

## **Annex SFB**

## Studienfachbeschreibung (subject description, SFB) for the subject Computer Science 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 Computer Science

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

Examination regulations version: 2021

Examination regulations version: 2021

= 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)):

28-Apr-2021 (2021-43)

15-Feb-2023 (2023-9)

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	To be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y							
	Method of as	ssessme	ent								
	Only after su completion o		l if applica	if applicable							
	Other prereq	uisites	if applica	if applicable							
	Participants and allocation of places		ocati- if applica	if applicable							
	Additional information		on if applica	if applicable							
	Referred to in	n LPO I	if applica	if applicable (examination regulations for teaching-degree programmes)							

Compulsory Cours	ses (20 E	CTS cred	lits)									
10-l=SEM3-212-	Semin	ar 1 - Cu	rrent Top	ics in (	Computer Science							
mo1	ECTS	ECTS 5 Duration		n	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	es			S (2) Module taught in: German and English The course is offered in parallel in both German and English.							
	Metho	Method of assessment			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, H	ocuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT, SE, IT, KI, R, HCI, GE							
10-I=SEM4-212-		ar 2 - Cu			s in Computer Science							
mo1	ECTS 5 Duratio			n	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.							
	Metho	Method of assessment			term paper (10 to 15 pages) and presentation (30 to 45 minutes) with subsequent discussion on the topic of the seminar Language of assessment: German and/or English							
	Additio	Additional Information			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT, SE, IT, KI, ES LR, HCI, GE							
10-I=PRAK-212-	Practio	al Cour	se - Curre	nt Top	ics in Computer So	cience						
mo1	ECTS	10	Duratio	n	1 semester	Method of grading (not) successfully comp	oleted Modul level	graduate				
	Courses				P (6) Module taught in: German and English The course is offered in parallel in both German and English.							
	Metho	d of ass	essment	term paper (5 to 15 pages) 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, SE, IT, KI, ES, LR, HCI, GE								

<b>Compulsory Electiv</b>	es (70 ECTS cred	dits)										
General Compulsory Electives (50 ECTS credits)  10-l=3D-212-mo1   3D Point Cloud Processing												
10-l=3D-212-m01	3D Point Cloud	Processi	ng									
	ECTS 5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses			V (2) + Ü (2) Module taught in: English								
	Method of asse		If ann of one date). Langu Separ credit	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 Separate written examination for Master's students creditable for bonus  Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): KI,LR,HCI,GE								
	Additional Info		Focus	es available for stud	lents of the Master's	programme Informatik	k (Computer Science, 120	ECTS credits): KI,LR,HCI,GE				
10-I=BS-212-m01	Operating Syst			,	AA .    C			<del>, , ,</del>				
	ECTS 5	Duratio		1 semester + Ü (2)	Method of grading	numerical grade	Modul level	graduate				
	Courses Method of asse	comont			ox. 60 to 120 minute	s)						
			If ann of one date). Separ Langu credit	If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examin of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per cadate).  Separate written examination for Master's students Language of assessment: German and/or English creditable for bonus								
	Additional Info	rmation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,ES,GE,SEC									
10-I=DM-212-m01	Data Mining	1			_							
	ECTS 5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses			+ Ü (2)								
	Method 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).  Separate written examination for Master's students  Language of assessment: German and/or English creditable for bonus									
	Additional Info	rmation	Focus SEC	es available for stuc	lents of the Master's	programme Informatik	k (Computer Science, 120	o ECTS credits): IT, KI, HCI, GE,				

10-l=DB2-212-m01	Databa	ses 2	1				"					
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate				
	Courses	S		V (2) -	+ Ü (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							
						udents of the Master's programme Informatik	(Computer Science, 120	ECTS credits): SE, KI, HCI				
10-l=ICG-161-m01		tive Cor	nputer Gr	aphics	; ·							
	ECTS	5	Duration		1 semester	Method of grading   numerical grade	Modul level	graduate				
	Courses				(2) + Ü (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). Separate written examination for Master's students. 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): HCI.								
10-l=KT-212-m01	<u>_</u>		Complex									
		5	Duration		1 semester	Method of grading   numerical grade	Modul level	graduate				
	Courses			V (2) -								
	Additional Information			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). Separate written examination for Master's students 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 stu	udents of the Master's programme Informatik	(Computer Science, 120	ECTS credits): AT,IT,KI,ES,GE				

