysics and I	, 		Plasmar	hvsics							
	ECTS	6	Duration		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)						
	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 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-AKM-092-m01	Cosmology										
	ECTS	6	Duration		1 semester	Method of grading		Modul level	graduate		
	Course			R + V (no information on SWS (weekly contact hours) and course language available)							
	Method	d of ass	essment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each 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-APL-092-m01	Plasma-Astrophysics											
	ECTS	6	Duration		1 semester	Method of grading	numerical grade	Modul	level	graduate		
	Courses			R + V (no information on SWS (weekly contact hours) and course language available)								
	Method	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-ASP-092-m01	Introduction to Space Physics											
	ECTS 6 Duratio				1 semester	Method of grading	numerical grade	Modul	level	graduate		
	Course	S		R + V ((no information on	SWS (weekly contac	t hours) and course langua	ge available)				
	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-GRT-092-m01	Group Theory												
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses			R + V (no information on SWS (weekly contact hours) and course language available)									
	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-RNT-092-m01	Renormalization Theory												
	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 a	ıvailable)					
	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		on to the le	etails at the beginr assessment. If stud cturer will put their nent in the current	ing of the course. Reg lents have obtained the registration for asses	istration for the course will be ne qualification for admissior sment into effect. Students w	e considered a de 1 to assessment c ho meet all prere	nform students about the respec- eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as- ents will have to obtain the quali-				

11-RQFT-092-m01	Relativistical Quantumfield Theory												
	ECTS	8 Di	uration	1 semester	Method of grading numerical grade		Modul level	graduate					
	Course	S	R + \	/ (no information o	n SWS (weekly contact hours) and course la	nguage ava	ailable)						
	Method	d of assess	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	rerequisite	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-RTT-092-m01	Theory of Relativity												
	ECTS	6 Di	uration	1 semester	Method of grading numerical grade		Modul level	graduate					
	Course	S	R + \	R + V (no information on SWS (weekly contact hours) and course language available)									
	Method	d of assess	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	rerequisite	tive on to the l sess	details at the begin assessment. If stu ecturer will put the ment in the current	nust be met to qualify for admission to assest ining of the course. Registration for the cour udents have obtained the qualification for a ir registration for assessment into effect. Sto t or in the subsequent semester. For assess o assessment anew.	rse will be o dmission to udents who	considered a de o assessment c o meet all prere	eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as-					

11-TEP-092-m01	Theoretical Elementary Particle Physics												
	ECTS	8	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S	R	2 + V (n	no information on :	SWS (weekly contact	hours) and course language av	ailable)					
	Method	d of ass	p tc A ne	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	rerequi	ti o th	ive det on to a: he lect essme	tails at the beginn ssessment. If stud turer will put their ent in the current c	ing of the course. Reg lents have obtained t registration for asses	gistration for the course will be on the qualification for admission to sment into effect. Students who	considered a de to assessment o o meet all prere	form students about the respectorial state of will to seek admissiver the course of the semester, quisites will be admitted to asints will have to obtain the quali-				
11-SUS-092-m01	Supersymmetry I and II												
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S	V	/ + R (n	no information on	SWS (weekly contact	hours) and course language av	ailable)					
	Method	d of ass	p tc A n	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	rerequi	ti o th	ive det on to a: he lect essme	tails at the beginn ssessment. If stud turer will put their ent in the current o	ing of the course. Reg lents have obtained t registration for asses	gistration for the course will be a he qualification for admission t ssment into effect. Students who	considered a de to assessment o o meet all prere	form students about the respectorial claration of will to seek admissiver the course of the semester, quisites will be admitted to asnts will have to obtain the quali-				

11-NMA-111-m01	Compu	itationa	l Astroph	ysics							
	ECTS 6 Duration			1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			V + R	V + R (no information on SWS (weekly contact hours) and course language available)						
	Method	d of ass	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) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English							
	other prerequisites			Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
Thesis (30 ECTS cro	edits)										
10-M=MACM-102-	Maste	r Thesis	Computa	tional	Mathematics						
mo1	ECTS	30	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	!S		no courses assigned							
	Metho	d of ass	essment	written thesis Language of assessment: German, English							
	other prerequisites			Registration for assessment and assignment of topic in consultation with supervisor. The supervisor may make the successful completion of certain modules that are relevant for the respective topic a prerequisite for the assignment of the topic.							