

Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject 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 modules in this SFB:

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

Information on assessment procedures:

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

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

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

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

ASPO2009

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

28-Nov-2012 (2012-197)

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

Every module will be described using the following form:

Abbreviation	Module title											
	ECTS		Duration	(in semesters)	Method of grading		Module level					
	Courses		To be 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	applicable								
	Other prereq	uisites	if applica	fapplicable								
	Participants on of places		ocati- if applica	if applicable								
	Additional in	format	ion if applica	if applicable								
	Referred to in	n LPO I	if applica	if applicable (examination regulations for teaching-degree programmes)								

Mathematics (60 E	CTS credi	its)										
Advanced Program	me (15 E0	CTS cre	dits)									
10-M=AAAN-102-	Applied	Analys	is									
mo1	ECTS	10	Duration	า	1 semester	Method of grading	numerical grade		Modul level	graduate		
	Courses	5	,	V + Ü	(no information on	SWS (weekly contact	hours) and course	language av	ailable)			
	Method	of asse	essment	(90 to 2, ap 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 pr	rerequis	sites	corda (e. g. tails a asses turer in the	nce with the specif successful comple at the beginning of ssment. If students will put their regist	ied registration dead tion of a certain perce the course. Registrati have obtained the qu ration for assessment ubsequent semester.	lines. Certain prere entage of exercises) on for the exercise alification for admi into effect. Studen	quisites mus). The lecture will be consi- ission to assents 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 ac- ilify for admission to assessment idents about the respective de- ation of will to seek admission to the course of the semester, the lec- es will be admitted to assessment have to obtain the qualification for		
10-M=AAL-	Topics i	Topics in Algebra										
G-102-m01	ECTS	10	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 av	ailable)			
	Method	of asse	essment	(90 to 2, ap Asses se off	o 120 minutes), b) o prox. 30 minutes) ssment offered: Ass	oral examination of or sessment offered in the every four semesters	e candidate each (ne semester in whic	(approx. 20 m	ninutes), c) oral	ssment: a) written examination examination in groups (groups of in the subsequent semester, cour-		
	other pr	rerequis	sites	corda (e. g. tails a asses turer in the	nce with the specif successful comple at the beginning of ssment. If students will put their regist	ied registration dead tion of a certain perce the course. Registrati have obtained the qu ration for assessment ubsequent semester.	lines. Certain prere entage of exercises) on for the exercise alification for admi into effect. Studen	quisites mus). The lecture will be consi- ission to assents 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 ac- lify for admission to assessment idents about the respective de- ation of will to seek admission to the course of the semester, the lec- es will be admitted to assessment have to obtain the qualification for		

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	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			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 lectordance 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 respectails 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 semesturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to a in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification to assessment anew.								
10-M=AFT-	Comple	x Analy	sis										
H-102-m01	ECTS	ECTS 10 Duratio			1 semester	Method of grading		Modul level	graduate				
	Courses	S		V + Ü	/ + Ü (no information on SWS (weekly contact hours) and course language available)								
	Method	l of asse	essment	(90 to 2, app Asses se off	120 minutes), b) ord prox. 30 minutes) sment offered: Asse ered on demand or 6	al examination of on essment offered in the every four semesters	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	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	etric Str	uctures										
mo1	ECTS	10	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	es		V + Ü	(no information or	n SWS (weekly contact	hours) and course language ava	ailable)					
	Metho	d of ass	essment	(90 to 2, app	o 120 minutes), b) orox. 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	orerequi	sites	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 deadletion of a certain perce the course. Registration have obtained the quatration for assessment subsequent semester. I	ines. Certain prerequisites musintage of exercises). The lecturer on for the exercise will be considalification for admission to assessinto effect. Students who meet	t be met to qual 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				
10-M=AIST-102-	Indust	Industrial Statistics 1											
mo1	ECTS 10 Duration			1	1 semester Method of grading numerical grade Modul level graduate								
	Course	es		V + Ü	V + Ü (no information on SWS (weekly contact hours) and course language available)								
	Method of assessment			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 (grou 2, approx. 30 minutes) Language of assessment: German, English									
	other p	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=ALTH-102-	Lie The	Lie Theory												
mo1	ECTS	10	Duration	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 av	ailable)						
	Method	d of asso		(90 to 2, app Assess se offe	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 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	rerequi		cordan (e. g. s tails at assess turer w in the o	nce with the specificuccessful completing the beginning of the sament. If students hill put their registra	ed registration deadlion of a certain perce he course. Registrationave obtained the quation for assessment bsequent semester. I	ines. Certain prerequisites musintage of exercises). The lecturer on for the exercise will be considalification for admission to assessinto effect. Students who meet	t be met to qua will inform stu dered a declara essment over th all prerequisite	lify for admission to assessment					
10-M=ANG-	Numeric of large Systems of Equations													
G-102-m01	ECTS	10	Duration	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 av	ailable)						
	Method of assessment other prerequisites			(90 to 2, app		ral examination of on	l choose one of the following m e candidate each (approx. 20 m		ssment: a) written examination examination in groups (groups of					
				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 Optir	nization					,				
T-102-m01	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	(no information on S	WS (weekly contact	hours) and course language av	ailable)				
				(90 to 2, app Asses se off Langu	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	orerequis	sites	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 lectucordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to asset (e.g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respectitails at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admisssessment. If students have obtained the qualification for admission to assessment over the course of the semester turer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to ass in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification to assessment anew.							
10-M=ARTH-102-	Introdu	iction to	Control	Theory								
mo1	ECTS 10 Duratio		1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	·S		V + Ü	/ + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method	d of asse	essment	oral e tes) Asses se off	written examination (approx. 90 to 120 minutes); if announced by the lecturer, the written examination can be replaced by a 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, co se offered on demand or every four semesters. Language of assessment: German or 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=ASM-	Stocha	Stochastic Models for Risk Analysis													
R-102-m01	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate						
	Course	S		V + Ü	(no information on S	SWS (weekly contact	hours) and course language ava	ailable)							
	Method	d of ass	essment	(90 to		al examination of on	l choose one of the following me e candidate each (approx. 20 m		ssment: a) written examination examination in groups (groups of						
	other p	rerequi	sites	corda (e. g. tails a asses turer v in the	ince with the specifications with the specification of the seginning of the sament. If students have their registrations is their registrations.	ed registration deadl on of a certain perce ne course. Registration wave obtained the qualition for assessment bsequent semester.	ines. Certain prerequisites must ntage of exercises). The lecturer on for the exercise will be consic alification for admission to asse into effect. Students who meet	t be met to qua 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						
10-M=AST-	Stocha	stical P	rocesses												
P-102-m01	ECTS	10	Duration	1	1 semester Method of grading numerical grade Modul level graduate										
	Course	S	,	V + Ü	V + Ü (no information on SWS (weekly contact hours) and course language available)										
	Method	d of ass	essment	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	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=A-	Topolo	gy										
TOP-102-m01	ECTS	10	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	(no information on S	SWS (weekly contact	hours) and course language av	ailable)				
	Method	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 e tage of assessment:	al examination of on ssment offered in th every four semesters German, English	e candidate each (approx. 20 n e semester in which the course	ninutes), c) oral	essment: a) written examination examination in groups (groups of in the subsequent semester, cour-			
		rerequis		corda (e. g. tails a asses turer v in the admis	Registration for the exercise must be made via SB@home at the beginning of the course or as announced by the lecture cordance with the specified registration deadlines. Certain prerequisites must be met to qualify for admission to assess (e.g. successful completion of a certain percentage of exercises). The lecturer will inform students about the respective tails at the beginning of the course. Registration for the exercise will be considered a declaration of will to seek admissi assessment. If students have obtained the qualification for admission to assessment over the course of the semester, to turer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assess in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification admission to assessment anew.							
10-M=AVS-	Insurar	ice Mat	hematics									
M-102-m01	ECTS 10 Duratio				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 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=AZ-	Time Series Analysis 1												
RA-102-m01	ECTS	10	Duration)	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V + Ü	(no information on	SWS (weekly contact	hours) and course language ava	ailable)					
	Method	d 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 p	rerequis		corda (e. g. s tails a asses turer v in the	nce with the specifi successful complet It the beginning of t sment. If students I will put their registr	ied registration deadlion of a certain perce the course. Registration have obtained the quation for assessment absequent semester. I	ines. Certain prerequisites must ntage of exercises). The lecturer on for the exercise will be conside alification for admission to asset into effect. Students who meet	t be met to qua 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 we to obtain the qualification for				
10-M=AZTH-102-	Number Theory												
mo1	ECTS	10	Duration)	1 semester Method of grading numerical grade Modul level graduate								
	Course	S		V + Ü	(no information on	SWS (weekly contact	hours) and course language ava	ailable)					
	Method	d of asse		(90 to 2, app Asses se offe	o 120 minutes), b) o orox. 30 minutes) esment offered: Ass	ral examination of on essment offered in th every four semesters	e semester in which the course	inutes), c) oral	examination in groups (groups of n the subsequent semester, cour-				
	other p	rerequis		corda (e. g. s tails a asses turer v in the	nce with the specifi successful complet it the beginning of t sment. If students l will put their registr	led registration deadle ion of a certain perce the course. Registration have obtained the qua ation for assessment absequent semester. I	ines. Certain prerequisites must 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 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 we to obtain the qualification for				