10-l=KD-212-m01	Cryptograp	hy and Data	Security							
	ECTS 5	Duration	1 semester	Method of grading numerical grade	Modul level	graduate				
	Courses		V (2) + Ü (2)		·					
	Method of a	assessment	If announced by the le of one candidate each date).	Separate written examination for Master's students Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered and in the subsequent semester						
	Additional I	Information	Focuses available for s AT,SE,IT,KI,GE,SEC	students of the Master's programme Informatik (	Computer Science, 12	o ECTS credits):				
10-I=APR-212-m01	Advanced P	Programming			'					
	ECTS 5	Duratio	1 semester	Method of grading numerical grade	Modul level	graduate				
	Courses		V (2) + Ü (2)							
	Method of a	assessment	If announced by the le of one candidate each date).	Language of assessment: German and/or English						
	Additional I	Information	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,KI,LR, HCI, ES,GE,SEC							
10-l=SSS-212-m01	Security of	Software Sys	stems							
	ECTS 5	Duratio		Method of grading numerical grade	Modul level	graduate				
	Courses		V (2) + Ü (2) Module taught in: English							
	Method of a	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							
	Additional I	Information	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE, KI, LR, HCI, ES, SEC							

10-I=RAK-161-m01	Compu	ter Arcl	nitecture							
	ECTS	5	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate	
	Course	S		V (2)	+ Ü (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).  Separate written examination for Master's students.  Language of assessment: German and/or English creditable for bonus						
1 01/0							programme Informatik (Com	puter Science, 12	o ECTS credits): SE, IT, ES, LR, GE.	
10-I=SKS-212-m01					1	_				
		5	Duration		1 semester	Method of grading	numerical grade	Modul level	undergraduate	
	Course		_	` ′	+ Ü (2)	orox. 60 to 120 minut		1		
				of on date) Sepa Langi 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 date).  Separate written examination for Master's students  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): IT, ES, LR						
10-I=SEC-212-m01	Introduction to IT Security									
	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate	
	Course	S		V (2) + Ü (2) Module taught in: English						
	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).  Separate written examination for Master's students  Language of assessment: English creditable for bonus						
	Additio	nal Info	ormation	Focus	ses available for stu	dents of the Master's	programme Informatik (Com	puter Science, 12	o ECTS credits): SEC	

10-l=WBS-212-	Knowledge-based Systems											
mo1	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		V (2) -	$V(2) + \ddot{U}(2)$							
	Method	d of ass	essment	If ann of one date). Separ 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).  Separate written examination for Master's students  Language of assessment: German and/or English creditable for bonus							
	Additio	nal Info	ormation	Focus	es available for stu	dents of the Master's programme Informatik (Co	mputer Science, 12	o ECTS credits): SE, IT, KI, HCI, GE				
		- Curre			nputer Science							
mo1	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		P (4)								
		,		Langu Asses be rep offere	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)							
	Additional Information			LR, HO	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT, SE, IT, KI, ES, LR, HCI, GE							
10-I=AMS-212-m01						<u>,                                      </u>						
	ECTS	8	Duration		1 semester	Method of grading   numerical grade	Modul level	graduate				
	Course	S			V (4) + Ü (2) Module taught in: English							
	Method	d 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								
	Additio	nal Info	ormation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): IT, KI, ES, LR, GE								

10-l=A-	Algorit	hms for	Geograpi	hic Info	ormation Systems						
GIS-212-m01	ECTS	5	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	: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 creditable for bonus						
	Additio	nal Info	rmation	Focus	es available for stu	dents of the Master's	programme Informatik (Com	puter Science, 120	o ECTS credits): AT,KI,HCI,LR		
10-l=AG-161-m01	Compu	tationa	l Geometr	у							
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	·S		V (2) -	+ Ü (2)						
	method of dissessmen				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	rmation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,HCI,GE							
10-l=APA-161-m01	Approx	cimation	n Algorith	ms				,			
	ECTS	5	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	: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 creditable for bonus							
				Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,IT,GE							
	Referre	d to in I	LPO I	§ 22 l	Nr. 3 b)						

10-I=AUT-212-m01	Automa	Automata Theory											
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S	•	V (2) -	+ Ü (2)			•					
				If ann of one date). Langu Asses credit	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								
						dents of the Master's	programme Informatik (Compu	uter Science, 120	ECTS credits): AT, IT, ES, HCI, GE				
		d to in L											
10-l=AVS-161-m01		_ <u> </u>			r .			1	1				
		5	Duration		1 semester Method of grading   numerical grade   Modul level   graduate								
L	Course			V (2) -									
	Method	1 01 asse	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	Focus ES,LR	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits):								
10-HCI=M-	Multim	odal Us	er Interfa	ces									
MUI-161-m01	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V (2) -	+ Ü (2)								
	Method	l of asse	essment	presentation of project results (approx. 40 minutes) Language of assessment: German and/or English creditable for bonus									
	Additio			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): HCI,GE.									
	Referre	Referred to in LPO I		§ 22 l	§ 22 II Nr. 3 b)								

