

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

Examination regulations version: 2018

Examination regulations version: 2018

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)):

14-Mar-2018 (2018-15)

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

Compulsory Cours	es (20 ECTS cre	edits)										
10-I=SEM3-161-	Seminar 1 - C	urrent Top	ics in C	omputer Science								
mo1	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	,	S (2)									
			puter Langu	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								
	Additional Inf	ormation		Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT, SE, IT, IS, ES, R, HCI´, GE.								
10-I=SEM4-161-	Seminar 2 - Current Topics in Computer Science											
mo1	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	*	S (2)	-	,		·	-				
	Method of as	sessment		m paper (10 to 15 pages) and presentation (30 to 45 minutes) with subsequent discussion on the topic of the seminar nguage of assessment: German and/or English								
	Additional Inf	ormation		ocuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT, SE, IT, IS, ES, R, HCI, GE								
10-I=PRAK-161-	Practical cou	rse - Curre	nt Topi	cs in Computer Sci	ence		'					
mo1	ECTS 10	Duratio	n	1 semester	Method of grading	(not) successfully com	pleted Modul level	graduate				
	Courses		P (6)	•			*					
	Method of as	sessment		paper (5 to 15 page lage of assessmen	s) t: German and/or Engli	sh						
	Additional Inf	ormation		Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT, SE, IT, IS, ES, LR, HCI, GE								
Compulsory Electi	ves (70 ECTS cr	edits)										
General Compulso	ry Electives (50	ry Electives (50 ECTS credits)										
10-l=3D-161-m01	3D Point Clou	d Processi	ing									
	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses		V (2) + Ü (2) Module taught in: English									
	Method of as	sessment	If annoted of one date). Separ	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 Inf	ormation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): IS,LR,HCI,GE									

10-I=BS-161-m01	Operat	ing Sys	tems			-					
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		V (2) -	V (2) + Ü (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, 120	o ECTS credits): SE,ES,GE			
10-I=DM-161-m01	Data M	ining									
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate			
	Course			V (2) -		prox. 60 to 120 minutes).					
				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 examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per cardate). Separate written examination for Master's students. Language of assessment: German and/or English creditable for bonus						
			ormation	Focus	es available for stu	dents of the Master's programme Informatik (Co	mputer Science, 120	o ECTS credits): IT, IS, HCI, GE.			
10-l=DB-161-m01	Databa		Dunatia	_	1	Mathad of madinal munacical and do	Madulland	I ave divete			
	ECTS Course	5 s	Duration	V (2) -	1 semester + Ü (2)	Method of grading numerical grade	Modul level	graduate			
				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, 120	o ECTS credits): SE, IS, HCI, GE.			

10-l=DB2-161-m01	Databases 2										
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		V (2)	+ Ü (2)						
				If ann of on date) Langu credit	anguage of assessment: German and/or English reditable for bonus						
			-			dents of the Master's programme Informatik (Co	omputer Science, 12	o ECTS credits): SE, IS, HCI.			
10-l=ICG-161-m01		tive Cor	mputer Gr	<u> </u>	5						
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		V (2)	+ Ü (2)			_			
				If ann of on date) Sepa 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). Separate written examination for Master's students. Language of assessment: German and/or English creditable for bonus						
	Additio	nal Info	rmation	Focus	ses available for stud	dents of the Master's programme Informatik (Co	omputer Science, 120	o ECTS credits): HCI.			
10-l=KT-161-m01	Compu	tationa	l Complex	rity				_			
	ECTS	5	Duration		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) Sepa 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	rmation	Focus	ses available for stud	dents of the Master's programme Informatik (Co	omputer Science, 120	o ECTS credits): AT, IT, IS, ES, GE.			

10-I=KD-161-m01	Crypto	graphy	and Data	Securi	ty	-		-				
	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). Separ 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). Separate written examination for Master's students. Language of assessment: German and/or English creditable for bonus							
					es available for stud	dents of the Master's programme Informatik (Comp	outer Science, 12	o ECTS credits): AT, SE, IT, IS, GE.				
10-I=APR-161-m01		Advanced Programming										
	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								
				Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,IS,LR, HCI, ES,GE								
10-l=SSS-172-m01	Security of Software Systems											
	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). 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, IS, LR, HCI, ES. Basic programming knowledge in C is required.								

