

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: Faculty of Mathematics and Computer Science

Responsible: Institute of Mathematics

Examination regulations version: 2022

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Abbreviations used: Course types: $\mathbf{E} = \text{field trip}$, $\mathbf{K} = \text{colloquium}$, $\mathbf{O} = \text{conversatorium}$, $\mathbf{P} = \text{placement/lab course}$, $\mathbf{R} = \text{project}$, $\mathbf{S} = \text{seminar}$, $\mathbf{T} = \text{tutorial}$, $\mathbf{U} = \text{exercise}$, $\mathbf{V} = \mathbf{V} = \mathbf$

= lecture

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

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

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

= list of modules

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

Conventions for the

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

modules in this SFB: ditable for bonus.

Information on Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the meassessment procedures: thod 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:

ASP02015

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

02-Feb-2022 (2022-5)

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	be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y								
	Method of as	ssessm	ent									
	Only after su completion of		ıl if applica	if applicable								
	Other prereq	uisites	if applica	ble								
	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	ble (examination re	gulations for teaching	g-degree programmes)						

Compulsory Elective	/es (90 l	ECTS cre	dits)									
Subfield Mathema	tics (30	ECTS cre	dits)									
10-M=AAAN-161-	Applie	d Analys	is									
mo1	ECTS	10	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	es			(4) + Ü (2) Nodule taught in: German and/or English							
	Metho	d of asse	essment	b) ora c) ora Langu Asses	l examination of one l examination in gro age of assessment:	e candidate each (ap ups (groups of 2, 15 r German or English	ates, usually chosen) or prox. 20 minutes) or ninutes per candidate) the course is offered and	in the subsequent se	emester			
10-M=AAL-	Topics	in Algeb	ra					,				
G-161-m01	ECTS	10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	es		V (4) + Ü (2) Module taught in: German and/or English								
	Metho	d of asse	essment	b) ora c) ora Langu Asses	a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus							
10-M=ADG-	Differe	ntial Ge	ometry					'				
M-161-m01	ECTS	10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	es		V (4) + Modu	- Ü (2) le taught in: Germar	n and/or English						
	Method of assessment a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus											

10-M=AFT-	Comple	x Analy	/sis										
H-161-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	S		V (4) - Modu	+ Ü (2) le taught in: Germaı	n and/or English							
	Method	l of asse	essment	b) ora c) ora Langu Asses) written examination (approx. 90 to 120 minutes, usually chosen) or) oral examination of one candidate each (approx. 20 minutes) or) oral examination in groups (groups of 2, 15 minutes per candidate) anguage of assessment: German or English .ssessment offered: In the semester in which the course is offered and in the subsequent semester reditable for bonus								
10-M=AGMS-161-	Geomet	tric Stru	ıctures										
mo1	ECTS	10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	S		V (4) - Modu	- Ü (2) le taught in: Germaı	n and/or English							
	Method	l of asse	essment	a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus									
10-M=AIST-161-	Industr	ial Stat	istics 1	•									
mo1	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	S			V (4) + Ü (2) Module taught in: German and/or English								
	Method	l of asse	essment	b) ora c) ora Langu Asses	l examination of on l examination in gro lage of assessment:	e candidate each (ap ups (groups of 2, 15 r German or English	ninutes per candidate)		emester				
10-M=ALTH-161-	Lie The	ory											
mo1	ECTS	10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	S		V (4) - Modu	+ Ü (2) le taught in: Germaı	n and/or English							
	Method	l of asse	essment	a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus									

10-M=ANG-	Numerio	c of Larg	ge Syster	ns of E	of Equations								
G-161-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	•		V (4) - Modu	+ Ü (2) le taught in: Germaı	n and/or English							
	Method	of asse	essment	b) ora c) ora Langu Asses	o written examination (approx. 90 to 120 minutes, usually chosen) or								
10-M=AOP-	Basics i	n Optin	nization										
T-161-m01	ECTS	10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	•		V (4) - Modu	+ Ü (2) le taught in: Germaı	n and/or English							
	Method	of asse	essment	b) ora c) ora Langu Asses	n) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) c) anguage of assessment: German or English c) Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus								
10-M=ARTH-161-	Control	Theory						·					
mo1	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	•			V (4) + Ü (2) Module taught in: German and/or English								
	Method	of asse	essment	b) ora c) ora Langu Asses	l examination of on- l examination in gro lage of assessment:	e candidate each (ap ups (groups of 2, 15 r German or English	ninutes per candidate)		emester				
10-M=ASM-	Stochas	stic Mod	dels of Ri	sk Mar	nagement								
R-161-m01	ECTS	10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	•		V (4) + Ü (2) Module taught in: German and/or English									
	Method	of asse	essment	b) ora c) ora Langu Asses	l examination of one l examination in gro lage of assessment:	e candidate each (ap ups (groups of 2, 15 r German or English	ninutes per candidate)		emester				

10-M=AST-	Stochas	stical P	rocesses										
P-161-mo1	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5		V (4) - Modu	- Ü (2) le taught in: Germa	n and/or English							
	Method	of asse	essment	b) ora c) ora Langu Asses	written examination (approx. 90 to 120 minutes, usually chosen) or oral examination of one candidate each (approx. 20 minutes) or oral examination in groups (groups of 2, 15 minutes per candidate) nguage of assessment: German or English sessment offered: In the semester in which the course is offered and in the subsequent semester editable for bonus								
10-M=A-	Topolog	gy											
TOP-161-mo1	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5		V (4) - Modu	⊦ Ü (2) le taught in: Germa	n and/or English							
	Method	of asse	essment	b) ora c) ora Langu Asses	n) written examination (approx. 90 to 120 minutes, usually chosen) or n) oral examination of one candidate each (approx. 20 minutes) or n) oral examination in groups (groups of 2, 15 minutes per candidate) n anguage of assessment: German or English n assessment offered: In the semester in which the course is offered and in the subsequent semester areditable for bonus								
10-M=AVS-	Insurance Mathematics 1												
M-161-m01	ECTS	10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5			V (4) + Ü (2) Module taught in: German and/or English								
	Method	of asse	essment	b) ora c) ora Langu Asses	a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus								
10-M=AZ-	Time Se	ries An	alysis										
RA-212-m01		10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5		V (4) + Ü (2) Module taught in: German and/or English									
	Method	of asse	essment	b) ora c) ora Langu Asses	l examination of on l examination in gro lage of assessment	e candidate each (ap oups (groups of 2, 15 r : German or English	utes, usually chosen) or prox. 20 minutes) or minutes per candidate) the course is offered ar		emester				

10-M=AZTH-161-	Number	lumber Theory												
mo1	ECTS 1	10 Du	ration	1	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Courses			V (4) + Module		an and/or English								
		of assessn		b) oral c) oral Langua Assess credita	written examination (approx. 90 to 120 minutes, usually chosen) or oral examination of one candidate each (approx. 20 minutes) or oral examination in groups (groups of 2, 15 minutes per candidate) anguage of assessment: German or English assessment offered: In the semester in which the course is offered and in the subsequent semester editable for bonus									
10-M=AGP-		i Prodi Lec	ture (I	Master))									
Cin-152-m01	ECTS 5	5 Du	ration		1 semester	Method of grading	numerical grade	Modul level	graduate					
	Courses			V (3) + Ü (1) Module taught in: English										
	Method	of assessn		b) oral c) oral Langua Assess	a) written examination (approx. 60 to 90 minutes, usually chosen) or b) oral examination of one candidate each (approx. 15 minutes) or c) oral examination in groups (groups of 2, approx. 10 minutes per candidate) c. anguage of assessment: English c. Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus									
10-M=VA-	Selected Topics in Analysis													
NA-161-m01	ECTS 1	10 Du	ration		1 semester	Method of grading	numerical grade	Modul level	graduate					
	Courses			V (4) + Module		an and/or English			_					
	Method	of assessn		b) oral c) oral Langua Assess	examination of o examination in gr age of assessmen	ne candidate each (ap roups (groups of 2, 15 t: German or English	nutes, usually chosen) oprox. 20 minutes) or minutes per candidate the course is offered		emester					
10-M=VAT-	Algebrai	c Topolog	y											
P-161-m01	ECTS 1	10 Du	ration		1 semester	Method of grading	numerical grade	Modul level	graduate					
	Courses			V (4) + Module		an and/or English								
	Method	of assessn		b) oral c) oral Langua Assess	examination of o examination in gr age of assessmen	ne candidate each (ap roups (groups of 2, 15 t: German or English	nutes, usually chosen) oprox. 20 minutes) or minutes per candidate the course is offered		emester					

10-M=VFN-	Selecte	d Topic	s in Finan	cial Mathemat	ics	,						
M-161-mo1	ECTS	10	Duration	1 seme	ster	Method of grading	numerical grade	Modul level	graduate			
	Courses	5		V (4) + Ü (2) Module taugh	t in: Germa	an and/or English						
	Method			b) oral examin c) oral examin Language of a Assessment o creditable for) written examination (approx. 90 to 120 minutes, usually chosen) or) oral examination of one candidate each (approx. 20 minutes) or) oral examination in groups (groups of 2, 15 minutes per candidate) anguage of assessment: German or English .ssessment offered: In the semester in which the course is offered and in the subsequent semester reditable for bonus							
10-M=VGDS-161-	Groups and their Representations											
mo1	ECTS	10	Duration		ster	Method of grading	numerical grade	Modul level	graduate			
	Courses	5		V (4) + Ü (2) Module taugh	t in: Germa	an and/or English						
	Method	of asse		b) oral examin c) oral examin Language of a Assessment o	a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus							
10-M=V-	Geometrical Mechanics											
GEM-161-m01	ECTS	10	Duration	1 semes	ster	Method of grading	numerical grade	Modul level	graduate			
	Courses	5		V (4) + Ü (2) Module taugh	t in: Germa	an and/or English						
	Method	of asse		b) oral examinc) oral examinLanguage of a	ation of or ation in gro ssessment ffered: In t	approx. 90 to 120 min ne candidate each (ap oups (groups of 2, 15 t: German or English he semester in which	oprox. 20 minutes) or minutes per candida		emester			
10-M=VIST-161-	Industri	ial Stati	istics 2									
mo1	ECTS	10	Duration		ster	Method of grading	numerical grade	Modul level	graduate			
	Courses	5		V (4) + Ü (2) Module taugh	t in: Germa	an and/or English						
	Method	of asse		b) oral examinc) oral examinLanguage of a	ation of or ation in gro ssessment ffered: In t	approx. 90 to 120 min ne candidate each (ap oups (groups of 2, 15 t: German or English he semester in which	oprox. 20 minutes) or minutes per candida	•	emester			