10-l=BER-212-m01	Comput	ability	Theory										
	ECTS	5	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5		V (2) -	+ Ü (2)			,					
	Method	of asse	essment			rox. 60 to 120 minute							
				of one date). Langu Asses credit	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					dents of the Master's	programme Informatik (	Computer Science, 120	o ECTS credits): AT,SE,IT,KI,GE				
	Referred			_	Nr. 3 b)								
07-BI-202-m01			Bioinfor										
	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses				) + Ü (4)								
				Log (a	Log (approx. 30 pages)								
10-l=DDB-212-m01	Deducti	ive Data											
	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses			V (2) -									
	Method	of asse	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 of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutedate).  Language of assessment: German and/or English creditable for bonus								
	Addition	nal Info	rmation	Focus	es available for stu	dents of the Master's	programme Informatik (	Computer Science, 120	o ECTS credits): AT,SE,IT,KI				
	Referred	d to in L	PO I	§ 22 l	Nr. 3 b)								
10-l=LP-212-m01	Logic P	rogram	ming										
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5		V (2) -	+ Ü (2)			,					
	Method	of asse	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	Focus	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,SE,IT,KI								
	Referred	d to in L	PO I	§ 22 l	Nr. 3 b)								

10-l=EL-212-m01	E-Learn	E-Learning											
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate					
	Courses	S		V (2) -	+ Ü (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									
						dents of the Master's programme Informatik (Comp	uter Science, 120	o ECTS credits): SE, IT, KI, HCI, GE					
10-I=PNN-212-m01			with neur	al nets	; ·								
	ECTS	5	Duration		1 semester	Method of grading   numerical grade	Modul level	graduate					
	Courses	S		V (2) -	+ Ü (2)								
			essment	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): SE,IT,KI,HCI,GE									
10-l=NLP-212-m01		e Learn	ing for Na	tural I	anguage Processin	<del></del>							
	ECTS	5	Duration		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	Additional Information			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,KI,HCI								
	Referre	d to in L	PO I	§ 22 l	l Nr. 3 b)								

10-l=ES-161-m01	Embed	ded Sys	tems				,				
	ECTS	8	Duration	า	1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		V (4)	+ Ü (2)						
	Method	d of asse	essment	If ann of one date) Langu	vritten 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).  It is a season or a season						
	Additio	nal Info	rmation		ses available for stu ,ES,LR,GE	dents of the Master's programme Informatik (Com	puter Science, 12	o ECTS credits):			
10-l=IR-212-m01	Inform	ation Re	trieval								
	ECTS 5 Duratio			1	1 semester	Method of grading numerical grade	Modul level	graduate			
[	Course	S		V (2)	V (2) + Ü (2)						
	Method	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	nal Info	rmation	Focus	ses available for stu	dents of the Master's programme Informatik (Com	puter Science, 12	o ECTS credits): IT,KI,HCI,GE			
10-HCl=3DUI-161-	3D Use	r Interfa	ices								
mo1	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate			
	Course		,		+ Ü (2)						
	Method of assessment			Langu	presentation of project results (approx. 30 minutes) 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): HCI,GE.							
	Referred to in LPO I		§ 22 l	§ 22 II Nr. 3 b)							

10-l=KT2-212-m01	Compu	tational	Complex	ity II								
	ECTS	5	Duration	n .	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	S		V (2) -	+ Ü (2)							
					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  Assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus							
						dents of the Master's	programme Informatik (Compu	iter Science, 120	o ECTS credits): AT, SE, IT, ES			
		erred to in LPO I § 22 II Nr. 3 b)										
10-l=Kl1-212-m01			gence 1						,			
		5	Duration		1 semester Method of grading numerical grade Modul level graduate							
	Courses			V (2) -								
	Method of assessment			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,SE,KI,HCI								
10-l=Kl2-212-m01	Artificia	al Intelli	gence 2		-							
	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			V (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 stud	dents of the Master's	programme Informatik (Compu	iter Science, 120	ECTS credits): AT,SE,KI,HCI,GE			