10-M=AGP-	Giovanr	ni-Prodi	Lecture ((Maste	er)							
C-102-m01	ECTS	5	Duration	า	1 semester	Method of grading	numerical grade		Modul level	graduate		
	Courses	5		V + Ü	(no information o	n SWS (weekly contac	t hours) and course lar	nguage ava	ailable)			
	Method	of asse	essment	(60 to	o 90 minutes), b) prox. 20 minutes)	oral examination of on		orox. 15 mir		ssment: a) written examination xamination in groups (groups of		
	other pr	rerequis	sites	corda (e. g. tails a asses turer 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.							
Specialisation (15 l	CTS cred	dits)										
10-M=VA-	Selecte	d Topic	s in Analy	rsis								
NA-122-m01	ECTS	10	Duration	<u> </u>	1 semester	Method of grading	numerical grade		Modul level	graduate		
	Courses	5		V + Ü	(no information o	n SWS (weekly contac	t hours) and course lar	nguage ava	ailable)			
	Method of assessment At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written ex (approx. 90 to 120 minutes; usually chosen), b) oral examination of one candidate each (approx. 20 minutes), c) nation 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 se se offered on demand or every four semesters. Language of assessment: German, English							orox. 20 minutes), c) oral exami-				
	other pr	rerequis	sites	tive d on to the le sessr	letails at the beging assessment. If steeturer will put the ment in the curren	nning of the course. Re cudents have obtained eir registration for asse	egistration for the cours the qualification for ac essment into effect. Stu	se will be c dmission to udents who	considered a de o assessment c o meet all prere	ofform students about the respec- eclaration of will to seek admissi- ever the course of the semester, quisites will be admitted to as- ents will have to obtain the quali-		

10-M=VAT-	Algebraic Topology												
P-102-m01	ECTS	10	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V + Ü	(no information on S	SWS (weekly contact	hours) and course language ava	ailable)					
	Method	d of ass		(appronation	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) Language of assessment: German, English								
		rerequi		cordar (e. g. s tails a asses turer v in the admis	nce with the specific successful completing at the beginning of the sment. If students have will put their registration current or in the suits	ed registration deadle on of a certain perce he course. Registration have obtained the quation for assessment bsequent semester.	ines. Certain prerequisites must ntage of exercises). The lecturer on for the exercise will be consic alification for admission to asse into effect. Students who meet	t be met to qual will inform studered a declara essment over thall 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				
10-M=VFN-	Special Topics in Financial Mathematics												
M-102-m01	ECTS	10	Duration	1	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		(appronation	ox. 90 to 120 minute	es; usually chosen), l didates (approx. 30 n	ll choose one of the following m b) oral examination of one candi ninutes total)						
	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=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 on	SWS (weekly contact	hours) and course language av	ailable)				
	Method	d of ass		(appronation Asses se off	ox. 90 to 120 minu n in groups of 2 car ssment offered: Ass ered on demand o	tes; usually chosen), l ndidates (approx. 30 n	o) oral examination of one cand ninutes total) e semester in which the course	lidate each (app	ssment: a) written examination prox. 20 minutes), c) oral examiin 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 regist	fied registration deadl tion of a certain perce the course. Registration have obtained the qual ration for assessment ubsequent semester.	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	it be met to qua r will inform stu dered a declara essment over th all prerequisite	is announced by the lecturer in ac- ilify for admission to assessment idents about the respective de- ition 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=V-	Geometrical Mechanics											
GEM-102-m01	ECTS 10 Duratio			1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method of assessment			(appronation Asses se off	ox. 90 to 120 minu n in groups of 2 car ssment offered: Ass ered on demand o	tes; usually chosen), k ndidates (approx. 30 n	o) oral examination of one cand ninutes total) e semester in which the course	lidate each (app	ssment: a) written examination prox. 20 minutes), c) oral examiin 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=VIST-102-	Indust	rial Stat	istics 2								
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)			
	Metho	d of ass	essment	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			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-	Field Arithmetics										
KAR-102-m01	ECTS	ECTS 10 Duration			1 semester Method of grading numerical grade Modul level graduate						
	Course	!S		V + Ü (no information on SWS (weekly contact hours) and course language available)							
				(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			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 deadletion 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 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 e course of the semester, the lecs will be admitted to assessment we to obtain the qualification for		

10-M=VGP-	Giovan	ni-Prodi	Lecture S	electe	d Topics (Master)						
C-122-m01	ECTS	10	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S	Ţ,	V + Ü	(no information on S	WS (weekly contact	hours) and course language av	ailable)			
	Method	l of asse	1	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 prerequisites			Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
10-M=VN-	Numeric of Partial Differential Equations										
PE-102-m01	ECTS	10	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S	'	V + Ü	(no information on S	WS (weekly contact	hours) and course language av	ailable)			
	Method of assessment			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 prerequisites				nce with the specifie successful completion t the beginning of the sment. If students h vill put their registra	ed registration deadle on of a certain perce he 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 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 ave to obtain the qualification for		

10-M=VOP-	Selecte	ed Topic	cs in Optir	nizatio	on .						
T-102-m01	ECTS	10	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	es.		V + Ü	(no information on	SWS (weekly contact	hours) and course language av	ailable)			
	Metho	d of ass	essment	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			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-	Statistical Analysis										
STA-102-m01	ECTS 10 Duration			1	1 semester Method of grading numerical grade Modul level graduate						
	Course	es.		V + 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 (90 to 120 minutes), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups (groups 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 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=VVS-	Insura	nce Mat	thematics	2								
M-102-m01	ECTS	10	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	(90 to	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							
		orerequi		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=VZ-	Time S	Time Series Analysis 2										
RA-102-m01	ECTS	ECTS 10 Duration			1 semester Method of grading numerical grade Modul level graduate							
	Course	es		V + Ü (no information on SWS (weekly contact hours) and course language available)								
	Metho				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 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 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-	Discrete Math	ematic								
DIM-102-m01	ECTS 5	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	V +	Ü (no information on S	SWS (weekly contact	hours) and course language av	vailable)				
	Method of ass	(60 2, 6 Ass se Lar	At 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 2, 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. Language of assessment: German, English							
	other prerequi	cor (e. tail ass tur in t adı	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=VDS-	Dynamical Sys	stems and Cor	ntrol							
R-102-m01	ECTS 5	Duration	1 semester	Method of grading		Modul level	graduate			
	Courses	_	V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method of ass	(60 2, 6 Ass se	At 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 2, 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. Language of assessment: German, English							
	other prerequi	cor (e. tail ass tur in t	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-	Aspects of Geometry											
GEO-102-m01	ECTS 5	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses		V + Ü	(no information on S	SWS (weekly contact	hours) and course language av	/ailable)					
	Method of ass	sessment	(60 to	At 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 2, approx. 20 minutes) Language of assessment: German, English								
	other prerequi	isites	corda (e. g. tails a asses turer 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=V-	Basics in Mathematics											
GRM-102-m01	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)									
	(6			At 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 2, approx. 20 minutes) Language of assessment: German, English								
	other prerequi	isites	corda (e.g. tails a asses turer in the	nce with the specific successful completi 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 qualition 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 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=V-	Mathe	matical	Continuu	m Mec	hanics							
KOM-122-mo1	ECTS	5	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	.s		V + Ü	(no information or	n SWS (weekly contact	hours) and course language av	ailable)				
	Method	d of ass	essment	(60 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 (60 to 90 minutes), b) oral examination of one candidate each (approx. 15 minutes), c) oral examination in groups (groups of 2, 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. Language of assessment: German, English							
	otherp	orerequi	sites	tive d on to the le sessn	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
10-M=VMB-	Mathematical Imaging											
V-102-m01	ECTS 5 Duration			า	1 semester	Modul level	graduate					
	Course	!S		V + Ü	(no information or	n SWS (weekly contact	hours) and course language av	ailable)				
				At 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 2, approx. 20 minutes) Language 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 a cordance 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=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 o	on SWS (weekly contact	hours) and course language ava	ailable)								
	Method of assessment	At 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 2, 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. Language 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=VMT-	Modul Theory												
H-102-m01	ECTS 5 Duration	1 semester	Method of grading	numerical grade	Modul level	graduate							
	Courses	V + Ü (no information o	on SWS (weekly contact	hours) and course language ava	ailable)								
	Method of assessment		oral examination of one			ssment: a) written examination examination in groups (groups of							
	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=V-	Non-Lir	near An	alysis					,			
NAN-102-m01	ECTS	5	Duration)	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		V + Ü	(no information on	SWS (weekly contact	hours) and course language ava	ailable)			
	Method	d of ass		At 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 2, approx. 20 minutes) Language 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 Duratio)	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method of assessment			(60 to 2, app		al examination of one	ll choose one of the following me candidate each (approx. 15 min		ssment: a) written examination xamination in groups (groups of		
	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=VQK-	Quantum Control and Quantum Computing											
C-102-m01	ECTS 5 Duration	n 1 semester	Method of grading numerical grade	Modul leve	graduate							
	Courses	V + Ü (no information	on SWS (weekly contact hours) and course	language available)								
	Method of assessment	At 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 2, 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. Language 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=VV-	Networked Systems											
SY-102-m01	ECTS 5 Duration	n 1 semester	Method of grading numerical grade	Modul leve	graduate							
	Courses	V + Ü (no information	on SWS (weekly contact hours) and course	language available)								
	Method of assessment											
	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.										