10-M=V-	Field Arithmetics												
KAR-161-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V (4) - Modu	+ Ü (2) le taught in: Germa	n and/or English							
			essment	b) ora c) ora Langu Asses credit	l examination of on l examination in gro lage of assessment: sment offered: In th able for bonus	e candidate each (ap ups (groups of 2, 15 r German or English	minutes per candidate)		emester				
10-M=VN-	Numeri	c of Par	tial Diffe	rential	Equations								
PE-161-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V (4) - Modu	- Ü (2) le taught in: Germa	n and/or English							
	Method	d of ass	essment	a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus									
10-M=VOP-	Selected Topics in Optimization												
T-161-m01	ECTS	10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S			V (4) + Ü (2) Module taught in: German and/or English								
	Method	d of ass	essment	b) ora c) ora Langu Asses	l examination of on l examination in gro lage of assessment:	e candidate each (ap ups (groups of 2, 15 r German or English	ninutes per candidate)		emester				
10-M=V-	Mather	matical	Statistics	5									
STA-212-m01	ECTS	10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V (4) + Ü (2) Module taught in: German and/or English									
	Method	d of ass	essment	b) ora c) ora Langu Asses	l examination of on l examination in gro lage of assessment:	e candidate each (ap ups (groups of 2, 15 r German or English	ninutes per candidate)		emester				

10-M=VVS-	Insuran	ce Mat	hematics	2								
M-161-mo1	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	;		V (4) - Modu	+ Ü (2) le taught in: Germa	n and/or English						
	Method	of asse	essment	b) ora c) ora Langu Asses	l examination of on l examination in gro lage of assessment:	e candidate each (ap ups (groups of 2, 15 r German or English	minutes per candidate		emester			
10-M=V-	Discrete	Mathe	ematics									
DIM-161-m01	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	;		V (3) - Modu	- Ü (1) le taught in: Germa	n and/or English						
	Method	of asse	essment	b) ora c) ora Langu Asses	l examination of on l examination in gro lage of assessment:	e candidate each (ap ups (groups of 2, app German or English	prox. 10 minutes per ca		emester			
10-M=VD-	Dynami	cal Sys	tems									
SY-161-m01	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	;			V (3) + Ü (1) Module taught in: German and/or English							
	Method	of asso	essment	b) ora c) ora Langu Asses	l examination of on l examination in gro lage of assessment:	e candidate each (ap ups (groups of 2, app German or English	prox. 10 minutes per ca		emester			
10-M=V-	Aspects	of Geo	metry									
GEO-161-mo1	ECTS	5	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	i		V (3) - Modu	- Ü (1) le taught in: Germa	n and/or English						
	Method	of asso	essment	b) ora c) ora Langu Asses	l examination of on l examination in gro lage of assessment:	e candidate each (ap ups (groups of 2, app German or English	prox. 10 minutes per ca		emester			

10-M=V-	Mathemati	cal Continuu	m Mec	hanics				-				
KOM-161-mo1	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses		V (3) + Modu	- Ü (1) le taught in: Germar	n and/or English							
	Method of a	assessment	b) ora c) ora Langu Asses	written examination (approx. 60 to 90 minutes, usually chosen) or								
10-M=VMB-	Mathemati	cal Imaging										
V-161-m01	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses			3) + Ü (1) odule taught in: German and/or English								
	Method of	assessment	b) ora c) ora Langu Asses	written examination (approx. 60 to 90 minutes, usually chosen) or oral examination of one candidate each (approx. 15 minutes) or oral examination in groups (groups of 2, approx. 10 minutes per candidate) nguage of assessment: German or English sessment offered: In the semester in which the course is offered and in the subsequent semester editable for bonus								
10-M=VMPH-161-	Selected To	pics in Math	ematio	al Physics			'					
mo1	ECTS 10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses			V (4) + Ü (2) Module taught in: German and/or English								
	Method of a	assessment	b) ora c) ora Langu Asses	a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus								
10-M=V-	Selected To	pics in Cont	rol The	ory								
TRT-161-m01	ECTS 10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses		V (4) - Modu	+ Ü (2) le taught in: Germar	n and/or English							
	Method of a	assessment	a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus									

10-M=VI-	Inverse Problems 1												
PR-222-m01	ECTS 5		Duration		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses			V (3) + Modu	· Ü (1) le taught in: Germar	n and/or English							
	Method o	of asses		b) ora c) oral Langu Asses	written examination (approx. 60 to 90 minutes, usually chosen) or oral examination of one candidate each (approx. 15 minutes) or oral examination in groups (groups of 2, approx. 10 minutes per candidate) nguage of assessment: German or English sessment offered: In the semester in which the course is offered and in the subsequent semester editable for bonus								
10-M=VMT-	Module T												
H-161-m01	ECTS 5	. [Duration		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses			V (3) + Modu	· Ü (1) le taught in: Germaı	n and/or English							
	Method o	of asses		b) ora c) oral Langu Asses) written examination (approx. 60 to 90 minutes, usually chosen) or) oral examination of one candidate each (approx. 15 minutes) or) oral examination in groups (groups of 2, approx. 10 minutes per candidate) anguage of assessment: German or English assessment offered: In the semester in which the course is offered and in the subsequent semester reditable for bonus								
10-M=V-	Non-linea	ar Analy	sis					,					
NAN-161-m01	ECTS 5	. [Duration		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses			V (3) + Ü (1) Module taught in: German and/or English									
	Method o	of asses		b) ora c) oral Langu Asses	l examination of one examination in gro age of assessment:	e candidate each (ap ups (groups of 2, app German or English	prox. 10 minutes per ca		emester				
10-M=VOST-161-	Optimal (Control						,					
mo1	ECTS 5		Duration		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses			V (3) + Modu	· Ü (1) le taught in: Germaı	n and/or English							
	Method o	of asses		b) ora c) oral Langu Asses	l examination of on examination in gro age of assessment:	e candidate each (ap ups (groups of 2, app German or English	prox. 10 minutes per ca		emester				

10-M=VV-	Netwo	rked Sy	stems		1							
SY-161-mo1	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	es.			+ Ü (1) Ile taught in: Germa	an and/or English						
	Metho	d of ass	essment	b) ora c) ora Langu Asses	written examination (approx. 60 to 90 minutes, usually chosen) or oral examination of one candidate each (approx. 15 minutes) or oral examination in groups (groups of 2, approx. 10 minutes per candidate) nguage of assessment: German or English sessment offered: In the semester in which the course is offered and in the subsequent semester editable for bonus							
10-M=VK-	Compl	ex Geor	netry									
GE-161-m01	ECTS	10	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	25			+ Ü (2) ıle taught in: Germa	an and/or English						
				b) ora c) ora Langu Asses credit	written examination (approx. 90 to 120 minutes, usually chosen) or oral examination of one candidate each (approx. 20 minutes) or oral examination in groups (groups of 2, 15 minutes per candidate) anguage of assessment: German or English assessment offered: In the semester in which the course is offered and in the subsequent semester editable for bonus							
10-M=VPD-		Differe			of Mathematical Ph	nysics						
P-161-m01	ECTS	10	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	! S			V (4) + Ü (2) Module taught in: German and/or English							
	Metho	d of ass	essment	b) ora c) ora Langu Asses	al examination of or l examination in gr uage of assessmen	ne candidate each (ap roups (groups of 2, 15 t: German or English	utes, usually chosen) o oprox. 20 minutes) or minutes per candidate) the course is offered an		emester			
10-M=V-	Pseudo	o Riema	nnian and	Riem	annian Geometry							
PRG-161-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses				+ Ü (2) Ile taught in: Germa	an and/or English						
	Metho	d of ass	essment	a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus								

10-M=AF-	Functio	nal Ana	lysis										
AN-161-mo1	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	S			+ Ü (2) le taught in: Germa	n and/or English							
	Method	l of asse	essment	b) ora c) ora Langu Asses	a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus								
10-M=VAD-	Applied	l Differe	ntial Geo	metry									
G-161-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	S			+ Ü (2) lle taught in: Germa	n and/or English		<u> </u>					
	Method	l of asse	essment	b) ora c) ora Langu Asses) written examination (approx. 90 to 120 minutes, usually chosen) or) oral examination of one candidate each (approx. 20 minutes) or) oral examination in groups (groups of 2, 15 minutes per candidate) anguage of assessment: German or English assessment offered: In the semester in which the course is offered and in the subsequent semester reditable for bonus								
10-M=VG-	Giovani	ni Prodi	Lecture :	Selecte	ed Topics (Master)								
PSin-152-m01	ECTS	10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	S			V (4) + Ü (2) Module taught in: English								
	Method	l of asse	essment	b) ora c) ora Langu Asses	ll examination of on l examination in gro lage of assessment:	e candidate each (apups (groups of 2, 15 English	ninutes per candidate		emester				
10-M=VG-	Giovani	ni Prodi	Lecture A	Advanc	ed Topics (Master)								
PAin-152-mo1	ECTS	10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	S			+ Ü (2) lle taught in: English	l							
	Method of assessment			a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus									

10-	Giovan	ni Prodi	Lecture A	/lodern	Topics (Master)			,			
M=VGPMin-152-	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
m01	Course	S		V (4) + Modu	- Ü (2) le taught in: English			,			
	Method	d of asse	essment	b) ora c) oral Langu Asses	l examination of one examination in grou age of assessment:	e candidate each (ap ups (groups of 2, 15 English	utes, usually chosen) or prox. 20 minutes) or minutes per candidate) the course is offered and	in the subsequent se	emester		
10-M=MP1-161-	_				sical Systems						
mo1		10	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course			V (4) + Ü (2) Module taught in: German and/or English							
	Method	d of asse	essment	a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Language of assessment: German or English creditable for bonus							
10-M=MP2-161-	Algebra	a and Dy	Dynamics of Quantum Systems								
mo1	ECTS	10	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		V (4) + Modu	- Ü (2) le taught in: German	and/or English					
	Method	d of asse	essment	b) ora c) oral Langu	l examination of one	candidate each (apups (groups of 2, 15 i	utes, usually chosen) or prox. 20 minutes) or minutes per candidate)				
10-M=VGFT-192-	Geome	tric Com	plex Ana	lysis							
mo1	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		V (4) + Ü (2) Module taught in: German and/or English							
	Method	d of asse	essment	a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus							

10-M=V-	Selected Topics in Numerical and Applied Mathematics											
NAM-192-m01	ECTS 1	о [Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			V (4) + Modul	· Ü (2) e taught in: Germar	n and/or English						
	Method o	of asses		b) oral c) oral Langu Assess	O written examination (approx. 90 to 120 minutes, usually chosen) or O oral examination of one candidate each (approx. 20 minutes) or O oral examination in groups (groups of 2, 15 minutes per candidate) Canguage of assessment: German or English Seessment offered: In the semester in which the course is offered and in the subsequent semester Oracle of the semester in which the course is offered and in the subsequent semester Oracle of the semester in which the course is offered and in the subsequent semester Oracle of the semester in which the course is offered and in the subsequent semester Oracle of the semester in which the course is offered and in the subsequent semester							
10-M=V-	Cryptogra	aphy/Co	oding Th									
KRY-192-m01	ECTS 1	о [Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			V (4) + Modul	· Ü (2) e taught in: Germar	n and/or English						
	Method o	of asses		a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus								
10-M=V-	Compute	r Algebr	ra									
CAL-192-m01	ECTS 1	о [Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			V (4) + Ü (2) Module taught in: German and/or English								
	Method o	of asses		b) oral c) oral Langua Assess	examination of one examination in groage of assessment:	e candidate each (ap ups (groups of 2, 15 r German or English	utes, usually chosen) or prox. 20 minutes) or minutes) or minutes per candidate) the course is offered and	l in the subsequent se	emester			
10-M=VAZ-	Algorithn	nic Num	ber The	ory				'				
T-192-m01	ECTS 1	о [Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			V (4) + Ü (2) Module taught in: German and/or English								
	Method o	of asses		a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus								