10-I=RAK-161-m01	Compu	Computer Architecture										
	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	sessment	If anr of on date) Sepa Langi	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	ses available for stu	dents of the Master's programme Informatik (Con	nputer Science, 12	o ECTS credits): SE, IT, ES, LR, GE.				
10-I=RK-161-m01	Compu	ter Net	works and	Comr	nunication Systems							
	ECTS	8	Duration		1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		V (4)	+ Ü (2)							
				If anr of on date) Sepa Langu credi	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							
					ses available for stu	dents of the Master's programme Informatik (Con	nputer Science, 12	o ECTS credits): IT, ES, LR.				
10-I=WBS-161-m01												
		5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate				
	Course				+ Ü (2)							
	Method	d of ass	sessment	If anr of on date) Sepa Langi	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	ses available for stu	dents of the Master's programme Informatik (Con	nputer Science, 12	o ECTS credits): SE, IT, IS, HCI, GE.				

10-I=PRJAK-162-	Project - Current Topics in Computer Science											
mo1	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		P (4)			•					
	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 topic. 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							
					ocuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT, SE, IT, IS, ES, R, HCI, GE.							
10-l=AA-152-m01		,	mation			<u>, </u>						
	ECTS	8	Duration		1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		V (4) ·	+ Ü (2)							
	Method	d of ass	essment		n examination (app able for bonus	orox. 60 to 120 minutes)						
	Additio	nal Info			cuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): IS,ES,LR,GE							
	Referre	d to in I	PO I	§ 22 l	l Nr. 3 b)							
10-l=AGIS-161-m01	Algorithms for Geographic Information Systems											
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		V (2) ·	+ Ü (2)	•		•				
	Method	d of ass		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		Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,IS,HCI								
10-I=AG-161-m01	Compu	tationa	l Geometr	y								
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		V (2) ·	+ 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		Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,HCI,GE								

10-l=APA-161-m01	Approx	imatio	n Algorith	ms			1					
	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 anr of on date) Lang	ritten examination (approx. 60 to 120 minutes). announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination f one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candi- ate). anguage of assessment: German and/or English reditable for bonus							
	Additio	nal Info	ormation	Focus AT,IT,	uses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): T,GE							
		d to in		§ 22	2 II Nr. 3 b)							
10-I=AUT-161-m01	Automa											
	ECTS 5 Duratio				1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		V (2)	(2) + Ü (2)							
	Method of assessment			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 e of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes date). Language of assessment: German and/or English creditable for bonus							
	Additio	nal Info	ormation	Focus	ocuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT, IT, ES, HCI, GE							
10-l=AVS-161-m01	Avionic	:s Syste	ems									
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate				
	Course				+ Ü (2)							
				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	ormation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): ES,LR								

10-HCI=M-	Multim	odal Us	ser Interfa	ces								
MUI-161-m01	ECTS	5	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V (2) -	$(2) + \ddot{U}(2)$							
	Method	d of ass	essment		presentation of project results (approx. 40 minutes)							
					anguage of assessment: German and/or English							
					able for bonus							
					ocuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): HCI,GE.							
	Referre			§ 22 l	22 II Nr. 3 b)							
10-l=BER-161-m01			Theory		i		·					
		5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course			V (2) -								
	Method	d of ass	essment			prox. 60 to 120 minut						
									replaced by an oral examination			
				date).	f one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candi-							
					anguage 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	,IT,IS,GE							
07-BI-161-m01	Bioinfo	rmatics										
	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	S		V (2) -	/ (2) + Ü (2)							
	Method	d of ass	essment		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							
				date).	of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate)							
						nt: German and/or Eng	lish					
					creditable for bonus							
10-l=CB-161-m01	Compil	er Cons	truction		'			"				
	ECTS	5	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V (2) -	+ Ü (2)			,				
	Method	d of ass	essment			prox. 60 to 120 minut		,				
									replaced by an oral examination			
				of one date).	one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candi-							
					nate). 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):							
				SE,IT,IS,GE								