Workshops and	Seminars ((10 ECT:	S credits)									
10-M=GAL-	Study	Group A	lgebra									
G-102-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Mod	dul level	graduate		
	Course	S	,	V + S	V + S (no information on SWS (weekly contact hours) and course language available)							
	Method	d of ass	essment	tation 120 m tes), o Asses se off	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 120 minutes, c) written examination (approx. 90 to 120 minutes), d) oral examination of one candidate each (approx. 20 minutes), e) 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.							
	other p	rerequ	isites	Regis corda	egistration for the seminar must be made via SB@home at the beginning of the course or as announced by the lecturer in acordance with the specified registration deadlines. Some seminars or workshops might only be open for students with pre- ious knowledge and/or skills in certain areas. Where applicable, details will be specified in the class schedule.							
10-M=G-	Study (Group [iscrete M	athem	atics							
DIM-102-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Mod	dul level	graduate		
	Course	:S		V + S	(no information or	SWS (weekly contac	t hours) and course lan	guage availabl	le)	-		
	Method	Method of assessment			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 120 minutes, c) written examination (approx. 90 to 120 minutes), d) oral examination of one candidate each (approx. 20 minutes), e) oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English							
	other prerequisites			corda	nce with the speci	fied registration dead		or workshops n	night only	s announced by the lecturer in ac- be open for students with pre- the class schedule.		
10-M=GDS-	Study (Group [ynamical	Syste	ms and Control							
R-102-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Mod	dul level	graduate		
	Course	:S	,	V + S	V + S (no information on SWS (weekly contact hours) and course language available)							
	Method	Method of assessment			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 120 minutes, c) written examination (approx. 90 to 120 minutes), d) oral examination of one candidate each (approx. 20 minutes), e) oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English							
	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 a cordance 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.						be open for students with pre-		

10-M=GFT-	Study	Group (Complex A	nalysi	 5			,				
H-102-m01	ECTS	10	Duratio	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S	•	V + S	V + S (no information on SWS (weekly contact hours) and course language available)							
	Method	d of ass	sessment	tation 120 n tes),	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 120 minutes, c) written examination (approx. 90 to 120 minutes), d) oral examination of one candidate each (approx. 20 minutes), e) oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English							
	·	rerequ		corda vious	nce with the speci knowledge and/o	ified registration deadl		shops might only	s announced by the lecturer in ac- be open for students with pre- the class schedule.			
10-M=GGM-		Group (Seometry		pology							
T-102-m01	ECTS	10	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	Courses			V + S (no information on SWS (weekly contact hours) and course language available)							
		Method of assessment			tation (approx. 60 to 120 minutes), b) written elaboration of contents equivalent to a seminar presentation of approx. 60 to 120 minutes, c) written examination (approx. 90 to 120 minutes), d) oral examination of one candidate each (approx. 20 minutes), e) oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English Registration for the seminar must be made via SB@home at the beginning of the course or as announced by the lecturer in account of the course or as a							
	·	other prerequisites			cordance 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=GM-		Group I			ts Context							
KX-102-m01	ECTS	10	Duratio		1 semester	Method of grading		Modul level	graduate			
	Course	25		V + S (no information on SWS (weekly contact hours) and course language available)								
	Method	Method of assessment			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 120 minutes, c) written examination (approx. 90 to 120 minutes), d) oral examination of one candidate each (approx. 20 minutes), e) oral examination in groups (groups of 2, approx. 30 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=GMN-	Study (Group N	lathemat	ics in t	he Sciences	,					
W-122-m01	ECTS	10	Duratio	า	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S	•	V + S	(no information or	n SWS (weekly contact	hours) and course language a	vailable)			
	Method	d of ass	essment	tation 120 m tes), 6 Asses se off Langu	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 120 minutes, c) written examination (approx. 90 to 120 minutes), d) oral examination of one candidate each (approx. 20 minutes), e) oral examination in groups of 2 candidates (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	rerequi	sites	corda	nce with the spec	fied registration deadl	a SB@home at the beginning o lines. Some seminars or works s. Where applicable, details wi	hops might only	s announced by the lecturer in ac- be open for students with pre- the class schedule.		
10-M=G-	Study (Group N	leasure a	nd Inte	gral						
MUI-102-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		V + S	(no information or	SWS (weekly contact	hours) and course language a	vailable)			
	Method	d of ass	essment	tation 120 m tes), 6	(approx. 60 to 12 ninutes, c) written e) oral examination	o minutes), b) written examination (approx.	elaboration of contents equiva	llent to a semina	of assessment: a) seminar present r presentation of approx. 60 to candidate each (approx. 20 minu-		
	other prerequisites			corda	nce with the spec	fied registration deadl		hops might only	s announced by the lecturer in ac- be open for students with pre- the class schedule.		
10-M=GN-	Study (Group N	umerical	Mathe	matics and Applie	d Analysis					
MA-102-m01	ECTS	10	Duratio	า	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		V + S (no information on SWS (weekly contact hours) and course language available)							
	Method	d of ass	essment	tation 120 m tes), 6	(approx. 60 to 12 ninutes, c) written e) oral examination	o minutes), b) written examination (approx.	elaboration of contents equiva	llent to a semina	of assessment: a) seminar presen- ir presentation of approx. 60 to candidate each (approx. 20 minu-		
	other prerequisites			corda	nce with the spec	fied registration deadl		hops 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 Th	eory						
K-102-m01	ECTS	10	Duratio	1								
	Course	S	•	V + S	no information on S	SWS (weekly contact	hours) and course language av	ailable)	e)			
	Method	d of ass	essment	tation 120 m tes), 6	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 120 minutes, c) written examination (approx. 90 to 120 minutes), d) oral examination of one candidate each (approx. 20 minutes), e) oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English							
	other p	rerequi	sites	corda	nce with the specifie	ed registration deadl	SB@home at the beginning of ines. Some seminars or worksh where applicable, details will	ops might only	s announced by the lecturer in ac- be open for students with pre- the class schedule.			
10-M=G-		Group S	tatistics		-							
STA-102-m01	ECTS	10	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + S	(no information on S	SWS (weekly contact	hours) and course language av	ailable)				
		,	essment	tation (approx. 60 to 120 minutes), b) written elaboration of contents equivalent to a seminar presentation of approx. 60 to 120 minutes, c) written examination (approx. 90 to 120 minutes), d) oral examination of one candidate each (approx. 20 minutes), e) oral examination in groups (groups of 2, approx. 30 minutes) Language of assessment: German, English Registration for the seminar must be made via SB@home at the beginning of the course or as announced by the lecturer in ac-								
	other p	rerequi	sites	corda	nce with the specific	ed registration deadl		ops might only	be open for students with pre-			
10-M=GZ-	Study (Group T	me Serie	s Analy	ysis							
RA-102-m01	ECTS	10	Duratio		1 semester	Method of grading		Modul level	graduate			
	Course						hours) and course language av	· ·				
	Method	d of ass	essment	tation 120 m tes), 6	(approx. 60 to 120 i ninutes, c) written ex	minutes), b) written amination (approx. on groups (groups of	elaboration of contents equival	lowing methods of assessment: a) seminar presenalent to a seminar presentation of approx. 60 to amination of one candidate each (approx. 20 minu-				
	other prerequisites			corda	nce with the specific	ed registration deadl		ops might only	s announced by the lecturer in ac- be open for students with pre- the class schedule.			