10-M=VA-	Algebraic Geometry												
GE-192-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5		V (4) - Modu	+ Ü (2) le taught in: Germaı	n and/or English							
	Method	of asse	essment	b) ora c) ora Langu Asses	a) written examination (approx. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 minutes per candidate) anguage of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus								
10-M=AAZ-	Analytic	c Numb	er Theory	<u> </u>									
T-222-m01	ECTS	10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5		V (4) - Modu	- Ü (2) le taught in: Germaı	n and/or English							
	Method	of asse	essment	b) ora c) ora Langu Asses	l examination of one l examination in gro lage of assessment:	ation (approx. 90 to 120 minutes, usually chosen) or on of one candidate each (approx. 20 minutes) or on in groups (groups of 2, 15 minutes per candidate) essment: German or English red: In the semester in which the course is offered and in the subsequent semester hus							
10-M=VIP2-222-	Inverse	Proble	ms 2					·					
mo1	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses	5		V (3) + Ü (1) Module taught in: German and/or English									
	Method	of asse	essment	b) ora c) ora Langu Asses	l examination of on- l examination in gro lage of assessment:	e candidate each (ap ups (groups of 2, app German or English	prox. 10 minutes per ca		emester				
10-M=VAFT-222-	Selecte	d Topic	s in Com _j	plex Ar	alysis								
mo1	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5			V (3) + Ü (1) Module taught in: German and/or English								
	Method	of asse	essment	a) written examination (approx. 60 to 90 minutes, usually chosen) or b) oral examination of one candidate each (approx. 15 minutes) or c) oral examination in groups (groups of 2, approx. 10 minutes per candidate) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus									

Subfield Research	h in Group	s and S	Seminars ((10 EC	ΓS credits)							
10-M=GAL-	Resear	ch in G	roups - Al	gebra								
G-161-m01	ECTS	10	Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S			(2) + S (2) Iodule taught in: German and/or English							
	Method	d of ass	sessment	Langi	lk (60 to 120 minutes) Inguage of assessment: German or English Inguage of assessment offered: In the semester in which the course is offered and in the subsequent semester							
10-M=G-	Resear	ch in G	roups - Di	screte	Mathematics							
DIM-161-m01	ECTS	10	Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S	<u> </u>		+ S (2) ıle taught in: Germ	an and/or English						
	Method	d of ass	sessment	talk (60 to 120 minutes) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester								
10-M=GD-	Resear	earch in Groups - Dynamical Systems and Control Theory										
SC-161-mo1	ECTS 10 Duratio		n	1 semester	Method of grading numerical grade	Modul level	graduate					
	Course	S	·		+ S (2) ıle taught in: Germ	an and/or English						
	Method	d of ass	sessment	Langi	alk (60 to 120 minutes) anguage of assessment: German or English assessment offered: In the semester in which the course is offered and in the subsequent semester							
10-M=G-	Resear	ch in G	roups - Co	mplex	Analysis							
COA-161-mo1	ECTS	10	Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S			+ S (2) ıle taught in: Germ	an and/or English	,	•				
	Method	d of ass	sessment	talk (60 to 120 minutes) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester								
10-M=GGM-	Resear	ch in G	roups - Ge	ometr	y and Topology							
T-161-m01	ECTS 10 Duratio			n	1 semester	Method of grading numerical grade	Modul level	graduate				
	Courses				V (2) + S (2) Module taught in: German and/or English							
	Method of assessment			talk (60 to 120 minutes) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester								

10-M=GM-	Resear	rch in Gr	oups - Ma	athema	atics in Context			-					
CX-161-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	25			+ S (2)								
					le taught in: Germar	and/or English							
	Metho	d of ass	essment		talk (60 to 120 minutes) Language of assessment: German or English								
				Asses	ssessment offered: In the semester in which the course is offered and in the subsequent semester								
10-M=GM-	Resear	rch in Gr	oups - Ma		hematics in the Sciences								
SC-161-m01	ECTS	10	Duratio	n	1 semester Method of grading numerical grade Modul level graduate								
	Course	!S	'		+ S (2) le taught in: Germar	and/or English		•	•				
	Metho	d of ass	essment	Langi	alk (60 to 120 minutes) anguage of assessment: German or English ssessment offered: In the semester in which the course is offered and in the subsequent semester								
10-M=G-	Resear	rch in Gr	h in Groups - Measure and Integral										
MAI-161-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses				+ S (2) le taught in: Germar	and/or English		,					
	Metho	Method of assessment			So to 120 minutes) lage of assessment: ssment offered: In th		the course is offered ar	nd in the subsequent se	emester				
10-M=GN-	Research in Groups - Numerical Mathematics and Applied Analysis												
MA-161-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	es			+ S (2) le taught in: Germar	and/or English							
	Metho	d of ass	essment										
10-M=GROC-161-	Resear	rch in Gr	oups - Ro	botics	, Optimization and C	ontrol Theory							
mo1	ECTS 10 Duratio												
	Course	25		V (2) + S (2) Module taught in: German and/or English									
	Metho	talk (60 to 120 minutes) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester											

10-M=GT-	Rese	arch in Gr	oups - Tir	me Ser	ies Analysis								
SA-161-mo1	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Cour	ses			+ S (2) Ile taught in: Germar	n and/or English		•					
	Meth	nod of ass	essment	Langi	talk (60 to 120 minutes) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester								
10-M=G-	Rese	arch in Gr	h in Groups - Statistics										
STA-161-m01	ECTS	10	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Cour	ses			(2) + S (2) Module taught in: German and/or English								
	Meth	od of ass	essment	Langi	x (60 to 120 minutes) Iguage of assessment: German or English Sessment offered: In the semester in which the course is offered and in the subsequent semester								
10-M=GNTH-161-	Rese	arch in Gr	in Groups - Number Theory										
mo1	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Cour	ses			+ S (2) Ile taught in: Germar	n and/or English		•					
	Meth	od of ass	essment	Langi	60 to 120 minutes) lage of assessment: ssment offered: In th		the course is offered and	I in the subsequent se	emester				
10-M=GC-	Research in Groups - Control Theory of Quantum Mechanical Systems												
QS-161-m01	ECTS	10	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Cour	ses			V (2) + S (2) Module taught in: German and/or English								
	Meth	od of ass	essment	talk (60 to 120 minutes) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester									
10-M=GD-	Rese	arch in Gr	oups - Di	fferent	ial Geometry			"					
GE-161-m01	ECTS	10	Duration	·				graduate					
	Cour	ses			V (2) + S (2) Module taught in: German and/or English								
	Meth	od of ass	essment										

10-M=GDF-	Research in Groups - Deformation Quantization												
Q-161-mo1	ECTS 10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Courses	 ,		+ S (2)	•		•						
				Module taught in: German and/or English									
	Method of as	ssessment		talk (60 to 120 minutes) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester Inclinear Analysis									
10-M=GN-	Research in	Groups - No											
LA-161-mo1	ECTS 10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate					
	Courses	Duratio		+ S (2)	Method of Stading	numerical grade	Modulitevel	graduate					
	Courses			le taught in: Germar	n and/or English								
	Method of as	ssessment		60 to 120 minutes)	<u> </u>								
				age of assessment:									
		Assessment offered: In the semester in which the course is offered and in the subsequent semester earch in Groups - Operator Algebras											
10-M=GO- PA-161-mo1		<u> </u>			I								
PA-161-11101	ECTS 10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate					
	Courses			+ S (2) le taught in: Germar	n and/or English								
	Method of as	ssessment		o to 120 minutes)									
				Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester									
10-M=SAD-	Seminar in Applied Differential Geometry												
G-161-m01	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Courses	•	S (2)										
				le taught in: Germar	n and/or English								
	Method of as	ssessment		talk (60 to 120 minutes) Language of assessment: German or English									
						the course is offered ar	nd in the subsequent se	emester					
10-M=SAL-	Seminar in A	lgebra											
G-161-m01	ECTS 5	Duratio	n 1 semester Method of grading numerical grade Modul level graduate				graduate						
	Courses		S (2) Modu	S (2) Module taught in: German and/or English									
	Method of as	sessment		talk (60 to 120 minutes)									
			Langu	Language of assessment: German or English									
			Assessment offered: In the semester in which the course is offered and in the subsequent semester										

10-M=SD-	Semina	ar in Dy	namical S	ystem	s and Control	1		,				
SC-161-m01	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		S (2) Modu	ıle taught in: Germ	an and/or English						
	Method	d of ass	sessment	Langi	alk (60 to 120 minutes) In the semester in which the course is offered and in the subsequent semester							
10-M=S-	Semina	ar in Co	mplex An	alysis	ysis							
COA-161-m01	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		S (2) Modu	ıle taught in: Germ	an and/or English						
	Method	d of ass	sessment	Langi	(60 to 120 minutes) guage of assessment: German or English essment offered: In the semester in which the course is offered and in the subsequent semester							
10-M=S-	Semina	ar in Financial and Insurance Mathematics										
FIM-161-m01	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S	,	S (2) Modu	lle taught in: Germ	an and/or English						
	Method	d of ass	sessment	Langi	talk (60 to 120 minutes) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester							
10-M=S-	Semina	ar in Ge	ometry ar	id Top	ology							
GTO-161-m01	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S	•	S (2) Modu	lle taught in: Germ	an and/or English						
	Method	Method of assessment talk (60 to 120 minutes) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester							emester			
10-M=SGP-	Giovan	ni Proc	li Seminar	(Mast	er)							
Cin-152-m01	ECTS	5	Duratio									
	Courses			S (2) Module taught in: English								
	Method	d of ass	sessment	talk (60 to 120 minutes) Language of assessment: English Assessment offered: In the semester in which the course is offered and in the subsequent semester								