10-l=LVS-161-m01	Performance Evaluation of Distributed Systems											
	ECTS 8	B Duration	n 1 semester	Method of grading numerical grade	Modul level	graduate						
	Courses		V (4) + Ü (2)	·	•							
	Method o	of assessment	If announced by the le of one candidate each date). Language of assessme	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								
	Addition	al Information	reditable for bonus Focuses available for s AT,IT,GE	students of the Master's programme Informatik (	Computer Science, 12	o ECTS credits):						
10-l=ML-212-m01	Mathema	atical Logic										
	ECTS 5	Duratio	n 1 semester	Method of grading numerical grade	Modul level	graduate						
	Courses	·	V (2) + Ü (2)		,							
			of one candidate each date). Language of assessme Assessment offered: Ir creditable for bonus	Language of assessment: German and/or English Assessment offered: In the semester in which the course is offered and in the subsequent semester								
			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,SE,KI,ES									
		to in LPO I	§ 22    Nr. 3 b)									
10-l=Ml-212-m01	Medical	Informatics										
	ECTS 5	Duratio	n 1 semester	Method of grading   numerical grade	Modul level	graduate						
	Courses		V (2) + Ü (2)	V (2) + Ü (2)								
	Method o	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									
	Addition	al Information	Focuses available for s	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE, IT, KI, HCI, GE								
	Referred	to in LPO I	§ 22 II Nr. 3 b)									

10-l=SB-212-m01	System	s Benc	hmarking									
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate				
	Courses	5		V (2)	+ Ü (2)	•						
	Method	of ass	essment	If ann of on 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 examinatio if one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per cand late). anguage of assessment: German and/or English							
	Additio	nal Info	ormation	Focus	able for bonus ses available for stu ES,HCI,GE	idents of the Master's programme Informatik (Co	omputer Science, 12	o ECTS credits):				
10-l=PM-212-m01	Profess	ional P	Project Ma	nagen	nent							
	ECTS 5 Duratio			า	1 semester	Method of grading numerical grade	Modul level	graduate				
	Courses	5		V (4)	•	· ·	•					
				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 prerequisites			We re	We recommend completing module 10-I=PRJAK in parallel.							
	Additional Information			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,IT,KI,ES,LR,HCI,GE								
10-l=RO1-212-m01	Robotics 1											
	ECTS	8	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate				
	Courses	5		V (4) + Ü (2) Module taught in: English								
	Method 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								
	Additio	nal Info	ormation	Focus	es available for stu	dents of the Master's programme Informatik (Co	omputer Science, 12	o ECTS credits): KI, ES, LR, HCI, GE				

10-I=RO2-212-m01	Roboti	Robotics 2											
101 102 212 11101	ECTS	8	Duration	<u> </u>	1 semester	Method of grading numerical grade	Modul level	graduate					
	Course	S		V (4) · Modu	ı ⊦ Ü (2) le taught in: English		'	10					
	Method	d of ass	essment	If ann of one date). Langu	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								
					es available for stud	dents of the Master's programme Informatik (Con	nputer Science, 12	o ECTS credits): IT, ES, LR					
10-l=ST-212-m01			Simulation	on									
	ECTS	8	Duratio	1	1 semester	Method of grading   numerical grade	Modul level	graduate					
	Course				(4) + Ü (2)								
	Method of assessment			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		Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): IT,KI,ES,GE									
10-HCI=RIS-182-	Real-Time Interactive Systems												
mo1	ECTS	5	Duratio	1	1 semester	Method of grading   numerical grade	Modul level	graduate					
	Course			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 creditable for bonus									
	Additional Information					dents of the Master's programme Informatik (Con 3 Sentence 8 FSB (subject-specific provisions).	nputer Science, 12	o ECTS credits): HCI.					
	Referred to in LPO I			§ 22 l	l Nr. 3 b)								

10-I=SAR-161-m01	Softwa	re Arch	itecture									
	ECTS	5	Duration	า	1 semester	Method of grading nume	rical grade	Modul level	graduate			
	Course	S		V (2)	+ Ü (2)	<u> </u>			-			
	Method	l of ass	essment	If ann of on 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	ormation	Focus SE,IT,		udents of the Master's progra	amme Informatik (	(Computer Science, 12	o ECTS credits):			
	Referre	d to in I	LPO I	§ 22 l	II Nr. 3 b)							
10-l=SSD-152-m01	Spacec	raft Sys	stem Desi	gn								
	ECTS	8	Duration	1	1 semester	Method of grading nume	rical grade	Modul level	graduate			
	Course	S		V (4)	+ Ü (2)							
	Method of assessment				written examination (approx. 60 to 120 minutes) creditable for bonus							
	Additional Information			Focus	ses available for stu	udents of the Master's progra	ımme Informatik (	(Computer Science, 12	ECTS credits): ES, LR			
	Referre	d to in I	LPO I	§ 22 l	II Nr. 3 b)							
10-HCI=M-	Machine Learning (for User Interfaces)											
LUI-161-mo1	ECTS 5 Duratio			า	1 semester	Method of grading nume	rical grade	Modul level	graduate			
	Course	S		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	nal Info	ormation	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    Nr. 3 b)								
10-l=VG-161-m01	Visuali	zation (	of Graphs									
	ECTS	5	Duration	า	1 semester	Method of grading nume	rical grade	Modul level	graduate			
	Course	S		V (2)	+ Ü (2)				•			
	Method of assessment			If ann of on 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	ormation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,IT,HCI,GE								
1	Referre	d to in	I PO I	§ 22 II Nr. 3 b)								