10-M=GZTH-102-	Study (Group N	umber Th	eory		1			"			
mo1	ECTS	10	Duration	า	1 semester	Method of grad	ing numerical grade		Modul level	graduate		
	Course	S		V + S	V + S (no information on SWS (weekly contact hours) and course language available)							
	Method	d of ass	essment	tation 120 m tes), (At the beginning of the course, the lecturer will choose one or two of the following methods of assessment: a) seminar presenation (approx. 60 to 120 minutes), b) written elaboration of contents equivalent to a seminar presentation of approx. 60 to 120 minutes, c) written examination (approx. 90 to 120 minutes), d) oral examination of one candidate each (approx. 20 minutes), e) oral examination in groups (groups of 2, approx. 30 minutes) anguage of assessment: German, English							
	other p	rerequi	sites	corda	nce with the spe	cified registration de		rs or worksh	ops might only	s announced by the lecturer in ac- be open for students with pre- the class schedule.		
10-M=SAD-	Semina	ar in Ap	plied Diffe	erentia	l Geometry							
G-102-m01	ECTS	5	Duration	1	1 semester	Method of grad	ing numerical grade		Modul level	graduate		
	Course	S		S (no	information on S	WS (weekly contact	hours) and course lang	uage availa	ble)			
				minut Asses se off Langu	tation (approx. 60 to 120 minutes), b) written elaboration of contents equivalent to a seminar presentation of approx. 60 to 90 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 Registration for the seminar must be made via SB@home at the beginning of the course or as announced by the lecturer in ac							
	other prerequisites			cordance 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=SAL-	Semina	ar in Alg	gebra									
G-102-m01	ECTS	5	Duration		1 semester		ing numerical grade		Modul level	graduate		
	Course			,			hours) and course lang					
	Method	d of ass	essment	tation minu Asses se off	n (approx. 60 to 1 tes ssment offered: A ered on demand	20 minutes), b) writt	en elaboration of conte n the semester in which ters.	ents equival	ent to a semina	of assessment: a) seminar presen- ar presentation of approx. 60 to 90 in the subsequent semester, cour-		
	other prerequisites			corda	nce with the spe	cified registration de		rs or worksh	ops might only	is announced by the lecturer in ac- be open for students with pre- the class schedule.		

10-M=SDS-	Seminar	in Dyna	mical Sy	ystem	s and Control						-		
R-102-m01	ECTS	5 [Duration	1	1 semester		Method of grading	numerical grade		Modul level	graduate		
	Courses			S (no information on SWS (weekly contact hours) and course language available)									
	Method	of asses		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 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 pro			corda vious	Registration for the seminar must be made via SB@home at the beginning of the course or as announced by the lecturer in actordance 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=SFT-	Seminar				_								
H-102-m01	ECTS	5 [Duration		1 semester		Method of grading			Modul level	graduate		
	Courses Method						•	urs) and course lang			of assessment: a) seminar presen-		
				tation minu Asses se off Lange	n (approx. 60 to tes ssment offered: Fered on demand uage of assessm	Asses d or event: (ninutes), b) written ssment offered in th very four semesters German, English	elaboration of conte ne semester in which 	nts equival	ent to a semina	ir presentation of approx. 60 to 90 in the subsequent semester, cour-		
	other pro			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=SFV-	Seminar	Financia	al and In	ısurar	ce Mathematic	:s							
M-102-m01	ECTS	5 [Duration		1 semester		Method of grading			Modul level	graduate		
	Courses			S (no information on SWS (weekly contact hours) and course language available)									
	Method of assessment			tation minu Asses se off	n (approx. 60 to tes ssment offered: fered on demand	Asses	ninutes), b) written	elaboration of conte ne semester in which	nts equival	ollowing methods of assessment: a) seminar presenvalent to a seminar presentation of approx. 60 to 90 rse is offered and in the subsequent semester, cour-			
	other prerequisites			corda	ince with the sp	ecifie	d registration dead	a SB@home at the bolines. Some seminar s. Where applicable,	s or worksh	nops might only	s announced by the lecturer in ac- be open for students with pre- the class schedule.		

10-M=SGM-	Semina	ar in Ge	ometry an	d Topo	ology		"					
T-102-m01	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		S (no	S (no information on SWS (weekly contact hours) and course language available)							
	Method	d of ass	essment	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 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	corda	nce with the specif	inar must be made via SB@home at the beg fied registration deadlines. Some seminars skills in certain areas. Where applicable, d	or workshops might only	be open for students with pre-				
10-M=SGP-	Giovanni-Prodi Seminar (Master)											
C-102-m01	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course					S (weekly contact hours) and course langu	· ·	-				
	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: 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 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=SID-	Interdi	sciplina	ary Semina	ar								
Z-102-m01	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course					S (weekly contact hours) and course langu	<u> </u>					
	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	rerequi	sites	corda	nce with the specif	inar must be made via SB@home at the beg fied registration deadlines. Some seminars skills in certain areas. Where applicable, d	or workshops might only	be open for students with pre-				

10-M=SMN-	Semina	ar in Ma	athematic	s in the	Sciences			,				
W-122-m01	ECTS	5	Duration	1	1 semester	Method of grading numer	ical grade	Modul level	graduate			
	Course	S		S (no	S (no information on SWS (weekly contact hours) and course language available)							
	Method	d of ass	sessment	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 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	rerequ	isites	corda	degistration 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 prejous knowledge and/or skills in certain areas. Where applicable, details will be specified in the class schedule.							
10-M=SN-	Semina	ar in Nu	ımerical M	athem	atics and Applied	Analysis						
MA-102-m01	ECTS	5	Duration	n	1 semester	Method of grading numer	ical grade	Modul level	graduate			
	Course	S		S (no	6 (no information on SWS (weekly contact hours) and course language available)							
	Method	d of ass	sessment	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=SOP-	Semina	ar in Op	otimizatio	i				"				
T-102-m01	ECTS	5	Duratio	<u> </u>	1 semester	Method of grading numer	ical grade	Modul level	graduate			
	Course	S		S (no	information on SV	VS (weekly contact hours) and	course language ava	ilable)				
	Method	d of ass	sessment	tation minut Asses se off	(approx. 60 to 12 es sment offered: As ered on demand o	o minutes), b) written elabora	tion of contents equiv	alent to a semina	of assessment: a) seminar presen- ir presentation of approx. 60 to 90 in the subsequent semester, cour-			
	other prerequisites			corda	nce with the speci		ome seminars or work	shops might only	s announced by the lecturer in ac- be open for students with pre- the class schedule.			