10-M=SID-	Interdi	sciplina	ry Semin	ar							
C-161-m01	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		S (2) Modu	le taught in: Germar	n and/or English					
	Method	d of asse	essment	Langi	k (60 to 120 minutes) nguage of assessment: German or English sessment offered: In the semester in which the course is offered and in the subsequent semester						
10-M=SM-	Semina	ar Mathe	matics i	n the S	ciences			,	,		
SC-161-m01	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		S (2) Modu	le taught in: Germar	n and/or English		,			
	Method	d of asse	essment	Langu	guage of assessment: German or English essment offered: In the semester in which the course is offered and in the subsequent semester						
10-M=SN-	Semina	ar in Nur	nerical M	athem	atics and Applied A	nalysis		'	,		
MA-161-m01	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			S (2) Modu	le taught in: Germar	n and/or English		·			
	Method of assessment			Langi	oo to 120 minutes) age of assessment: sment offered: In th	German or English e semester in which	the course is offered	and in the subsequent se	emester		
10-M=SOP-	Seminar in Optimization										
T-161-mo1	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		S (2) Modu	le taught in: Germar	n and/or English					
	Method	Method of assessment talk (60 to 120 minutes) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester						emester			
10-M=S-	Semina	ar in Sta	tistics								
STA-161-m01	ECTS 5 Duratio			n 1 semester Method of grading numerical grade Modul level graduate							
	Courses			S (2) Modu	S (2) Module taught in: German and/or English						
	Method of assessment			talk (60 to 120 minutes) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester							

10-M=SN-	Semi	nar in No	n-linear A	nalysi	 5	1		"					
LA-161-m01	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Cour	ses		S (2) Modu	le taught in: Germar	n and/or English							
	Meth	od of ass	essment		talk (60 to 120 minutes)								
				Langu	Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester								
10-M=SA-	Somi	nar Annli	ed Mathe		, , ,								
MA-192-mo1	ECTS		Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate				
			Duratio	S (2)	1 Semester	Method of grading	numencat grade	Modulitevel	graduate				
	Courses				le taught in: Germar	n and/or English							
	Meth	od of ass	essment	Langu	(60 to 120 minutes) guage of assessment: German or English essment offered: in the semester in which the course is offered and in the subsequent semester								
10-M=GLIE-192-	Rese	arch in G	roups - Lie	e Theo	y								
mo1	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Cour	ses			+ S (2) le taught in: Germar	n and/or English							
	Meth	od of ass	essment	Langi	talk (60 to 120 minutes) Language of assessment: German or English Assessment offered: in the semester in which the course is offered and in the subsequent semester								
10-M=GAD-	Research in Groups - Applied Differential Geometry												
G-192-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Cour	ses			+ S (2) le taught in: Germar	n and/or English							
	Meth	od of ass	essment	Langi	talk (60 to 120 minutes) Language of assessment: German or English Assessment offered: in the semester in which the course is offered and in the subsequent semester								
10-M=G-	Rese	arch in G	roups - Ma	athema	atical Physics								
MAP-192-m01	ECTS	10	Duratio				graduate						
	Cour	ses			V (2) + S (2) Module taught in: German and/or English								
	Meth	od of ass	essment										

10-M=GHST-222-	Resear	ch in G	roups - Hi	gher S	tructures	,						
mo1	ECTS	10	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S			(2) + S (2) Nodule taught in: German and/or English							
	Method	d of ass	essment	Langi		t: German or English the semester in which	the course is offered and in th	e subsequent s	emester			
10-M=G-	Resear	ch in G	roups - Fu	nctional Analysis								
FAN-222-m01	ECTS	10	Duratio	1	1 semester	graduate						
	Course	S			+ S (2) le taught in: Germa	an and/or English						
	Method	d of ass	essment	talk (60 to 120 minutes) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester								
10-M=GIN-	Resear	arch in Groups - Inverse Problems										
P-222-m01	ECTS	10	Duratio	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S			+ S (2) le taught in: Germa	an and/or English						
	Method	d of ass	essment	Langi	talk (60 to 120 minutes) Language of assessment: German or English Assessment offered: In the semester in which the course is offered and in the subsequent semester							
Subfield Learning	and Teac	hing										
10-M=EL-	Learnin	g by Te	eaching 1									
T1-192-m01		5	Duration		1 semester	Method of grading	(not) successfully completed	Modul level	graduate			
	Course	S		Ü (2)	ļ		,	•	, -			
	Method	d of ass	essment		sment of tutoring a		ng lecturers or exercise superv	isors (1 to 2 tead	ching units)			
	Additio	nal Info	ormation	Appli	cation and selection	n with the teaching co	ordinator for mathematics					
10-M=EL-	Learnin	rning by Teaching 2										
T2-192-m01	ECTS			<u> </u>	1 semester	Method of grading	(not) successfully completed	Modul level	graduate			
	Courses			Ü (2)								
	Method of assessment			Assessment of tutoring activities by supervising lecturers or exercise supervisors (1 to 2 teaching units) Language of assessment: German								
	Additio	dditional Information Application and selection with the teaching coordinator for mathematics										

Subfield Optional A	Application Subject and	or Intership									
Application Subject	t Biology										
07-MS2BI-152-m01	1 Bioinformatics										
	ECTS 10 Durati	on 1 semester	Method of grading	g numerical grade	Modul level	graduate					
	Courses	V (2) + S (1) Module taught in: (V (2) + S (1) Module taught in: German and/or English								
	Method of assessmen	c) oral examination d) oral examination	a) written examination (30 to 60 minutes, including multiple choice questions) or c) oral examination of one candidate each (30 to 60 minutes) or d) oral examination in groups of up to 3 candidates (30 to 60 minutes) Language of assessment: German and/or English								
07-MS2BIF1-152-	Bioinformatics F1				,						
mo1	ECTS 10 Durati		Method of grading	numerical grade	Modul level	graduate					
	Courses		German and/or English								
	Method of assessmen	b) log (15 to 30 pag c) oral examination d) oral examination e) presentation (20	of one candidate each (3 in groups of up to 3 cand	o to 60 minutes) or lidates (30 to 60 minute	,						
07-MS2BIF2-152-	Bioinformatics F2										
mo1	ECTS 15 Durati		Method of grading	g (not) successfully con	npleted Modul level	graduate					
	Courses	P (29) + S (1) Module taught in: (German and/or English								
	Method of assessmen	b) log (15 to 30 pag c) oral examination d) oral examination e) presentation (20	of one candidate each (3 in groups of up to 3 cand	o to 60 minutes) or lidates (30 to 60 minutes	,						
07-MBI-B-152-m01	Bioinformatics B				,						
	ECTS 5 Durati	on 1 semester	Method of grading	g (not) successfully con	npleted Modul level	graduate					
	Courses	V (2) Module taught in: (German and/or English								
	Method of assessmen	c) oral examination d) oral examination	cion (30 to 60 minutes, ind of one candidate each (3 n in groups of up to 3 cand noment: German and/or En	o to 60 minutes) or lidates (30 to 60 minutes	•						

System	s Biolo	gy									
ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
Course	S										
Method	d of asso	essment									
		,	Langu	Language of assessment: German and/or English							
			,								
		Duratio		<u> </u>	Method of grading	numerical grade	Modul level	graduate			
Course	S		Modu	le taught in: Germa							
Method	d of asso	essment			o to 60 minutes, inc	luding multiple choice question	is) or				
					e candidate each (30	o to 60 minutes) or					
			d) oral examination in groups of up to 3 candidates (30 to 60 minutes) or								
System	o Piolo	m, Fo	Language of assessment. German ana/or English								
_			<u> </u>	1 comostor	Mothod of grading	(not) successfully completed	Modulloval	graduate			
		Duration			I Method of grading	(lot) successfully completed	Modulitevel	graduate			
Course			Module taught in: German and/or English								
Method	d of asso	essment									
					e candidate each (30	o to 60 minutes) or					
			d) ora	l examination in gro	oups of up to 3 cand						
						rlich					
System	s Riolo	ov R	Langu	age of assessment.	German and/or Eng	3(15)1		-			
_		7	n	1 semester	Method of grading	(not) successfully completed	Modul level	graduate			
		2 2. 41.01		1 = 3000001		Taray subsection in proceed		3.2.2000			
	_			le taught in: Germa	n and/or English						
Method											
			d) oral examination in groups of up to 3 candidates (30 to 60 minutes) Language of assessment: German and/or English								
	System ECTS Course Method System ECTS Course Method System ECTS Course Method	ECTS 10 Courses Method of ass Systems Biolo ECTS 10 Courses Method of ass Method of ass Method of ass Systems Biolo ECTS 15 Courses Method of ass	Courses Method of assessment Systems Biology F1 ECTS 10 Duration Courses Method of assessment Systems Biology F2 ECTS 15 Duration Courses Method of assessment Systems Biology B ECTS 5 Duration	ECTS 10 Duration Courses V (2) Modu Method of assessment a) wric) ora d) ora Langu Systems Biology F1 ECTS 10 Duration Courses P (14) Modu Method of assessment a) wrich log cond ora d) ora e) present angu Systems Biology F2 ECTS 15 Duration Courses P (29) Modu Method of assessment a) wrich log cond ora d) ora e) present angu Systems Biology B ECTS 5 Duration Courses V (2) Modu Method of assessment a) wrich ora e) present angu Systems Biology B ECTS 5 Duration Courses V (2) Modu Method of assessment a) wrich ora e) present angu Systems Biology B ECTS 5 Duration Courses V (2) Modu	Courses V (2) + S (1) Module taught in: German Method of assessment a) written examination of one d) oral examination in gro Language of assessment: Systems Biology F1 ECTS 10 Duration 1 semester Courses P (14) + S (1) Module taught in: German Method of assessment a) written examination of one d) oral examination of one d) oral examination in gro e) presentation (20 to 45 Language of assessment: Systems Biology F2 ECTS 15 Duration 1 semester Courses P (29) + S (1) Module taught in: German Method of assessment a) written examination (30 to 1) log (15 to 30 pages) or c) oral examination of one d) oral examination of one d) oral examination in gro presentation (20 to 45 Language of assessment: Systems Biology B ECTS 5 Duration 1 semester Courses V (2) Module taught in: German Systems Biology B 1 semester Courses V (2) Module taught in: German Systems Systems A semination Systems Systems A semination Systems A semination Systems Systems Systems A semination Systems Systems	Courses	Courses	Courses			

Application Subjec	t Chemie	е									
08-PCM1a-161-	Laser S	pectros	сору								
mo1		5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S	•		S (2) + Ü (1) Module taught in: German or English						
	Method	d of asse	essment	b) ora	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) Language of assessment: German and/or English						
08-PCM1b-161-	Advanc	ed Phys	sical Che	mistry ((Lab)						
mo1	ECTS	5	Duration	n	1 semester	Method of grading	(not) successfully completed	Modul level	graduate		
	Course	S	P (4) Module taught in: German or English								
	Method	d of asse	essment	and a	ortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) nd assessment of practical performance (2 to 4 random examinations) anguage of assessment: German and/or English						
	Additio	nal Info	rmation	Additi	onal information on	module duration: blo	ock taught lab course with app	rox. 20 working	days.		
08-PCM2-161-m01	Statistical Mechanics and Reaction Dynamics										
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		S (2) + Modu	- Ü (1) le taught in: German	n or English					
	Method	d of asse	essment	b) ora c) talk	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English						
08-PCM3-161-m01	Nanosc	ale Mat	erials	•							
	ECTS	5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S			S (2) + Ü (1) Module taught in: German or English						
	Method of assessment			a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English creditable for bonus							