10-I=AGE-191-m01	Selecte	d Topic	s of Game	es Eng	ineering			-				
	ECTS	5	Duration	1	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 credit	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							
						dents of the Master's programme Informatik (Co	mputer Science, 12	o ECTS credits): GE.				
10-I=AKA-161-m01		<u>-</u>	s in Algo									
	ECTS	5	Duration		1 semester	Method of grading   numerical grade	Modul level	graduate				
	Course	S		V (2)	+ Ü (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								
				Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits):  AT								
10-l=AKT-161-m01		d Topic	s in Theo	ry								
	ECTS	5	Duration		1 semester	Method of grading   numerical grade	Modul level	graduate				
	Course	_			+ Ü (2)			_				
	Method	d 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								
	Additio	nal Info	rmation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT								

10-l=AK-	Selecte	d Topic	s in Softv	vare Er	ngineering							
SE-161-m01	ECTS	5	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V (2)	+ Ü (2)		•					
				If ann of one date) Langu credit	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	programme Informatik (Co	mputer Science, 12	o ECTS credits): SE.			
10-l=A-	Selecte	d Topic	s in IT Se	curity								
KITS-212-m01	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S			V (2) + Ü (2) Module taught in: English							
	Method of assessment			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								
	Additional Information			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE, KI, LR, HCI, ES, SEC								
10-l=AKIT-161-m01	Selecte	d Topic	s in Inter	net Te	chnologies							
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		$V(2) + \ddot{U}(2)$								
	Method	d 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								
	Additio	nal Info	rmation	Focus	es available for stu	idents of the Master's	programme Informatik (Co	mputer Science, 12	o ECTS credits): IT.			

10-I=AKIS-212-m01	Selecte	d Topic	s in Intell	igent								
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S	•	V (2)	+ Ü (2)	'						
	Method	l 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	Focus	es available for stu	dents of the Master's p	rogramme Informatik (Com	nputer Science, 120	o ECTS credits): KI			
10-l=A-	Selecte	d Topic	s in Embe	edded	Systems							
KES-161-m01	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V (2)	+ Ü (2)							
	Method	101 833	essillent	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): ES.								
10-I=STM-162-m01	NLP and	d Text I	Mining					,				
	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		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 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								
	Additio	nal Info	rmation	Focus	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT, IT, HCI.							
	Referre	d to in I	LPO I	§ 22 l	l Nr. 3 b)							

10-l=AKL-	Selected	d Topic	s in Aeros	space	Engineering	,		1					
R-161-mo1	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses			V (2)	+ Ü (2)								
	Method	of ass	essment										
				of one date) Separ 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).  Separate written examination for Master's students.  Language of assessment: German and/or English creditable for bonus								
	Addition	nal Info	rmation	Focus	es available for st	udents of the Master'	s programme Informatik	(Computer Science, 12	o ECTS credits): LR.				
ıo-I=AKH-	Selected	d Topic	s in HCI		1	,		•					
Cl-182-m01	ECTS		Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses		•	V (2)	+ Ü/S (2)		•	<u>'</u>					
	wethod	or ass	essment	written examination (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									
	Addition	nal Info	rmation	Focus	es available for st	udents of the Master'	s programme Informatik	(Computer Science, 12	o ECTS credits): HCI.				
10-l=AKII-182-m01	Selected Topics in Computer Science												
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	I		V (2)	+ Ü/S (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 examinatio 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									
10-I=TSD-212-m01	Telecom	ımunic	ation Sys	tems									
	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses				+ Ü (2) ıle taught in: Engli	sh							
	Method of assessment			written examination (approx. 90 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									
	Additional Information			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): LR									
Master's with 1 major Cor	nputer Scien	ce (2021)					JMU Würzburg • generated	d 19-Apr-2025 • exam. reg. data r	ecord 88 079 - - H 2021 page 22 / 31				