10-M=S-	Semina	r in Sta	tistics									
STA-102-m01	ECTS	5	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	S		S (no	S (no information on SWS (weekly contact hours) and course language available)							
	Method	l of asse	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 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	corda	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.							
Learning by Teachi Students may choo	se whetl											
10-M=EL-			aching M		atics 1							
T1-102-m01		5	Duration		1 semester	Method of grading	-	Modul level	graduate			
	Courses			-			rs) and course language avai	lable)				
	Method of assessment				cal examination (ap age of assessment:							
10-M=EL-	Learning by Teaching 2											
T2-102-m01	ECTS	CTS 5 Duration			1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	S		Ü (no	information on SWS	(weekly contact hou	rs) and course language avai	lable)				
	Method	l of asse	essment	practical examination (approx. 90 minutes) Language of assessment: German, English								
Optional Application Students may choose application-oriente	se whetl	her or n	ot to take	modu	les in this area. Stud	dents may choose to	complete modules from the s	pecified applicat	tion-oriented subjects and/or an			
Application-oriente	ed Subje	ct Biolo	gy (10 EC	TS cred	lits)							
07-MS2BI-102-	Bioinfo	rmatics	(Lecture	and Se	eminar)							
mo1	ECTS	10	Duration	ı	1 semester	Method of grading	numerical grade	Modul level graduate				
	Courses	S		S + V	(no information on S	SWS (weekly contact	hours) and course language a	ıvailable)				
	Method of assessment			wing	options will be chos n of one candidate e	en: a) written examin	ation (30 to 60 minutes, inclu	uding 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	ormatics	(Practica	l Cour	se and Seminar 1)						
mo1	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	25	•	S + P	(no information on S	SWS (weekly contact	hours) and course language a	vailable)			
	Metho	d of asse	essment	tions t	Students will be informed about the length and scope of the assessment prior to the course. Usually, one of the following options will be chosen: a) written examination (30 to 60 minutes, including multiple choice questions) or b) log (approx. 10 to 30 pages) or c) oral examination of one candidate each (30 to 60 minutes) or d) oral examination in groups of up to 3 candidates (approx. 30 to 60 minutes) or e) presentation (20 to 45 minutes)						
07-MS2BIF2-102-	Bioinfo	ormatics	(Practica	l Cour	se and Seminar 2)			,			
mo1	ECTS	15	Duration	ı	1 semester	Method of grading	(not) successfully completed	Modul level	graduate		
	Course	25		S + P	(no information on S	SWS (weekly contact	hours) and course language a	ıvailable)			
	Metho	d of asse	essment	tions by pages (appro	will be chosen: a) w) or c) oral examina ox. 30 to 60 minutes	ritten examination (3 tion of one candidate s) or e) presentation	o to 60 minutes, including mi e each (30 to 60 minutes) or d (20 to 45 minutes)	ultiple choice qu) oral examinatio	. Usually, one of the following opestions) or b) log (approx. 10 to 30 on in groups of up to 3 candidates		
	·	rerequis		Admission prerequisite to assessment: regular attendance of lab course and successful completion of the respective exercises as specified at the beginning of the course.							
07-MBI-B-121-m01	Bioinformatics B										
	ECTS 5 Duratio			1	1 semester	Method of grading	(not) successfully completed	Modul level	graduate		
	Courses			V (no	information on SWS	(weekly contact hou	rs) and course language avail	able)			
	Metho	d of asse	essment	(30 to	Students will be informed about the method, length and scope of the assessment prior to the course. a) written examination (30 to 60 minutes, including multiple choice questions) or b) oral examination of one candidate each (30 to 60 minutes) or c) oral examination in groups of up to 3 candidates (30 to 60 minutes)						
07-MS3S-102-m01	Systen	n Biolog	y (Lecture	ture and Seminar)							
	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	es.		S + V	(no information on S	SWS (weekly contact	hours) and course language a	ıvailable)			
	Metho	d of asse	Students will be informed about the method, length and scope of the assessment prior to the course. Usually, one of the following options will be chosen: a) written examination (30 to 60 minutes, including multiple choice questions) or b) oral examination of one candidate each (30 to 60 minutes) or c) oral examination in groups of up to 3 candidates (approx. 30 to 60 minutes)						noice questions) or b) oral exami-		
07-MS3SYF1-102-	Systen	n Biolog	y (Practic	al Cou	rse and Seminar 1)						
mo1	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			P + S	(no information on S	SWS (weekly contact	hours) and course language a	vailable)			
	Method of assessment		tions by	will be chosen: a) w) or c) oral examina	ritten examination (3	o to 60 minutes, including mu e each (30 to 60 minutes) or d	ultiple 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 Biology (Practical Course and Seminar 2)											
mo1	ECTS	15	Duration	1 semester	Method of	fgrading	(not) successful	lly completed	Modul level	graduate		
	Course	S	,	P + S (no information	on SWS (weekly	y contact h	ours) and cours	e language ava	ailable)			
	Method of assessment			tions will be chosen: pages) or c) oral exa	Students will be informed about the length and scope of the assessment prior to the course. Usually, one of the following opions will be chosen: a) written examination (30 to 60 minutes, including multiple choice questions) or b) log (approx. 10 to 30 pages) or c) oral examination of one candidate each (30 to 60 minutes) or d) oral examination in groups of up to 3 candidates (approx. 30 to 60 minutes) or e) presentation (20 to 45 minutes)							
	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.							
07-MS-B-121-m01	System	ns Biolo	gy B		,							
	ECTS	5	Duration	1 semester	Method of	fgrading	(not) successful	lly completed	Modul level	graduate		
	Course	S		V (no information on	SWS (weekly co	ntact houi	s) and course la	nguage availa	ble)			
	Method	d of asso	essment									
Application-oriente	ed Subje	ct Chem	nistry									
08-TCM2-102-m01	Computational Chemistry											
	ECTS	5	Duration	1 semester	Method of	fgrading	numerical grade	;	Modul level	graduate		
	Course	S		S + Ü (no information	on SWS (weekly	y contact l	nours) and cours	se language av	ailable)			
	Method	d of asso	essment	written examination (90 minutes) Language of assessment: German or English Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the begin ning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).								
	other p	rerequi										
08-TCM1-102-m01	Theore	tical Ch	emistry									
	ECTS	5	Duration	1 semester	Method of	fgrading	numerical grade	j	Modul level	graduate		
	Course	S	•	S + Ü (no information	on SWS (weekly	y contact l	nours) and cours	se language av	ailable)			
	Method	d of asso	essment	written examination (90 minutes) Language of assessment: German or English								
	other p	rerequi		Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).								
o8-TCM3-102-mo1	Progra	mming	in Theoret	tical Chemistry								
	ECTS	5	Duration			-	numerical grade		Modul level	graduate		
	Course	S		S + Ü (no information	on SWS (weekly	y contact l	nours) and cours	se language av	ailable)			
	Method of assessment			completion and discussion of approx. 5 programming exercises as well as talk (approx. 45 minutes) Language of assessment: German or English								

08-TCAP-102-m01												
	ECTS	10	Duration	1 semester Method of grading (not) successfully completed Modul level graduate								
	Course	S		This module has 3 components; information on courses listed separately for each component. • 08-TCAP-1-102: P (no information on language and number of weekly contact hours available) • 08-TCAP-2-102: P (no information on language and number of weekly contact hours available) • 08-TCAP-3-102: P (no information on language and number of weekly contact hours available)								
	Method	d of ass	essment	This module has the following 3 assessment components. To pass the module as a whole students must pass two out of these three assessment components.								
				Assessment component to module component o8-TCAP-1-102: Theoretische Chemie Arbeitsgruppenpraktikum Wellenpaket-dynamik • 5 ECTS credits, method of grading: (not) successfully completed • presentation (approx. 30 minutes) • Language of assessment: German or English Assessment component to module component o8-TCAP-2-102: Theoretische Chemie Arbeitsgruppenpraktikum Wellenfunktionsmethoden • 5 ECTS credits, method of grading: (not) successfully completed • presentation (approx. 30 minutes) • Language of assessment: German or English Assessment component to module component o8-TCAP-3-102: Theoretische Chemie Arbeitsgruppenpraktikum Dichtefunktionaltheorie • 5 ECTS credits, method of grading: (not) successfully completed • presentation (approx. 30 minutes) • Language of assessment: German or English								
	Additio	nal Info	ormation	Additional information on module duration: 4 weeks								
08-PCM1-102-m01	Advanced Physical Chemistry											
	ECTS	10	Duration	1 semester Method of grading numerical grade Modul level graduate								
	Course	S		This module comprises 2 module components. Information on courses will be listed separately for each module component. • 08-PCM1-1-102: S + Ü (no information on SWS (weekly contact hours) and course language available) • 08-PCM1-2-102: P (no information on SWS (weekly contact hours) and course language available)								
	Method	d of ass	essment	Assessment in this module comprises the assessments in the individual module components as specified below. Unless stated otherwise, successful completion of the module will require successful completion of all individual assessments. Assessment in module component o8-PCM1-1-102: Laser Spectroscopy Laser Spectroscopy 5 ECTS, Method of grading: numerical grade written examination (90 minutes) or oral examination (20 minutes) Language of assessment: German or English Assessment in module component o8-PCM1-2-102: Advanced Physical Chemistry (Lab) 5 ECTS, Method of grading: (not) successfully completed Vortestate (pre-experiment exams) and Nachtestate (post-experiment exams) (approx. 15 minutes), log (approx. 15 pages) Language of assessment: German or English								

08-PCM2-102-m01	Chemica	al Dynan	nics					•			
	ECTS	5	Duration)	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	;		S + Ü	(no information on	SWS (weekly contact	hours) and course language av	vailable)			
	Method	of asses	ssment			minutes) or oral exam : German or English	ination of one candidate each	(20 minutes) or	talk (30 minutes)		
08-PCM3-102-m01	Nanosca	ale Mate	erials								
	ECTS	5	Duration)	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			S + Ü	(no information on	SWS (weekly contact	hours) and course language av	vailable)	-		
						ninutes) or oral exam : German or English	ination of one candidate each	(20 minutes) or	talk (30 minutes)		
08-PCM4-102-m01	Ultrafas	t spectr	oscopy a	ınd qu	antum-control						
	ECTS	5	Duration)	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	;		S + Ü	(no information on	SWS (weekly contact	hours) and course language av	vailable)			
	Method	od of assessment written examination (90 minutes) or oral examination of one candidate each (20 minutes) or talk (30 minutes) Language of assessment: German or English							talk (30 minutes)		
08-PCM5-102-m01	Physica	l chemis	stry of su	pramo	olecular assemblies	;		,			
	ECTS	5	Duration)	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	;		S + Ü	(no information on	SWS (weekly contact	hours) and course language av	vailable)			
	Method	of asses	ssment			minutes) and/or oral : German or English	examination of one candidate	each (20 minute	es) and/or talk (30 minutes)		
08-PCM6-102-m01	Physical Chemistry (Advanced Lab)										
	ECTS	5	Duration	1	1 semester	Method of grading	(not) successfully completed	Modul level	graduate		
	Courses	;		P (no information on SWS (weekly contact hours) and course language available)							
	Method	of asses		presentation (20 minutes) Language of assessment: German or English							
Application-oriente	d Subjec	t Compu	uter Scie	nce							
10-I-DB-102-m01	Databas	ses									
	ECTS	5	Duration)	1 semester	Method of grading	numerical grade	Modul level	undergraduate		
	Courses			V + Ü	(no information on :	SWS (weekly contact	hours) and course language av	vailable)			
	Method	of asses	ssment	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	rerequisi	ites	cours	e).		ses (type and scope to be anno	ounced by the le	cturer at the beginning of the		
	Referred	d to in LF		§ 49 (1) 1. b) Datenbanksysteme und Softwaretechnologie § 69 (1) 1. b) Datenbanksysteme und Softwaretechnologie							
					·		IMILW: who we a concrete do (Aug o				