08-PCM4-161-m01	Ultrafa	st spect	roscopy a	and qu	antum-control		,				
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate			
	Courses	S		S (2) - Modu	+ Ü (1) le taught in: Germar	n or English					
	Method	d of asse	essment	b) ora c) talk	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English						
		rerequis				les o8-PCM1a and o8-PCM1b recommended.					
08-PCM5-161-m01	<u> </u>	al Chem	istry of S	upram	olecular Assemblies	5					
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate			
	Courses	S		S (2) - Modu	+ Ü (1) le taught in: Germar	n or English		_			
	Method	d of asse	essment	b) ora c) talk	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) talk (approx. 30 minutes) Language of assessment: German and/or English						
08-PCM6-161-m01	Physica	al Chem	istry (Adv	anced Lab)							
	ECTS	5	Duration	1	1 semester	Method of grading (not) successfully completed	Modul level	graduate			
	Courses	S		P (4) Modu	le taught in: Germar	n or English					
	Method	d of asse	essment	presentation (approx. 20 minutes) Language of assessment: German and/or English							
	Additio	nal Info	rmation	Additi	onal information on	module duration: block taught lab course with ap	prox. 20 working	days.			
08-TCM2-161-m01		and App	olications	of Qua	antum Chemistry						
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate			
	Courses			S (2) -				_			
	Method	d of asse	essment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English							

o8-TCM3-161-mo1	Numerical N	lethods and	Programming								
	ECTS 5	Duration	1 semester	Method of grading numerical grade	Modul level	graduate					
	Courses		S (2) + Ü (2)								
	Method of a	ssessment	a) written examination (approx. 90 to 180 minutes) or								
			b) oral examination of one candidate each (20 to 30 minutes) or								
			c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or								
			e) presentation (approx. 30 minutes)								
			anguage of assessment: German and/or English								
08-TCM4-161-m01	Quantum Dy	namics			'						
	ECTS 5	Duration	1 semester	Method of grading numerical grade	Modul level	graduate					
	Courses		S (2) + Ü (2)								
	Method of a	ssessment		n (approx. 90 to 180 minutes) or							
				one candidate each (20 to 30 minutes) or	11.1.1						
			d) log (approx. 20 pag	groups of up to 3 candidates (approx. 15 minutes) or	s per candidate) or						
			e) presentation (appro								
				nguage of assessment: German and/or English							
08-TCM1-161-m01	Selected To	pics in Theo	retical Chemistry		'						
	ECTS 5	Duration	1 semester	Method of grading numerical grade	Modul level	graduate					
	Courses	`	S (2) + Ü (2)	·							
	Method of a	ssessment	a) written examination (approx. 90 to 180 minutes) or								
			b) oral examination of one candidate each (20 to 30 minutes) or								
			c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or								
				e) presentation (approx. 30 minutes)							
			Language of assessm	ent: German and/or English							
08-TCAP1-161-m01	Theoretical	Chemistry -	Project course quantu	m chemistry							
	ECTS 5	Duration	1 semester	Method of grading (not) successfully comp	oleted Modul level	graduate					
	Courses		P (5)								
	Method of a	ssessment	presentation (approx.								
		,		ent: German and/or English							
	Additional Ir			n on module duration: block taught lab course wi	th approx. 20 working	g days.					
08-TCAP2-161-m01			Project course quantu	-							
	ECTS 5	Duration		Method of grading (not) successfully comp	oleted Modul level	graduate					
	Courses		P (5)								
	Method of a	ssessment	presentation (approx.								
				ent: German and/or English							
	Additional Ir	ntormation	Additional information	n on module duration: block taught lab course wi	th approx. 20 working	g days.					

Application Subject	t Computer	Science and A	Aerospace Computer Sci	ence						
10-I=SEM3-212-	Seminar 1	- Current Top	ics in Computer Science							
mo1	ECTS 5	Duratio	1 semester	Method of grading numerical grade	Modul level	graduate				
	Courses		S (2) Module taught in: German and English The course is offered in parallel in both German and English.							
	Method of	fassessment	term paper (10 to 15 pages) and presentation (30 to 45 minutes) with subsequent discussion on a topic from the field of computer science Language of assessment: German and/or English							
			LR, HCI, GE	tudents of the Master's programme Informatik (Computer Science, 12	o ECTS credits): AT, SE, IT, KI, ES,				
10-I=APR-212-m01	Advanced	Programming								
	ECTS 5	Duratio	1 semester	Method of grading numerical grade	Modul level	graduate				
	Courses	·	V (2) + Ü (2)	·	•					
	Method of	dssessment	If announced by the lector of one candidate each date).	_anguage of assessment: German and/or English						
	Additiona	l Information	Focuses available for st ES,GE,SEC	cudents of the Master's programme Informatik (Computer Science, 12	o ECTS credits): SE,KI,LR, HCI,				
10-I=AA-152-m01	Advanced	Automation								
	ECTS 8	Duratio	1 semester	Method of grading numerical grade	Modul level	graduate				
	Courses		V (4) + Ü (2)							
	Method of	fassessment	written examination (approx. 60 to 120 minutes) creditable for bonus							
	Additiona	l Information	Focuses available for st IT,IS,ES,LR,GE	cudents of the Master's programme Informatik (Computer Science, 12	o ECTS credits):				
	Referred t	o in LPO I	§ 22 II Nr. 3 b)							
10-l=A-	Algorithm	s for Geograp	hic Information Systems	•	'					
GIS-212-m01	ECTS 5	Duratio	1 semester	Method of grading numerical grade	Modul level	graduate				
	Courses	,	V (2) + Ü (2)							
	Method of	fassessment	written examination (approx. 60 to 120 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus							
	Additiona	l Information	Focuses available for st	cudents of the Master's programme Informatik (G	Computer Science, 12	o ECTS credits): AT,KI,HCI,LR				
Master's with 1 major Ma	thematics (202	2)		JMU Würzburg • generated 1	19-Apr-2025 • exam. reg. data r	ecord 88 105 - - H 2022 page 31 / 56				

	Compu	tational	l Geometr	y			,					
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul lev	el graduat	te			
	Course	S		V (2)	$V(2) + \ddot{U}(2)$							
	Method	l of asse		If anr of on date) Lange	written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus							
	Additio	nal Info		Focus AT,H0		tudents of the Master's programme Inform	natik (Computer Science	, 120 ECTS cre	edits):			
10-l=APA-161-m01	Approx	imation	Algorith	ms								
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul lev	el graduat	te			
	Course	S		V (2)	+ Ü (2)							
				If anr of on date) Langu credi	If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus							
	Additional Information			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,IT,GE								
		d to in L		§ 22 II Nr. 3 b)								
10-I=AUT-212-m01							1					
		5	Duration		1 semester	Method of grading numerical grade	Modul lev	el graduat	te			
	Course			• • •	+ Ü (2)							
L	Method of assessment			written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus								
	Additio	nal Info	rmation	Focus	es available for st	tudents of the Master's programme Inform	atik (Computer Science	, 120 ECTS cre	edits): AT, IT, ES, HCI, GE			
	Referre	d to in L	PO I	§ 22	II Nr. 3 b)							

10-I=AVS-161-m01												
	ECTS	5	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	5		V (2) -	+ Ü (2)	•			-			
	Method	l of ass	essment		written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination							
				of one date). Langu	of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candi-							
	Additio	nal Info	rmation	Focus ES,LR		dents of the Master's	s programme Informatik (C	Computer Science, 120	o ECTS credits):			
10-HCI=M-	Multim	odal Us	ser Interfa	ces								
MUI-161-mo1	ECTS	5	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	5	•	V (2) -	+ Ü (2)	•		•	•			
	Method	l of ass	essment	Langu	resentation of project results (approx. 40 minutes) anguage of assessment: German and/or English editable for bonus							
	Additio	nal Info	rmation	Focus	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): HCI,GE.							
	Referre	d to in I	LPO I	§ 22 l	§ 22 Nr. 3 b)							
10-l=BER-212-m01	Comput	tability	Theory									
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	_		` ′	$V(2) + \ddot{U}(2)$							
	Method of assessment				written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per cardate). Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus							
	Additio	nal Info	rmation	Focus	es available for stud	dents of the Master's	programme Informatik (C	Computer Science, 120	o ECTS credits): AT,SE,IT,KI,GE			
	Referre	d to in I	LPO I	§ 22 l	Nr. 3 b)							
07-Bl-161-m01	Bioinfo	rmatics	5									
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses	5		V (2) -	+ Ü (2)				=			
	Method	of ass	essment	written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus								

07-BI-202-m01	Introdu	ction to	Bioinfor	matics								
	ECTS	5	Duratio	1	1 semester	Method of grading nu	merical grade	Modul level	undergraduate			
	Courses	S		V (0.5	V (0.5) + Ü (4)							
	Method	l of asse	essment	Log (a	Log (approx. 30 pages)							
10-I=CB-161-m01	Compiler Construction											
	ECTS	5	Duratio		1 semester	Method of grading nu	merical grade	Modul level	graduate			
	Courses	5		V (2)	+ Ü (2)							
				If ann of one date) Langu credit	written examination (approx. 60 to 120 minutes). f announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus							
	Additio	nal Info	rmation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,IT,IS,GE								
10-l=DDB-212-m01	Deduct	ive Data	bases									
	ECTS	5	Duratio	1	1 semester	Method of grading nu	merical grade	Modul level	graduate			
	Courses	S		V (2)	+ Ü (2)							
	Method	l of asse	essment	If ann of one date) Langu	ounced by the lecti e candidate each (a				replaced by an oral examination s (approx. 15 minutes per candi-			
	Additio	nal Info	rmation	Focus	es available for stu	idents of the Master's pro	gramme Informatik (Compu	ter Science, 12	o ECTS credits): AT,SE,IT,KI			
	Referre	d to in L	PO I	§ 22 l	I Nr. 3 b)							
10-l=EL-212-m01	E-Learn	ing										
	ECTS	5	Duratio		1 semester	Method of grading nu	merical grade	Modul level	graduate			
	Courses	5		` '	+ Ü (2)							
	Method	l of asse	essment	written examination (approx. 60 to 120 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus								
	Additio	nal Info	rmation	Focus	es available for stu	idents of the Master's pro	gramme Informatik (Compu	ter Science, 12	o ECTS credits): SE, IT, KI, HCI, GE			