10-I=RRS-212-m01	Radar F	Remote	Sensing			'						
	ECTS	5	Duration	)	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S			V (2) + Ü (2) Module taught in: English							
	Method				written examination (approx. 90 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 Info	rmation	Focus	es available for st	udents of the Master's	programme Informatik	(Computer Science, 12	o ECTS credits): LR			
10-l=QC-221-m01		m Com	municatio	ns								
	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S			V (2) + V (2)  Module taught in: English							
	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								
	Additio	nal Info	rmation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): LR								
10-l=DRLOC-221-	Deep R	einforce	ement Lea	rning	for Optimal Contro	ol						
mo1	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			V (2) + Ü (2) Module taught in: English								
	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								

10-xtAl=CV-202-	Computer V	ision					'-				
mo1	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	·	V (2) + Modul	· Ü (2) le taught in: English							
	Method of a	ssessment	If anno of one date). Langu	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: English creditable for bonus							
10-l=M-	Modeling ar	nd Simulatio	on of Sn	nart Energy System	S						
SIE-221-m01	ECTS 5	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		V (2) +								
	Method of a	ssessment	If anno of one date).	written examination (approx. 90 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). creditable for bonus							
10-I=NA-	Sustainable	Mobility									
MO-221-m01	ECTS 5	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		V (2) +	V (2) + Ü (2)							
	Method of a	ssessment	written examination (approx. 90 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).  creditable for bonus								
10-I=MLN1-221-	Machine Lea	arning for N	etworks	5 1			'				
mo1	ECTS 5	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		V (2) + Ü (2) Module taught in: English								
	Method of a		If anno of one date). Langua credita	Language of assessment: English creditable for bonus							
	Additional I	ntormation	Focuse	es available for stud	lents of the Master's	programme Informatik (Cor	nputer Science, 12	o ECTS credits): AT,IT,SE,KI,HCI			

10-l=MLN2-221-	Machir	ne Learr	ning for Ne	twork	5 2	,		'				
mo1	ECTS	5	Duration	)	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	!S			- + Ü (2) le taught in: Englis	:h		•				
	Method	d of ass		If ann of one date).	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: English creditable for bonus							
	Additio	nal Info	ormation	Focus	es available for stu	udents of the Master's	programme Informatik	(Computer Science, 12	o ECTS credits): AT,IT,SE,KI,HCI			
<b>Projects and Tarini</b>	ng											
10-I=RSE-182-m01	Space	System	s Design									
	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course			R (6)								
	Method	d of ass	essment	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 (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.)								
	Additional Information			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): LR. Cf. Section 3 Subsection 3 Sentence 8 FSB (subject-specific provisions).								
10-l=EPB-182-m01	Design of Planetary Bases and Orbital Stations											
	ECTS	10	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	<u>!</u> S		R (6)								
	Method	d of ass	essment	Each   Asses Langu	project report (10 to 15 pages) and presentation of project (15 to 30 minutes)  Each project is offered one time only. The project will not be repeated; there will not be another project with the same Assessment can, therefore, only be offered for the project offered in the respective semester.  Language of assessment: German and/or English  Assessment offered: In the semester in which the course is offered							
	Additio	onal Info	ormation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): LR. Cf. Section 3 Subsection 3 Sentence 8 FSB (subject-specific provisions).								
10-I=PRT-212-m01	Practic	al cour	se - Rocke	t Engir	neering and Payloa	ıds						
	ECTS	10	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course			P (6)								
	Method	d of ass	essment	placement report (4 to 5 pages) and presentation of results (15 to 30 minutes) Language of assessment: German and/or English								
	Additio	onal Info	ormation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): LR Cf. Section 3 Subsection 3 Sentence 8 FSB (subject-specific provisions).								