10-I-DM-102-m01	Data M	ining												
	ECTS	5	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Course	S		V + Ü	(no information or	n SWS (weekly contact	hours) and course language av	ailable)						
	Method	l of asse	essment	writte didate	n examination car e each: 15 minutes	n be replaced by an ora s, groups of 2: 20 minu			orior to the examination date, the l examination in groups (one can-					
	other p	rerequis	sites	Admis		to assessment: exercise	ses (type and scope to be anno	unced by the le	cturer at the beginning of the					
10-I-AGT-122-m01	Algorit	hmic Gr	aph Theo	ry										
	ECTS	5	Duration	า	1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Course	S		V + Ü	(no information or	o information on SWS (weekly contact hours) and course language available)								
	Method	l of asse	essment	written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examinatio written examination can be replaced by an oral examination of one candidate each or an oral examination in group didate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: English, German if agreed upon with the examiner										
	other p	rerequis	sites	Where	e applicable, prere	equisites as specified b	by the lecturer at the beginning	of the course (e	g. g. completion of exercises).					
10-I-KT-102-m01	Theory	of Com	plexity											
	ECTS	5	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Course	S		V + Ü	(no information or	n SWS (weekly contact	hours) and course language av	ailable)						
	Method	l of asse	essment	writte didate	n examination car e each: 15 minutes	n be replaced by an ora s, groups of 2: 20 minu			prior to the examination date, the l examination in groups (one can-					
	other p	rerequis	sites	Admis		to assessment: exerci	ses (type and scope to be anno	unced by the le	cturer at the beginning of the					
10-I-WBS-102-m01	Knowle	dge-ba	sed Syste	ms										
	ECTS	5	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Course	S		V + Ü	(no information or	n SWS (weekly contact	hours) and course language av	ailable)						
	Method of assessment written examination (approx. 50 to if announced by the lecturer by fou examination of one candidate each tes, groups of 3: 25 minutes) Language of assessment: German,					turer by four weeks pri didate each or an oral nutes)	or to the examination date, the examination in groups (one car							

10-l=AG-102-m01	Compu	tational	Geometr	у		,				
	ECTS	5	Duration	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 av	ailable)		
	Method	d of asso	essment	writte didate	n examination can e each: 15 minutes	be replaced by an ora , groups of 2: 20 minu			prior to the examination date, the l examination in groups (one can-	
	other p	rerequi	sites	Where	e applicable, prere	quisites as specified l	by the lecturer at the beginning	of the course (e	g. g. completion of exercises).	
10-l=A-	Algorit	hms for	Geograp	hic Info	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 on	SWS (weekly contact	hours) and course language av	ailable)		
	Method	written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination da written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (o didate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner								
	other p	rerequi	sites	Where	e applicable, prere	quisites as specified l	by the lecturer at the beginning	of the course (e	e.g. completion of exercises).	
10-I=APA-102-m01	Approx	imation	Algorith	ms						
	ECTS	5	Duration	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 av	ailable)		
	Method	d 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	e applicable, prere	quisites as specified l	by the lecturer at the beginning	of the course (e	. g. completion of exercises).	
10-l=AUT-102-m01	Automa	ata Theo	ory							
	ECTS	5	Duration	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 av	ailable)		
	Method	d of ass	essment	written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date, th written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one ca 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	Admis cours		to assessment: exerci	ses (type and scope to be anno	unced by the le	cturer at the beginning of the	

10-I=BER-102-m01	Compu	Computability Theory												
	ECTS	5	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 langu	age available)						
	Method	d of ass	essment	writte didat	n examination ca e each: 15 minute	n be replaced by an ora s, groups of 2: 20 minu		ndidate éach or an ora ites)	prior to the examination date, the l examination in groups (one can-					
	other p	rerequi	sites	Admi		to assessment: exerci	ses (type and scope to be	e announced by the le	cturer at the beginning of the					
10-l=DB2-102-m01	Databa	ses II						,						
	ECTS	5	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Course	S		V + Ü (no information on SWS (weekly contact hours) and course language available)										
	Method	d of ass	essment	writte didat	n examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination date n examination can be replaced by an oral examination of one candidate each or an oral examination in groups (one e each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) lage of assessment: German, English if agreed upon with the examiner									
	other p	rerequi	sites	Wher	e applicable, prer	equisites as specified b	by the lecturer at the begi	inning of the course (e	e.g. completion of exercises).					
10-l=EL-102-m01	E-Learr	ning	1											
	ECTS	5	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 langu	age available)						
	Method	d of ass	essment	writte didat	written examination (approx. 50 to 60 minutes); if announced by the lecturer by four weeks prior to the examination of written examination can be replaced by an oral examination of one candidate each or an oral examination in groups (didate each: 15 minutes, groups of 2: 20 minutes, groups of 3: 25 minutes) Language of assessment: German, English if agreed upon with the examiner									
	other p	rerequi	sites	Wher	e applicable, prer	equisites as specified b	by the lecturer at the begi	inning of the course (e	e.g. completion of exercises).					
10-l=KD-102-m01		graphy	and Data	Securi	ty									
	ECTS	5	Duration	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 available)											
	Method	d of ass	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 p	rerequi	sites	Wher	e applicable, prer	equisites as specified b	y the lecturer at the begi	inning of the course (e	. g. completion of exercises).					

10-l=Ml-102-m01	Medica	lInforn	natics									
	ECTS	5	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	(no information or	n SWS (weekly contac	t hours) and course langua	age available)				
	Method	l of ass	essment	writte didat	en examination car e each: 15 minutes	n be replaced by an or s, groups of 2: 20 minu		didate each or an oral	orior to the examination date, the l examination in groups (one can-			
	other p	rerequi	sites	Wher	e applicable, prere	equisites as specified	by the lecturer at the begi	nning of the course (e	.g. completion of exercises).			
10-l=ML-102-m01	Mather	natical	Logic									
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	(no information or	n SWS (weekly contac	t hours) and course langua	age available)				
	Method	l of ass	essment	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 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	Admission prerequisite to assessment: exercises (type and scope to be announced by the lecturer at the beginning of the course).								
10-l=PA-102-m01	Prograi	m Desig	gn and An									
	ECTS	5	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	(no information or	n SWS (weekly contac	t hours) and course langua	age available)				
	Method	l of ass	essment	writte didat	en examination car e each: 15 minutes	n be replaced by an or s, groups of 2: 20 minu		didate each or an oral tes)	orior to the examination date, the l examination in groups (one can-			
	other p	rerequi	sites	Wher	e applicable, prere	equisites as specified	by the lecturer at the begi	nning of the course (e	.g. completion of exercises).			
10-I=RAM-102-m01		ter Arit	hmetic									
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	(no information or	n SWS (weekly contac	t hours) and course langua	age available)				
	Method	Method of assessment 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 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).						.g. completion of exercises).				

10-I-AR-102-m01	Automa	tion an	d Control	Techn	ology								
	ECTS	8	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses	S		V + Ü	(no information on	SWS (weekly contact	hours) and course langu	uage available)					
	Method	l of asse	essment	writte 90 mi (appro Langu	n examination can nute written exami ox.) oral examination lage of assessmen	be replaced by an ora nation is equivalent to on in groups of 2 and t: German, English if a	al examination of one ca to a 20 minute (approx.) o a 40 minute (approx.) or greed upon with the exa	ndidate each or an oral oral examination of one al examination in grou aminer	-				
	other p	rerequis	sites	Admis cours		o assessment: exerci	ses (type and scope to b	e announced by the le	cturer at the beginning of the				
10-I=CB-102-m01	Compil	er Cons	truction										
	ECTS	8	Duration	ı	1 semester	Modul level	graduate						
	Courses	S		V + Ü	(no information on	SWS (weekly contact	hours) and course langu	uage 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. nguage of assessment: German, English if agreed upon with the examiner								
	other p	rerequis	sites	Where	e applicable, prere	quisites as specified b	by the lecturer at the beg	ginning of the course (e	.g. completion of exercises).				
10-I=DDB-102-m01	Deduct	ive Data	bases										
	ECTS	8	Duration		1 semester	Method of grading		Modul level	graduate				
	Courses						hours) and course lange	<u> </u>					
				writte 90 mi (appro Langu	n examination can nute written exami ox.) oral examination lage of assessmen	be replaced by an ora nation is equivalent to on in groups of 2 and t: German, English if a	al examination of one ca to a 20 minute (approx.) on a 40 minute (approx.) or agreed upon with the exa	ndidate each or an oral oral examination of one ral examination in grou aminer					
	other p			Where	e applicable, prere	quisites as specified b	by the lecturer at the beg	ginning of the course (e	.g. completion of exercises).				
10-l=Kl-102-m01	Artificia												
	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 langu	uage available)					
	Method	l of asse	essment	written examination (approx. 80 to 90 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	other prerequisites Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).						. g. completion of exercises).					