10-I=ES-161-m01	Embedo	ded Sys	tems			'		'				
	ECTS	8	Duration	1	1 semester	Method of grading	numerical grade	Modul le	vel	graduate		
	Courses	5		V (4) -	+ Ü (2)			·				
	Method	l of ass	essment	If ann of one date).	written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus							
	Additio	nal Info		Focus	ocuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): T,SE,ES,LR,GE							
10-I=PA-161-m01	Analysi	s and D	esign of I	Progra	ms							
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul le	vel	graduate		
	Courses	S	•	V (2) -	+ Ü (2)	•	•	•				
	Method	l of ass	essment	If ann of one date).	vritten examination (approx. 60 to 120 minutes). f announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). language of assessment: German and/or English creditable for bonus							
	Additional Information			Focus SE,IS,		dents of the Master	s programme Informatik	k (Computer Scienc	e, 120	o ECTS credits):		
10-I=IR-212-m01	Informa	ation Re	etrieval									
	ECTS 5 Duratio		Duration			Method of grading numerical grade		Modul le	vel	graduate		
	Courses				V (2) + Ü (2)							
	Method	l of ass	essment	If ann of one date).	ounced by the lecture candidate each (a		of the course, the writter or an oral examination i			replaced by an oral examination s (approx. 15 minutes per candi-		
				Focus	es available for stu	dents of the Master	s programme Informatik	k (Computer Scienc	e, 120	o ECTS credits): IT,KI,HCI,GE		
10-HCl=3DUI-161-	3D Use	r Interfa	aces									
mo1	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul le	vel	graduate		
	Courses			• • •	V (2) + Ü (2)							
	Method	l of ass	essment	presentation of project results (approx. 30 minutes) Language of assessment: German and/or English creditable for bonus								
	Additio	nal Info	rmation	Focus	es available for stu	dents of the Master	s programme Informatik	(Computer Scienc	e, 120	o ECTS credits): HCI,GE.		
	Referred to in LPO I			§ 22 l	Nr. 3 b)							

10-I=KT2-212-m01	Compu	tationa	l Complex	ity II			1		
	ECTS	5	Duratio	n .	1 semester	Method of grading numerical grade	Modul level	graduate	
	Course	S		V (2) -	+ Ü (2)				
	Method	d of ass	essment	If ann of one date). Langu	ounced by the lectue candidate each (a	rox. 60 to 120 minutes). For at the beginning of the course, the written exam opprox. 20 minutes) or an oral examination in groups of German and/or English he semester in which the course is offered and in the	s of 2 candidates	s (approx. 15 minutes per candi-	
			_			dents of the Master's programme Informatik (Compu	uter Science, 120	o ECTS credits): AT, SE, IT, ES	
	Referre			§ 22 l	l Nr. 3 b)				
10-l=Kl1-212-m01			igence 1		r				
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate	
	Course			V (2) -					
	Method	or ass	essment	If ann of one date). Langu	ounced by the lecture candidate each (a	rox. 60 to 120 minutes) For at the beginning of the course, the written exam Exprox. 20 minutes) or an oral examination in groups Express: German and/or English			
	Additio	nal Info	rmation	Focus	es available for stu	dents of the Master's programme Informatik (Compu	uter Science, 120	o ECTS credits): AT,SE,KI,HCI	
10-l=Kl2-212-m01		al Intell	igence 2					_	
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate	
	Course			V (2) -					
		,		written examination (approx. 60 to 120 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus					
	Additio	nal Info	rmation	Focus	es available for stu	dents of the Master's programme Informatik (Compu	uter Science, 120	o ECTS credits): AT,SE,KI,HCI,GE	

10-l=LVS-161-m01	Perform	nance E	valuation	of Dis	tributed Systems	<u> </u>					
	ECTS	8	Duration)	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	S		V (4)	+ Ü (2)			•			
	Method	d of asse		written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,IT,GE							
	Additio	nal Info									
10-l=ML-212-m01	Mather	matical	Logic					,			
	ECTS	5	Duration)	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	<u></u> S		V (2)	+ Ü (2)			•			
				If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus							
		Additional Information			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,SE,KI,ES						
	Referred to in LPO I			§ 22 II Nr. 3 b)							
10-l=Ml-212-m01	Medica	l Inform	atics								
	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			• • •	+ Ü (2)				_		
	Method	d of asse	essment	written examination (approx. 60 to 120 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus							
	Additio	nal Info	rmation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE, IT, KI, HCI, GE							
	Referre	d to in L	PO I	§ 22	II Nr. 3 b)						

10-l=PEB-182-m01	Performa	nce Engineeri	ng and	Benchmarking of C	omputer Systems						
	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			+ Ü (2) ıle taught in: Englis	h		,				
	Method o	of assessment	written examination (approx. 90 to 120 minutes) Language of assessment: English creditable for bonus								
10-l=RAM-161-m01	Compute	r Arithmetic									
	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		V (2)	+ Ü (2)							
	Method o	of assessment	If anr of on date) Lang	written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus							
	Additiona	al Information	Focus AT,ES	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,ES							
10-l=R01-212-m01	Robotics	1									
	ECTS 8	B Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		Modu	V (4) + Ü (2) Module taught in: English							
	Method o	of assessment	written examination (approx. 60 to 90 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Separate written examination for Master's students Language of assessment: English creditable for bonus								
	Additiona	al Information	Focus	ses available for stu	idents of the Master's	programme Informatik	(Computer Science, 120	ECTS credits): KI, ES, LR, HCI, GE			
10-l=RO2-212-mo1	Robotics	2									
	ECTS 8	B Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			+ Ü (2) ıle taught in: Englis	h						
			written examination (approx. 60 to 90 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: English creditable for bonus								
	Additiona	al Information	Focus	ses available for stu	idents of the Master's	programme Informatik	(Computer Science, 120	ECTS credits): IT, ES, LR			
Master's with 1 major Ma	thematics (202	22)		_		JMU Würzburg • generated	19-Apr-2025 • exam. reg. data re	ecord 88 105 - - H 2022 page 38 / 56			

10-l=ST-212-m01	Discret	te Event	Simulation	n							
	ECTS	8	Duration	ı	1 semester	Method of grading numerical grade		Modul level	graduate		
	Course	es		V (4)	+ Ü (2)	·	-				
	Metho	d of ass	essment	written examination (approx. 60 to 120 minutes)							
				of one date) Langu	f announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per date). Language of assessment: German and/or English creditable for bonus						
	Additio	onal Info		Focus IT,KI,E		students of the Master's programme Inforn	natik (Comput	er Science, 12	o ECTS credits):		
10-HCI-PRIS-212-	Princip	oles of I	nteractive	Syste	ms						
mo1	ECTS	5	Duration	า	1 semester	Method of grading numerical grade		Modul level	graduate		
	Course	es			+ Ü (2) le taught in: Gerr	man and/or English					
	Metho	d of ass	essment	b) ora Langu	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 30 minutes) Language of assessment: German and/or English creditable for bonus						
10-I=SAR-161-m01	Softwa	re Arch	itecture								
	ECTS 5 Duratio			1	1 semester	Method of grading numerical grade		Modul level	graduate		
	Courses			V (2)							
	Method of assessment			written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus							
	Additio	onal Info	ormation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,IT,ES							
	Referre	ed to in I	LPO I	§ 22 l	l Nr. 3 b)						
10-HCI=M-	Machin	ne Learr	ning (for U	ser Int	erfaces)						
LUI-161-m01	ECTS	5	Duration	1	1 semester	Method of grading numerical grade		Modul level	graduate		
	Course	es		V (2)	+ Ü (2)						
	Method of assessment			presentation of project results (approx. 40 minutes) Language of assessment: German and/or English creditable for bonus							
	Additio	onal Info	rmation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): HCI,GE.							
	Referred to in LPO I			§ 22 l	l Nr. 3 b)						

10-I=VG-161-m01	Visuali	zation (of Graphs									
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		V (2)	$(2) + \ddot{U}(2)$							
	method of assessment			If ann of one date) Langu	written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus							
				AT,IT,	HCI,GE	tudents of the Master's programme Informatik	(Computer Science, 120	o ECTS credits):				
	Referre				I Nr. 3 b)							
10-I=AKA-161-m01		ed Topic	s in Algo	ithms								
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		V (2)	+ Ü (2)							
	Method of assessment			If ann of one date) Langu	If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus							
	Additional Information			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT								
10-l=AKT-161-m01	Selecte	ed Topio	s in Theo	ry	·		,					
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		V (2)	+ Ü (2)							
	Method	d of ass	essment	If ann of one date) Langu	written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus							
	Additio	nal Info	rmation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT								

10-I=SSS-212-m01	Security of Software Systems											
	ECTS	5 Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate					
	Course	S		+ Ü (2) ıle taught in: Englisi	h							
	Method	d of assessment	If anr of on date) Lange	written examination (approx. 60 to 120 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: English creditable for bonus								
	Additio	nal Information	Focus ES, S		dents of the Master's programme Informatik (Co	omputer Science, 12	o ECTS credits): SE, KI, LR, HCI,					
10-I=NLP-212-m01	Machin	e Learning for N	atural	Language Processii	ng							
[ECTS	5 Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate					
	Course	S	V (2)	+ Ü (2)	·							
			of on date) Langi	If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candate). Language of assessment: German and/or English creditable for bonus								
	Additio	nal Information	Focus	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,KI,HCI								
	Referre	d to in LPO I	§ 22 II Nr. 3 b)									
10-I=PM-212-m01	Profess	sional Project M	anagen	nent								
	ECTS	5 Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate					
	Course	S	V (4)									
	Method	d of assessment	If anr of on date) Lange	written examination (approx. 60 to 120 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus								
[other p	rerequisites	We re	commend completi	ing module 10-I=PRJAK in parallel.							
	Additio	nal Information		Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,IT,KI,ES,LR,HCI,GE								

10-I=PRJAK-212-	Project	Project - Current Topics in Computer Science											
mo1	ECTS	5	Duration	1	1 semester	Method of grading numerical gra	ide	Modul level	graduate				
	Courses	S		P (4)									
	Method	l of ass	essment	Langu Asses be rep	project report (10 to 15 pages) and presentation of project (15 to 30 minutes) Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered (Each project is offered one time only. The project will not be repeated; there will not be another project with the same topic. Assessment can, therefore, only be offered for the project offered in the respective semester) Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT, SE, IT, KI, ES, LR, HCI, GE								
	Additio	nal Info											
10-I=STM-162-m01	<u></u> ,	d Text M	Mining										
	ECTS	5	Duration		1 semester	Method of grading numerical gra	ide	Modul level	graduate				
	Courses	S		V (2) -	+ Ü (2)								
	Method of assessment				written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English								
	Additional Information			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT, IT, HCI.									
	Referre	d to in I	_PO I	§ 22 II Nr. 3 b)									
10-I=SNA-222-m01	Statisti	cal Net	work Ana	lysis									
	ECTS	5	Duration	1	1 semester	Method of grading numerical gra	ide	Modul level	graduate				
	Courses				+ Ü (2) lle taught in: Engli	sh							
	Method of assessment				written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: English creditable for bonus								