10-l=FZB-182-m01	Aircraft Construction											
	ECTS	10	Duratio	n	1 semester	Method of grading   numerical grad	de	Modul level	graduate			
	Course	S		R (6)				•				
	Method	d of ass	essment	project report (10 to 15 pages) and presentation of project (15 to 30 minutes) 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): LR. Cf. Section 3 Subsection 3 Sentence 8 FSB (subject-specific provisions).							
10-l=F-	Flight S	Simulat	or									
SIM-182-m01	ECTS	10	Duratio	n	1 semester	Method of grading   numerical grad	de	Modul level	graduate			
	Course	S		R (6)								
	Method	d of ass	essment	project report (10 to 15 pages) and presentation of project (15 to 30 minutes) Separate written examination for Master's students. 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): LR. Cf. Section 3 Subsection 3 Sentence 8 FSB (subject-specific provisions).								
10-l=GRL-	Game Research Lab - Theory											
T-182-mo1	ECTS 10 Duration			n	1 semester	Method of grading numerical grad	de	Modul level	graduate			
	Courses			R (4)								
	Method of assessment			project report (10 to 15 pages) and presentation of project (15 to 30 minutes) 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): GE. Cf. Section 3 Subsection 3 Sentence 8 FSB (subject-specific provisions).								
10-l=GRAR-182-	Game Research Lab - Architectures											
mo1	ECTS	10	Duratio	n	1 semester	Method of grading   numerical grad	de	Modul level	graduate			
	Course	S		R (4)								
	Method of assessment			project report (10 to 15 pages) and presentation of project (15 to 30 minutes) 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): GE. Cf. Section 3 Subsection 3 Sentence 8 FSB (subject-specific provisions).							

10-l=GRDE-182-	Game F	Game Research Lab - Design												
mo1	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Course	S		R (4)				,						
	Method	d of ass	essment				on of project (15 to 30 minutes)							
						German and/or Eng	lish							
	م ناماند: م				able for bonus			tou Coionas	a FCTC and distal CF					
				Cf. Se	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): GE.  Cf. Section 3 Subsection 3 Sentence 8 FSB (subject-specific provisions).									
10-I=GRAP-182-	Game F	Researc	h Lab - Ap	plicati	ons									
mo1	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Course	S		R (4)										
	Method	d of ass		project report (10 to 15 pages) and presentation of project (15 to 30 minutes) Language of assessment: German and/or English creditable for bonus										
	Additio	nal Info	rmation	Focus Cf. Se	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): GE. Cf. Section 3 Subsection 3 Sentence 8 FSB (subject-specific provisions).									
10-I-PAT1-182-m01	Practic	al Cour	se - Algori	thms and Theory 1										
	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Course	S		R (6)				,						
	Method of assessment			report (10 to 15 pages) and presentation of results (15 to 30 minutes) 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-PAT2-182-m01	1 Practical Course - Algorithms and Theory 2													
	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Course	S		R (6)										
	Method	d of ass	essment	report (10 to 15 pages) and presentation of results (15 to 30 minutes) 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-PSE1-182-m01	Practic	al Cour	se - Softw	are Engineering 1										
	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Course	S		R (6)										
	Method	d of ass	essment	``										
	Additio	nal Info	rmation	Focus	es available for stud	dents of the Master's	programme Informatik (Comp	uter Science, 12	o ECTS credits): SE.					

10-I-PSE2-182-m01	Practio	al Cour	se - Softw	are En	gineering 2								
	ECTS	10	Duration	<u> </u>	1 semester	Method of grading   numerical grade	Modul level	undergraduate					
	Course	!S		R (6)		,		-					
	Method of assessment			Langu	report (10 to 15 pages) and presentation of results (15 to 30 minutes) Language of assessment: German and/or English creditable for bonus								
	Additio	nal Info	ormation	Focus	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE.								
10-I-PIT1-182-m01	Practical Course - Internet Technology 1												
	ECTS	10	Duration	1	1 semester	Method of grading   numerical grade	Modul level	undergraduate					
	Course	:S		R (6)		·							
	Metho	d of ass	sessment	report (10 to 15 pages) and presentation of results (15 to 30 minutes) 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): IT.												
10-I-PIT2-182-m01													
	ECTS	10	Duration	า	1 semester	Method of grading   numerical grade	Modul level	undergraduate					
	Course	25		R (6)			,						
	Method of assessment			report (10 to 15 pages) and presentation of results (15 to 30 minutes) Language of assessment: German and/or English creditable for bonus									
	Additio	nal Info	ormation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): IT.									
10-I-PIS1-212-m01	Practical Course - Intelligent Systems 1												
	ECTS 10 Duratio			<u>-</u> 1	1 semester	Method of grading   numerical grade	Modul level	undergraduate					
	Course	!S		R (6)	R (6)								
				report (10 to 15 pages) and presentation of results (15 to 30 minutes) 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): KI												
10-I-PIS2-212-m01	Practio	al Cour	se - Intelli	igent Systems 2									
	ECTS 10 Duratio			1	1 semester	Method of grading numerical grade	Modul level	undergraduate					
	Courses			R (6)									
	Method of assessment			report (10 to 15 pages) and presentation of results (15 to 30 minutes) Language of assessment: German and/or English creditable for bonus									
	Additio	nal Info	ormation	Focus	es available for st	udents of the Master's programme Informatik	(Computer Science, 12	o ECTS credits): KI					