10-l=KT2-122-m01	Advanc	Advanced Topics in Computational Complexity													
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade		Modul level	graduate					
	Courses	S		V + Ü	(no information on	SWS (weekly contact	hours) and course l	language ava	ilable)	-					
	Method	of ass	essment							orior to the examination date, the					
									each or an ora	l examination in groups (one can-					
						, groups of 2: 20 minu t: German, English if a									
	other p	rerequi	sites		ssion prerequisite t		<u> </u>		nced by the le	cturer at the beginning of the					
10-I-RK-102-m01	Compu	ter Netv	works and	Comr	nunication System	S		1							
	ECTS	8	Duration	on 1 semester Method of grading numerical grade					Modul level	undergraduate					
	Course	S		V + Ü	(no information on	SWS (weekly contact	hours) and course l	language ava	ıilable)						
	Method	of ass	essment							prior to the examination date, the					
				90 m (appr	inute written exami ox.) oral examinati	n examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 nute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minut ex.) oral examination in groups of 3.									
						t: German, English if a									
	other p	rerequi		Admi cours	,										
10-l=ST-102-m01	Simula	tion Ted	chniques f	or Pe	rformance Evaluatio	on									
	ECTS	8	Duration	1	1 semester	Method of grading	numerical grade		Modul level	graduate					
	Courses	S		V + Ü	$^{\prime}$ + \ddot{U} (no information on SWS (weekly contact hours) and course language available)										
	Method	d of ass	essment	writte 90 m (appr Lange	en examination can inute written exami rox.) oral examinati uage of assessmen	be replaced by an ora ination is equivalent to on in groups of 2 and a t: German, English if a	l examination of on on a 20 minute (approse 40 minute (approse greed upon with the	ne candidate ox.) oral exan x.) oral exam e examiner	each or an ora mination of on ination in grou						
	other p	rerequi	sites	Wher	e applicable, prere	quisites as specified b	y the lecturer at the	e beginning o	of the course (e	e. g. completion of exercises).					
Application-oriente	ed Subje	ct Aeros	space Con	npute	r Science										
10-I-RAK-102-m01	Comput	ter Arch	itecture												
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade		Modul level	undergraduate					
	Courses	S	·	V + Ü	(no information on	SWS (weekly contact	hours) and course l	language ava	ilable)	•					
	Method	d of ass	essment	writte didat Langı	en examination can e each: 15 minutes uage of assessmen	be replaced by an ora , groups of 2: 20 minu t: German, English if a	l examination of on tes, groups of 3: 25 greed upon with the	ne candidate minutes) e examiner	each or an ora	prior to the examination date, the l examination in groups (one can-					
	other p	rerequi	sites			to assessment: exerci	ses (type and scope	to be annou	nced by the le	cturer at the beginning of the					
	Referre			cours		Technische Informatik									

10-l-AR-102-m01	Automation and Control Technology												
	ECTS	8	Duration	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	S	•	V + Ü	(no information or	n SWS (weekly contact	hours) and course langua	age available)					
	Method	d of ass	essment	writte 90 mi (appr	n examination car nute written exam ox.) oral examinat	n be replaced by an ora ination is equivalent t ion in groups of 2 and	al examination of one can	didate each or an oral ral examination of one Il examination in grou	orior to the examination date, the l examination in groups. A 80 to e candidate each, a 30 minute ps of 3.				
	other p	rerequi	sites	Admi: cours		to assessment: exerci	ses (type and scope to be	announced by the le	cturer at the beginning of the				
10-l-RK-102-m01	Compu	ter Netv	works and	Comn	nunication System	ıs							
	ECTS	8	Duration	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	S		V + Ü (no information on SWS (weekly contact hours) and course language available)									
	Method	d of ass	essment	writte 90 mi (appr Langu	itten examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, itten examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute pprox.) oral examination in groups of 3. In guage 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-l=AA-102-m01	Advanc	ed Auto	mation										
	ECTS	8	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V + Ü	(no information or	n SWS (weekly contact	hours) and course langua	age available)					
	Method	d of ass	essment	writte 90 mi (appr	n examination car nute written exam ox.) oral examinat	n be replaced by an ora ination is equivalent t ion in groups of 2 and	al examination of one can	didate each or an oral ral examination of one Il examination in grou	orior to the examination date, the l examination in groups. A 80 to e candidate each, a 30 minute ps of 3.				
	other p	rerequi	sites	Wher	e applicable, prere	quisites as specified l	by the lecturer at the begi	nning of the course (e	g. g. completion of exercises).				
10-l=ES-102-m01	Embed	ded Sys	tems										
	ECTS	8	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V + Ü	(no information or	n SWS (weekly contact	hours) and course langua	age available)					
		written examination (approx. 80 to 90 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. 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 3. Language of assessment: German, English if agreed upon with the examiner							l examination in groups. A 80 to e candidate each, a 30 minute ps of 3.				
	other p	er prerequisites Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e. g. completion of exercises).							g. completion of exercises).				

10-l=RO-102-m01	Robotio										
	ECTS	8	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		V + Ü	(no information on S	SWS (weekly contact	hours) and course language ava	ailable)			
	Method	d of asse	essment	writte 90 mi (appro	n examination can b nute written examin ox.) oral examination	ne replaced by an ora ation is equivalent to n in groups of 2 and a		each or an oral mination of one			
	other p	rerequi	sites	Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e.g. completion of exercises).							
10-l=R02-102-m01	Robotio	s II: Ne	II: Networked Robots								
	ECTS	8	Duration	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 available)							
	Method	d of asse	essment	writte 90 mi (appro	vritten 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 group or minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a approx.) oral examination in groups of 3. anguage of assessment: German, English if agreed upon with the examiner						
	other p	rerequis	sites	Where	e applicable, prereq	uisites as specified b	y the lecturer at the beginning o	of the course (e	.g. completion of exercises).		
10-l=SSD-102-m01	Spacec	raft Sys	tems Des	sign							
	ECTS	8	Duratio		1 semester	Method of grading		Modul level	graduate		
	Course	S		V + Ü	(no information on S	SWS (weekly contact	hours) and course language ava	ailable)			
	Method	d of asse	essment	writte 90 mi (appro Langu	written examination (approx. 80 to 90 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. A 80 to be 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. In anguage of assessment: German, English if agreed upon with the examiner						
	other p	rerequis	sites	Where	applicable, prereq	uisites as specified b	y the lecturer at the beginning o	of the course (e	.g. completion of exercises).		