Application Subject	Application Subject Physik											
11-BSV-161-m01	Image	and Sig	nal Proce	ssing i	in Physics							
	ECTS	6	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V (2) + Ü (2) Module taught in: German or English								
				a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered and in the subsequent semester								
11-PMM-161-m01	Physics of Advanced Materials											
	ECTS 6 Duratio		า	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses			V (3) + R (1) Module taught in: German or English								
	Method of assessment			a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered and in the subsequent semester								

11-SPI-161-m01	Spintronics	i								
	ECTS 6	Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate			
	Courses			+ R (1)						
				Module taught in: German or English						
	Method of a	assessment	a) wr	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or						
			d) pro							
			e) pre	esentation/talk (a ritten examination	pprox. 30 minutes). n was chosen as method of assessment, this may	he changed and as	sessment may instead take the			
					ation of one candidate each or an oral examinatio					
					m students about this by four weeks prior to the o	riginal examination	date at the latest.			
					nt: German and/or English the semester in which the course is offered and i	n the subsequent s	emester			
11-FKS-161-m01	Solid State	Spectrocopy		33ment onered. II	The semester in which the course is offered and i	Ti tile subsequent so				
111183 101 11101	ECTS 6	Duratio		1 semester	Method of grading numerical grade	Modul level	graduate			
	Courses			+ R (1)						
				Module taught in: German or English						
	Method of a	assessment	a) wr	a) written examination (approx. 90 to 120 minutes) or						
				b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or						
				d) project report (approx. 8 to 10 pages) or						
			e) pre	e) presentation/talk (approx. 30 minutes) If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed,						
				the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered and in the subsequent semester						
			Langi							
		1	Asses							
11-MAG-161-mo1	Magnetism									
	ECTS 6	Duratio		1 semester	Method of grading numerical grade	Modul level	graduate			
	Courses		V (3) + R (1) Module taught in: German or English							
	Method of a	assessment			(approx. 90 to 120 minutes) or					
					one candidate each (approx. 30 minutes) or groups (groups of 2, approx. 30 minutes per candi	data) or				
						date) of				
			e) pre	d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes).						
			If a w	If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the						
			form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							
			Langi	Language of assessment: German and/or English						
			Asses	Assessment offered: In the semester in which the course is offered and in the subsequent semester						

11-HNS-161-mo1	Optical Properties of Semiconductor Nanostructures												
	ECTS	6	Duration	1 semester	Method of grading numerical grade	Modul level	graduate						
	Course	S		V (3) + R (1)		,							
				Module taught in: German or English									
	Method	d of ass	essment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or									
				d) project report (approx. 8 to 10 pages) or									
				e) presentation/talk (a	e) presentation/talk (approx. 30 minutes). f a written examination was chosen as method of assessment, this may be changed and assessment may instead take the orm of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed,								
				the lecturer must infor	rm students about this by four weeks prior to the c								
					ent: German and/or English	:th							
ACM	Matha	Assessment offered: In the semester in which the course is offered and in the subsequent semester Methods of Observational Astronomy											
11-ASM-161-mo1					Makka a dafawa dinasi muwa wi a alawa da	Madulland	Lawa du ata						
		6	Duration		Method of grading numerical grade	Modul level	graduate						
	Course			/ (3) + R (1) Module taught in: German or English									
	Method	d of ass	essment	a) written examination (approx. 90 to 120 minutes) or									
				o) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or									
				d) project report (approx. 8 to 10 pages) or									
				e) presentation/talk (approx. 30 minutes).									
				If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed,									
				the lecturer must inform students about this by four weeks prior to the original examination date at the latest.									
				_anguage of assessment: German and/or English									
				Assessment offered: In the semester in which the course is offered and in the subsequent semester									
11-TPE-161-m01			Particle Ph	<u> </u>									
	ECTS	6	Duration		Method of grading numerical grade	Modul level	graduate						
	Course	S		V (3) + R (1)									
	Matha	J - £		Module taught in: German or English a) written examination (approx. 90 to 120 minutes) or									
	Method	ı or ass			one candidate each (approx. 30 minutes) or								
					groups (groups of 2, approx. 30 minutes per cand	lidate) or							
				d) project report (appr									
				e) presentation/talk (approx. 30 minutes).									
				If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered and in the subsequent semester									
				Assessment offered: I	it the semester in which the course is offered and	in the subsequent so	emester						

11-ASP-161-mo1	Introductio	n to Space P	hysics							
	ECTS 6	Duratio	1 semes	ster	Method of grading numerical grade	Modul level	graduate			
	Courses	·	V (3) + R (1)			,				
	AA (1 1 C		Module taught in: German or English							
	Method of	assessment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or							
) oral examination of the candidate each (approx. 30 minutes) of) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or) project report (approx. 8 to 10 pages) or) presentation/talk (approx. 30 minutes).						
			lf a written exa	n/taik (ap) amination	prox. 30 minutes). was chosen as method of assessment, this m	nay be changed and as	sessment may instead take the			
			form of an oral	l examinat	ion of one candidate each or an oral examina:	ation in groups. If the m	ethod of assessment is changed,			
					students about this by four weeks prior to the	e original examination	date at the latest.			
					t: German and/or English he semester in which the course is offered an	nd in the subsequent s	emester			
11-MAS-161-mo1	Multi-wave	length Astro								
	ECTS 6	Duratio	1 semes	ster	Method of grading numerical grade	Modul level	graduate			
	Courses		V (3) + R (1) Module taught							
	Method of	assessment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes).							
			If a written exa form of an oral	sessment may instead take the ethod of assessment is changed, date at the latest.						
11-QM2-161-m01	Quantum N	Nechanics II								
	ECTS 8	Duratio	n 1 semes	ster	Method of grading numerical grade	Modul level	undergraduate			
	Courses		V (4) + R (2) Module taught in: German or English							
	Method of	assessment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English							
			If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is change the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							

11-RTT-161-m01	Theory	of Rela	tivity									
	ECTS	6	Duration	n	1 semester	Method of grading numerical grade	Modul level	graduate				
	Courses	5			V(3) + R(1) Module taught in Corman or English							
					Module taught in: German or English							
	Method	l of ass	essment	a) wri	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or							
				e) pre	presentation/talk (approx. 30 minutes). a written examination was chosen as method of assessment, this may be changed and assessment may instead take the							
				form	of an oral examina	ation of one candidate each or an oral examinatio	on in groups. If the m	ethod of assessment is changed,				
						n students about this by four weeks prior to the o	original examination	date at the latest.				
						nt: German and/or English the semester in which the course is offered and i	in the subsequent se	emester				
11-PKS-161-mo1	Physics	of Cor	nplex Sys									
		6	Duration	_	1 semester	Method of grading numerical grade	Modul level	graduate				
	Courses	S	•		/ (2) + R (2) Module taught in: German or English							
	Method	l of ass	essment	a) wri	a) written examination (approx. 90 to 120 minutes) or							
					b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or							
					d) project report (approx. 8 to 10 pages) or							
					e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed,							
				the le	the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English							
				Langi								
11-TFK-161-mo1	Assessment offered: In the semester in which the course is offered and in the subsequent semester Theoretical Solid State Physics											
11-15K-101-11101		8	Duration	<u> </u>	1 semester	Method of grading numerical grade	Modul level	graduate				
	Courses		Daration		+ R (2)	method of glading humered glade	moduliteret	Siddate				
				Module taught in: German or English								
	Method	l of ass	essment			(approx. 90 to 120 minutes) or						
						one candidate each (approx. 30 minutes) or groups (groups of 2, approx. 30 minutes per cand	idata) or					
						ox. 8 to 10 pages) or	idate) of					
				e) pre	esentation/talk (a	pprox. 30 minutes).						
				If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the								
				form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.								
				Language of assessment: German and/or English								
				Asses	ssment offered: In	the semester in which the course is offered and i	in the subsequent se	emester				

11-TFK2-161-m01	Theoretic	Theoretical Solid State Physics 2											
	ECTS 8	B Durat	on	1 semester	Method of grading numerical grade	Modul level	graduate						
	Courses	·		+ R (2)		,							
		<u> </u>		Module taught in: German or English									
	Method	of assessmen		a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the									
			e) pr										
			form	of an oral examina	ation of one candidate each or an oral examinatior	n in groups. If the m	ethod of assessment is changed,						
					n students about this by four weeks prior to the or	iginal examination	date at the latest.						
					nt: German and/or English the semester in which the course is offered and ir	the subsequent se	emester						
11-CMS-161-m01	Computa	tional Materi				· ···· sunsequentes							
	ECTS 8			1 semester	Method of grading numerical grade	Modul level	graduate						
	Courses	•		+ R (2) ule taught in: Gern	nan or English								
	Method o	of assessmen	_	a) written examination (approx. 90 to 120 minutes) or									
			b) or	o) oral examination of one candidate each (approx. 30 minutes) or									
			c) or	c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or									
				e) presentation/talk (approx. 30 minutes).									
			If a v	If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the									
				form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.									
				Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered and in the subsequent semester									
			Asse										
11-KFT-161-m01	Conforma	al Field Theor	у										
	ECTS 6	Durat		1 semester	Method of grading numerical grade	Modul level	graduate						
	Courses			V (3) + R (1)									
	Mathada	of accossmon		Module taught in: German or English a) written examination (approx. 90 to 120 minutes) or									
	Method	oi assessinen			one candidate each (approx. 30 minutes) or								
			c) or	al examination in ક્	groups (groups of 2, approx. 30 minutes per candic	date) or							
			d) pr	oject report (appro	ox. 8 to 10 pages) or								
			lf a v	esentation/taik (a vritten examinatioi	pprox. 30 minutes). It was chosen as method of assessment, this may be	he changed and ass	sessment may instead take the						
			If a written examination was chosen as method of assessment, this may be changed and assessment may instead tak form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is cl										
				the lecturer must inform students about this by four weeks prior to the original examination date at the latest.									
				Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered and in the subsequent semester									
			7,1330		the semester in which the course is officied that if	- and Jubbequent st							