10-I-PES1-182-m01	Practical Course - Embedded Systems 1												
	ECTS	10	Duration		1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	!S		R (6)									
	Method	d of asse	essment	report (10 to 15 pages) and presentation of results (15 to 30 minutes) Language of assessment: German and/or English creditable for bonus									
	Additio	nal Info	rmation	Focus	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): ES.								
10-I-PES2-182-m01	Practic	al Cours	se - Embe	dded S	ystems 2								
	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	!S		R (6)									
	Method	d of asse	essment	report (10 to 15 pages) and presentation of results (15 to 30 minutes) 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): ES.									
10-I-PHCl1-182-	Practical Course - Human Computer Interaction 1												
mo1	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	es .	-	R (6)									
	Method	d of asse	essment	report (10 to 15 pages) and presentation of results (15 to 30 minutes) 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): HCI.									
10-I-PHCl2-182-	Practic	al Cours	e - Huma	n Computer Interaction 2									
mo1	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	!S		R (6)									
	Method	d of asse	essment	report (10 to 15 pages) and presentation of results (15 to 30 minutes) Language of assessment: German and/or English creditable for bonus									
	Additio	onal Info	rmation	Focus	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): HCI.								

10-I-EHL1-212-m01	Practical Course - Ethical Hacking Lab / Software											
	ECTS	10	Duration		1 semester	Method of grading   numerical grade	Modul level	graduate				
	Course	S	•	R (6) Module taught in: English								
	Method	d of ass	essment	written examination (approx. 60 to 120 minutes) and report (5 to 8 pages), weighted: written examination: 100%; The report just has to be passed 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								
						idents of the Master's programme Informatik (Comp	outer Science, 12	o ECTS credits): SEC				
10-I-EHL2-212-m01		al Cours	se - Ethica	ıl Hack	ing Lab / Network	5						
	ECTS	10	Duration	1	1 semester	Method of grading   numerical grade	Modul level	graduate				
	Course	S		R (6) Module taught in: English								
	Method of assessment			written examination (approx. 60 to 120 minutes) and report (5 to 8 pages), weighted: written examination: 100%; The report just has to be passed  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 Info	rmation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SEC								
10-l=TEL-212-m01	Teleco	nmunic	ation Sys	items Lab								
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate				
	Courses			V (2) + P (4) Module taught in: English								
	Method of assessment			a) oral examination of one candidate each (approx. 20 minutes) or b) oral examination in groups (max. 3 candidates, approx. 15 minutes each) or c) report (4 to 8 pages) Language of assessment: English								
	Additio	nal Info	rmation	Focus	es available for stu	idents of the Master's programme Informatik (Comp	outer Science, 12	o ECTS credits): LR				

10-l=RSL-212-m01	Radar Systems Lab											
	ECTS	5	Duratio	n	1 semester	Method of grading numerical grade	Mod	dul level	graduate			
	Course	S		V (2) + P (4) Module taught in: English								
	Method of assessment			a) written examination (approx. 90 to 120 minutes) or b) report (4 to 8 pages) 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								
			_		es available for stu	dents of the Master's programme Inform	atik (Computer So	cience, 120	ECTS credits): SEC			
10-I=PCV-221-m01			uter Visi									
	ECTS	10	Duratio		1 semester	Method of grading   numerical grade	Mod	dul level	graduate			
	Course		_	R (6)	R (6)							
	Method	l of asso	essment	report (10 to 15 pages) and presentation of results (15 to 30 minutes) Language of assessment: German and/or English creditable for bonus								
	Additio	nal Info	rmation	Focus	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): KI,LR;HCI							
Thesis (30 ECTS cre	edits)											
10-I-MA-MK-212-	Conclu	ding Co	lloquium	Comp	ıter Science							
mo1	ECTS 5 Duratio			n	1 semester	Method of grading numerical grade	Mod	dul level	graduate			
	Course	S		K (o)								
	Method of assessment			final colloquium (approx. 60 minutes) Language of assessment: German and/or English								
10-l-MA-161-m01	Master	's Thesi	is Compu	ter Science								
	ECTS	25	Duratio	1 semester Method of grading numerical grade				dul level	graduate			
	Course				No courses assigned to module							
	Method	d of ass	essment		er's thesis (50 to 100 lage of assessment	o pages) : German and/or English						
	Additio	nal Info	rmation	Time	to complete: 6 mon	ths		•				