Application-orient	ed Subje	ct Physi	ics										
11-SPD-102-m01	Semico	onducto	r Physics	and De	evices								
	ECTS	6	Duration	n	1 semester	Method of grading	numerical grade	M	lodul level	graduate			
	Course	S	-	V + R	(no information on	SWS (weekly contact	hours) and course lang	guage availa	able)				
	Method	d of asse	essment	30 mi ges, ti Asses nound 2009.	nutes per candidat ime to complete: 1 sment offered: Who ced in due form und	e, for modules with le to 4 weeks) or presen en and how often ass der observance of Sec	ess than 4 ECTS credits a tation/seminar present essment will be offered	approx. 20 tation (appr d depends o	minutes) or prox. 30 minut on the method	examination in groups (approx. project report (approx. 8 to 10 pa- es) d of assessment and will be an- and examination regulations)			
	other p	rerequis	sites	tive d on to the le sessn	In prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the retails at the beginning of the course. Registration for the course will be considered a declaration of will to seek accessment. If students have obtained the qualification for admission to assessment over the course of the seme cturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted the nent in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the conformal forms assessment anew.								
11-FK2-092-m01	Solid S	tate Phy	ysics 2										
	ECTS	8	Duration	n	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 asse	essment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 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 beginn assessment. If stuc cturer will put their nent in the current o	ing of the course. Reg lents have obtained t registration for asses	gistration for the course he qualification for adn ssment into effect. Stud	e will be con mission to a dents who m	nsidered a de Issessment o neet 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-FKS-092-m01	Solid S	tate Spe	ctroscopy	<u>, </u>				'				
	ECTS	6	Duration		1 semester	Method of gradir	g numerical grade		Modul level	graduate		
	Course	s		R + V ((no information o	n SWS (weekly conta	ct hours) and course langu	ıage ava	ilable)			
	Method	d of asse		prox. 3 to 10 p Asses nounc 2009.	anguage of assessment: German, English							
	other p	rerequis		tive de on to a the lea sessm	ertain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respec- ve details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admissi- n to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, ne lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to as- essment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the quali- cation for admission to assessment anew.							
11-HLF-092-m01	Semiconductor Lasers - Principles and Current Research											
	ECTS	6	Duration		1 semester	Method of gradir	g numerical grade		Modul level	graduate		
	Course	S		R + V ((no information o	n SWS (weekly conta	ct hours) and course langu	ıage ava	iilable)			
	Method	d of asse		prox. 3 to 10 p Asses nounc 2009.	go minutes per ca pages, time to con sment offered: W ted in due form un	ndidate, for module nplete: 1 to 4 weeks) hen and how often a	s with less than 4 ECTS cred or d) presentation/semina ssessment will be offered c	dits app ar prese depends	orox. 20 minute ntation (approx s on the metho	oral examination in groups (aps) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations)		
	other p	rerequis		tive de on to a the lea sessm	etails at the begir assessment. If sti cturer will put the nent in the curren	ning of the course. Fudents have obtained ir registration for ass	legistration for the course v d the qualification for admi essment into effect. Studer	will be c ission to nts who	onsidered a de assessment o meet all prere	form students about the respec- eclaration 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	nductor	Physics									
	ECTS	6	Duration	1	1 semester	Method of gradi	ng numerical grade		Modul level	graduate		
	Course	S		R + V	(no information o	n SWS (weekly cont	act hours) and course	language ava	ailable)			
	Method	d of asse		prox. to 10 Asses nound 2009.	anguage of assessment: German, English							
	other p	rerequis		tive do on to the le sessm	ertain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, we lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualication for admission to assessment anew.							
11-HNS-092-m01	Semiconductor Nanostructures											
	ECTS	6	Duration	1	1 semester	Method of gradi	ng 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 asse		prox. to 10 Asses nound 2009.	30 minutes per ca pages, time to con ssment offered: W ced in due form un	ndidate, for module nplete: 1 to 4 weeks hen and how often a	es with less than 4 ECT) or d) presentation/seassessment will be offe	'S credits ap _l eminar prese ered depend	prox. 20 minute entation (approx Is on the metho	oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations)		
	other p	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-TPE-092-m01	Experi	mental	Particle Pl	hysics								
	ECTS	4	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	:S	•	R + V	no information o	n SWS (weekly contact	hours) and course language ava	ailable)				
	Method	d of ass	essment	prox. to 10 Asses nound 2009	anguage 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 the nent in the current	ning of the course. Reg idents have obtained t ir registration for asses	gistration for the course will be on the qualification for admission to sment into effect. Students who	considered a de o assessment c o 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-A4-072-m01	Astrop	hysics										
	ECTS	6	Duration	า	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	:S		V + S	(no information o	n SWS (weekly contact	hours) and course language ava	ailable)				
	Method	d of ass	essment	writte	n examination (ap	prox. 120 minutes)						
	other p	rerequi	sites	Admission prerequisite to assessment: successful completion of approx. 50% of exercises. Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
		oants ar		Only	as part of pool of g	general key skills (ASQ)	: 15 places. Places will be alloca	ated by lot.				

11-AWP-092-m01	Atmosp	here and S	ace Physi	cs								
	ECTS	6 Du	ration	1 semester	Method of grading numerical grad	le	Modul level	graduate				
	Course	s	R + V	(no information or	n SWS (weekly contact hours) and cour	se language av	ailable)					
	Method	l of assessn	prox nar p Asse nour 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) 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	rerequisites	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-TPS-092-m01	Particle Physics (Standard Model)											
	ECTS	8 Du	ration	1 semester	Method of grading numerical grad	le	Modul level	graduate				
	Course	S	R + V	(no information or	n SWS (weekly contact hours) and cour	se language av	ailable)					
	Method	l of assessn	prox to 10 Asse nour 2009	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English								
	other p	rerequisites	tive on to the 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-SDC-092-m01	Statistics, Data Analysis and Computer Physics											
	ECTS	4	Duration	ı	1 semester	Method of gradir	g numerical grade	Modul level	graduate			
	Course	S	•	R + V	(no information o	on SWS (weekly conta	ct hours) and course language a	vailable)				
	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	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-QM2-092-m01	Quantum Mechanics II											
	ECTS 8 Duratio			ı	1 semester	Method of gradir	g numerical grade	Modul level	undergraduate			
	Course	S		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	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	prox. to 10 Asses nound 2009.	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English								
	other pr	rerequisites	tive d on to the le sessn	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-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.									

11-AKM-092-m01	Cosmo	logy											
	ECTS	6	Duration	1	1 semester	Method of gradir	g numerical grade	Modul level	graduate				
	Course	S		R + V	(no information or	SWS (weekly conta	ct hours) and course languag	e available)					
	Method	d of asso		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		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	Plasma-Astrophysics											
	ECTS	6	Duration	1	1 semester	Method of gradir	g numerical grade	Modul level	graduate				
	Course	S		R + V (no information on SWS (weekly contact hours) and course language available)									
	Method	d of asso	essment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 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		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	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	s	R	? + V (no information on	SWS (weekly contact	hours) and course languag	e available)				
	Method	d of asse	p to A n 2	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 p	rerequis	ti o tl s	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-TEP-092-m01	Theoretical Elementary Particle Physics											
	ECTS	8	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S	R	R + V (no information on	SWS (weekly contact	hours) and course languag	e available)				
	Method	d of asse	p to A n 2	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English								
	other p	rerequis	ti o tl s	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 n	umerical grade	Modul level	graduate				
	Courses			R + V	+ V (no information on SWS (weekly contact hours) and course language available)								
	Method	d of asso		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		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-NMA-111-mo1	Compu	Computational Astrophysics											
	ECTS	6	Duration	1	1 semester	Method of grading n	umerical grade	Modul level	graduate				
	Course	S		V + R (no information on SWS (weekly contact hours) and course language available)									
	Method	d of asso		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 p	rerequi		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-SUS-092-m01	Supersymmetry I and II												
	ECTS	6	Duration	ı	1 semester	Method of grad	ing numerical gra	ide	Modul level	graduate			
	Course				<u>`</u>	n SWS (weekly cont							
	Method	d of asso		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		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-RNT-092-m01	Renorm	Renormalization Theory											
	ECTS	6	Duration	า	1 semester	Method of grad	ing numerical gra	ide	Modul level	graduate			
	Course	S		R + V	(no information or	SWS (weekly cont	act hours) and co	urse language ava	ailable)				
	Method	d of asso	essment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 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-RQFT-092-m01	Relativ	istical Quantu	mfield T	heory									
	ECTS	8 Dura	ion	1 semester	Method of grading num	erical grade	Modul level	graduate					
	Course	S	R + V	(no information or	SWS (weekly contact hours) and course language av	ailable)						
	Method	d of assessme	prox to 10 Asse nour	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
	other p	rerequisites	tive on to the lessess	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-EPP-092-m01	Introdu	Introduction to Plasmaphysics											
	ECTS	6 Dura	ion	1 semester	Method of grading num	erical grade	Modul level	graduate					
	Course	S	V + R	(no information or	SWS (weekly contact hours) and course language av	ailable)						
	Method	l of assessme	prox to 10 Asse nour	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
	other p	rerequisites	tive on to the lessess	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 Rela	tivity									
	ECTS	6	Duration	n .	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	·S		R + V	+ V (no information on SWS (weekly contact hours) and course language available)							
	Method	d of asse	essment	prox. to 10 Asses nound 2009	30 minutes per cal pages, time to com ssment offered: Wh ced in due form un	ndidate, for modules vales in the second of	vith less than 4 ECTS credits a r d) presentation/seminar pre- essment will be offered deper	pprox. 20 minute sentation (appro lds on the metho	r oral examination in groups (apess) or c) project report (approx. 8 ox. 30 minutes) od of assessment and will be anand examination regulations)			
	other p	rerequis	sites	tive d on to the le sessn	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
Application-orient	ed Work	Placem	ent (10 EC	TS cre	edits)							
10-M=E-	Internship (Lab Course) Applied Mathematics											
PRK-102-m01	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		P (no information on SWS (weekly contact hours) and course language available)								
	Method	d of asse	essment	placement report / fieldwork report / report on practical training / report on practical course / project report / report on technical course (oral: approx. 30 to 60 minutes, written: approx. 10 to 30 pages) Language of assessment: German, English								
	other p	rerequis	sites	1	Module can only be taken if a lecturer from the Institute of Mathematics agrees to supervise the placement. He or she will register the student for assessment.							
Thesis (30 ECTS cr	edits)											
10-M=MAAR-102-	Master	Thesis	Mathema	tics								
mo1	ECTS	30	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	·S		no courses assigned								
	Method	d of asse	essment			t: German, English						
	other p	rerequis	sites				of topic in consultation with sunt for the respective topic a pr		pervisor may make the successful e assignment of the topic.			