11-KFT2-161-m01	Conformal Field Theory 2												
	ECTS 6 Duration			1	1 semester	Method of grading numerical grade	Modul level	graduate					
	Courses	;			+ R (1)	·							
					le taught in: Germ								
	Method	of asse	essment	a) wri	tten examination ((approx. 90 to 120 minutes) or one candidate each (approx. 30 minutes) or							
						roups (groups of 2, approx. 30 minutes) or	date) or						
				d) pro	oject report (appro	x. 8 to 10 pages) or	2010) 0.						
				e) pre	esentation/talk (ap	pprox. 30 minutes).							
						was chosen as method of assessment, this may be tion of one candidate each or an oral examination							
						students about this by four weeks prior to the ori							
				Langu	uage of assessmer	nt: German and/or English							
						the semester in which the course is offered and in	the subsequent se	emester					
11-CRP-161-mo1		Renormalization Group and Critical Phenomena											
		6	Duration		1 semester	Method of grading numerical grade	Modul level	graduate					
	Courses	;			V (3) + R (1) Module taught in: German or English								
	Method	of asse	essment	a) written examination (approx. 90 to 120 minutes) or									
				b) oral examination of one candidate each (approx. 30 minutes) or									
				c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or									
				e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the									
				form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English									
				Assessment offered: In the semester in which the course is offered and in the subsequent semester									
11-BWW-161-m01		ation a	nd Intera	ctions	in One Dimension	1							
	ECTS	6	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate					
	Courses	;		A (3)	+ R (1)								
				Module taught in: German or English									
	Method	Method of assessment				(approx. 90 to 120 minutes) or one candidate each (approx. 30 minutes) or							
						roups (groups of 2, approx. 30 minutes) of	date) or						
				d) project report (approx. 8 to 10 pages) or									
				e) presentation/talk (approx. 30 minutes).									
						was chosen as method of assessment, this may be tion of one candidate each or an oral examination							
						n students about this by four weeks prior to the ori							
						nt: German and/or English	iginat examination	date at the latest.					
				Asses	Assessment offered: In the semester in which the course is offered and in the subsequent semester								

11-GGD-161-m01	Introduction to Gauge/Gravity Duality												
	ECTS 8	Duratio	n 1 semeste	er Method	of grading numerical grad	de	Modul level	graduate					
	Courses	<u>,</u>	V (4) + R (2)										
				n: German or Englis									
	Method o	f assessment	a) written exami	nation (approx. 90 t	to 120 minutes) or le each (approx. 30 minute	25) 24							
) or						
			c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or										
			e) presentation/	talk (approx. 30 mi	nutes).	4 41:1	l						
								sessment may instead take the nethod of assessment is changed,					
					bout this by four weeks pr								
				essment: German a									
A1/14			Assessment offe	ered: In the semeste	r in which the course is of	fered and in the	subsequent se	emester					
11-AKM-161-m01	Cosmolog			laa d	c 1. 1 . 1		1						
	ECTS 6	Duratio		er Method (of grading numerical grad	de	Modul level	graduate					
	Courses		V (3) + R (1) Module taught in: German or English										
	Method o	f assessment	a) written examination (approx. 90 to 120 minutes) or										
			b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or										
			d) project report (approx. 8 to 10 pages) or										
			e) presentation/talk (approx. 30 minutes).										
			If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.										
			Language of assessment: German and/or English										
			Assessment offered: In the semester in which the course is offered and in the subsequent semester										
11-AST-161-m01		al Astrophysic											
	ECTS 6	Duratio		er Method	of grading numerical grad	de	Modul level	graduate					
	Courses		V (2) + R (2) Module taught in: German or English										
	Method o	f assessment		nation (approx. 90 t									
					e each (approx. 30 minute) ~~						
			c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or										
			e) presentation/	e) presentation/talk (approx. 30 minutes).									
								sessment may instead take the					
					candidate each or an oral (bout this by four weeks pr			nethod of assessment is changed,					
						ioi to the origina	at examination	date at the latest.					
				Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered and in the subsequent semester									

11-APL-161-m01	High Energy Astrophysics												
	ECTS 6	Duratio	n 1 S	emester	Method of grading numerical grade	Modul level	graduate						
	Courses			V (3) + R (1)									
					nan or English								
	Method o	of assessment	a) written	examination	(approx. 90 to 120 minutes) or one candidate each (approx. 30 minutes) or								
					groups (groups of 2, approx. 30 minutes) of	ate) or							
			d) project	d) project report (approx. 8 to 10 pages) or									
			e) present	tation/talk (a	oprox. 30 minutes).	a shangad and as	sassment may instead take the						
					n was chosen as method of assessment, this may be ation of one candidate each or an oral examination i								
			the lecture	er must inforr	n students about this by four weeks prior to the orig								
					nt: German and/or English								
		<u> </u>		ent offered: In	the semester in which the course is offered and in t	the subsequent s	emester						
11-QFT2-161-m01		Field Theory I				1.0. 1.11. 1							
	ECTS 8	Duratio		emester	Method of grading numerical grade	Modul level	graduate						
	Courses			V (4) + R (2) Module taught in: German or English									
	Method o	of assessment	a) written examination (approx. 90 to 120 minutes) or										
			b) oral examination of one candidate each (approx. 30 minutes) or										
			c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or										
			e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the										
			form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.										
				Language of assessment: German and/or English									
			Assessment offered: In the semester in which the course is offered and in the subsequent semester										
11-TEP-161-m01		al Elementary		ysics		,							
	ECTS 8	B Duratio	n 1 S	emester	Method of grading numerical grade	Modul level	graduate						
	Courses		V (4) + R (
			Module taught in: German or English										
	Method o	of assessment			(approx. 90 to 120 minutes) or one candidate each (approx. 30 minutes) or								
					groups (groups of 2, approx. 30 minutes) of	ate) or							
			d) project report (approx. 8 to 10 pages) or										
				e) presentation/talk (approx. 30 minutes).									
					n was chosen as method of assessment, this may be ation of one candidate each or an oral examination i								
					n students about this by four weeks prior to the orig								
			Language	of assessme	: German and/or English								
		,	Assessme	ent offered: In	the semester in which the course is offered and in t	the subsequent s	emester						

11-ATTP-161-m01	Selected Top	ics of Theo	retical	retical Elementary Particle Physics					
	ECTS 6	Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate		
	Courses		V (3) + R (1) Module taught in: German or English						
	Method of as	ssessment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered and in the subsequent semester						
11-BSM-161-m01	Models Beyo	nd the Sta	ndard Model of Elementary Particle Physics						
	ECTS 6	Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate		
	Courses		V (3) + R (1) Module taught in: German or English						
	Method of as	ssessment	b) ora c) ora d) pro e) pre If a wr form o the le Langu	l examination of of a lexamination in gobile in good in gentation and the sentation are the sentation of an oral examination of an oral examination age of assessmer	(approx. 90 to 120 minutes) or one candidate each (approx. 30 minutes) or roups (groups of 2, approx. 30 minutes per candidate x. 8 to 10 pages) or oprox. 30 minutes). was chosen as method of assessment, this may be the tion of one candidate each or an oral examination in a students about this by four weeks prior to the originate. German and/or English the semester in which the course is offered and in the	changed and ass groups. If the m nal examination	ethod of assessment is changed, date at the latest.		

11-FK2-201-m01	Solid S	Solid State Physics 2												
	ECTS	8	Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate						
	Course	S		V (4) + R (2) Module taught in: German or English										
	Method	d of ass	essment	b) ora c) ora d) pro e) pre If a w form the le Langu	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered and in the subsequent semester									
	other p	rerequi	sites	Approval from examination committee required.										
11-HPH-201-m01	Semiconductor Physics													
	ECTS 6 Duration		Duration	า	1 semester	Method of grading numerical grade	Modul level	graduate						
	Course	S		V (3) + R (1) Module taught in: German or English										
	Method of assessment			b) ora c) ora d) pro e) pre If a w form the le Langu	al examination of or l examination in gropicated report (approximation) esentation/talk (approximation) of an oral examination octurer must inform		changed and as n groups. If the m inal examination	nethod of assessment is changed, date at the latest.						

11-FFK-201-m01	Field TI	heory ir	1 Solid Sta	te Physic	:s						
	ECTS	8	Duration	1 19	semester	Method of grading numerical grade	Modul level	graduate			
	Course	S			V (4) + R (2)						
					aught in: Germ	· · · · · · · · · · · · · · · · · · ·					
	Method	d of ass	essment	a) writter	n examination	(approx. 90 to 120 minutes) or one candidate each (approx. 30 minutes) or					
						roups (groups of 2, approx. 30 minutes) of	late) or				
				d) projec	t report (appro	x. 8 to 10 pages) or	ŕ				
				e) preser	ntation/talk (ap	oprox. 30 minutes). was chosen as method of assessment, this may b	ne changed and acc	sessment may instead take the			
						ition of one candidate each or an oral examination					
				the lectu	rer must inforn	n students about this by four weeks prior to the ori					
						nt: German and/or English the semester in which the course is offered and in	the subsequent se	omactor			
11-QIC-201-m01	Advanc	od Tho				uantum Information	the subsequent se	emester			
11-QiC-201-11101		6	Duration		semester	Method of grading numerical grade	Modul level	graduate			
	Course		<u> </u>			Method of grading Trumencal grade	Modulitevel	graduate			
	Course	3		V (3) + R (1) Module taught in: German or English							
	Method	d of ass	essment	a) written examination (approx. 90 to 120 minutes) or							
				b) oral examination of one candidate each (approx. 30 minutes) or							
				c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or							
				e) presentation/talk (approx. 30 minutes).							
				If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the							
				form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.							
				Language of assessment: German and/or English							
				Assessment offered: In the semester in which the course is offered and in the subsequent semester							
11-TEFK-201-m01			fects in So		Physics						
	ECTS	8	Duration		semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		V(4) + R(1)							
İ	Madle a			Module taught in: German or English a) written examination (approx. 90 to 120 minutes) or							
	Method	Method of assessment				(approx. 90 to 120 minutes) or one candidate each (approx. 30 minutes) or					
						roups (groups of 2, approx. 30 minutes per candid	late) or				
				d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the							
						ition of one candidate each or an oral examination					
				the lectu	rer must inforn	n students about this by four weeks prior to the ori					
						nt: German and/or English	Ala a auda a servicio				
				Assessm	ient offered: In	the semester in which the course is offered and in	the subsequent se	emester			

11-PTS-201-m01	Phenomenology and Theory of Superconductivity												
	ECTS 6 Duration		1	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Course	S	_		V (3) + R (1) Module taught in: German or English								
	Method	d of ass	essment	a) wri b) ora c) ora d) pro e) pro If a w form the le Langu	a) written examination (approx. 90 to 120 minutes) or o) oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). f a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered and in the subsequent semester								
11-QFT1-201-m01	Quantu	ım Field	Theory I		"	,		•					
	ECTS	8	Duration	<u> </u>	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S	•	V (4) + R (2) Module taught in: German or English									
	Method	d of ass	essment	a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered and in the subsequent semester									
	other p	rerequi	sites	Approval from examination committee required.									
Internship													
10-M=E-	Interns	hip Mat	thematics	;									
PRK-161-m01	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		P (o)									
				a) placement report (15 to 30 pages) or b) talk (30 to 60 minutes)									
	other prerequisites			In advance, please consult with a lecturer who agrees to be your supervisor.									

Thesis (30 ECTS credits)												
10-M=MAAR-161-	Master Thesis Mathematics											
mo1	ECTS	30	Duratio	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		No co	No courses assigned to module							
	Method	d of asse	essment	Master's thesis (750 to 900 hours total) Registration and assignment of topic in consultation with supervisor. Language of assessment: German or English								
	other p	rerequis		The supervisor may make the successful completion of certain modules that are relevant for the respective topic a prerequisite for the assignment of the topic.								
	Additio	nal Info	rmation	Time to complete: 6 months								