10-I=DDB-172-m01	Deduct	Deductive Databases										
	ECTS	5	Duration	<u> </u>	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S	,	V (2) -	+ Ü (2)		•	•				
	Method of assessment				tten examination (approx. 60 to 120 minutes). nnounced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per cand se). Inguage of assessment: German and/or English ditable for bonus							
				Focus	es available for stu	dents of the Master's programme Informatik (Compo	uter Science, 120	o ECTS credits): AT, SE, IT, IS.				
10-l=LP-172-m01	Logic P	rogram	ogramming									
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		$V(2) + \ddot{U}(2)$								
				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	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT, SE, IT, IS.							
10-l=EL-161-m01	E-Learning											
	ECTS	5	Duration	1	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								
	Additional Information			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,IT,IS,HCI,GE								

10-I=PNN-182-mo1	Programming with neural nets											
	ECTS	5	Duration	ı	1 semester	Method of gradi	ng numerical grade	Modul	level	graduate		
	Courses			V (2) +	+ Ü (2)		<u>.</u>					
	Method	of asse			written examination (approx. 60 to 120 minutes).							
				of one date). Langu	Language of assessment: German and/or English creditable for bonus							
	Addition	nal Info	rmation	Focus	ocuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE, IT, IS, HCI, GE.							
10-l=NLP-182-m01	Machine Learning for Natural Language Processing											
	ECTS	5	Duration	ı	1 semester	Method of gradi	ng numerical grade	Modul	level	graduate		
	Courses			V (2) +	+ Ü (2)		<u>.</u>					
				If annoted of one date). Langu credit	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							
	Addition	nal Info	rmation	Focus	es available for st	tudents of the Mast	er's programme Informa	tik (Computer Scier	1ce, 12	o ECTS credits): AT, IS, HCI.		
10-l=HCl-161-m01	Introduction into Human-Computer Interaction											
	ECTS	5	Duration	n 1 semester		Method of grading numerical grade		Modul	level	graduate		
	Courses			V (3) +								
	Method of assessment			presentation of project results (approx. 30 minutes) Language of assessment: German and/or English creditable for bonus								
	Addition	nal Info	rmation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): HCI.								
10-l=ES-161-m01	Embedd	led Sys	tems					,				
	ECTS	8	Duration	ı	1 semester	Method of gradi	ng numerical grade	Modul	level	graduate		
	Courses	i		V (4) +	+ Ü (2)							
	Method	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								
	Addition	nal Info		Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,SE,ES,LR,GE								

ECTS 5 Duration 1 semester Method of grading numerical grade Modul level graduate Courses V (2) + Ü (2) Method of assessment 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 II Nr. 3 b)	10-I=PA-161-m01	Analysis and Design of Programs											
Method of assessment: written examination (approx. 6o to 120 minutes). fannounced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 2o minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for browns		ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination date). Language of assessment: German and/or English creditable for bonus		Course	S		V (2) +	· Ü (2)				-			
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): SE,IS,ES,GE SE SE Duration I semester Method of grading numerical grade Modul level graduate Modul level graduate Modul level Method of grading numerical grade Modul level Method of grading Numerical grade Numeric		Method	l of ass	essment	If anno	announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination f one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candi-							
10-I=R-161-mot Information Retrieval ECTS 5 Duration 1 semester Method of grading numerical grade Modul level graduate					Language of assessment: German and/or English creditable for bonus								
ECTS 5 Duration 1 semester Method of grading numerical grade Modul level graduate		Additio	nal Info										
Courses V(2) + Ü(2) Method of assessment written examination (approx. 6o 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). Additional Information Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): IT,IS,HCI,GE 3D User Interfaces ECTS Duration 1 semester Method of grading numerical grade Modul level graduate Courses V(2) + Ü(2) Method of assessment 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 § 22 I Nr. 3 b) Computational Complexity II Semester Method of grading numerical grade Modul level graduate Courses 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 candidates). Language of assessment: German and/or English Creditable for bonus Creditabl	10-l=IR-161-m01	Informa	ation Re	etrieval					"				
Method of assessment Written examination (approx. 6o to 120 minutes). fannounced 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		ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
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		Course	S		V (2) +	· Ü (2)			,				
IT,IS,HCI,GE 10-HCI=3DUI-161-10-HCI=3DUI-1		Method	l of ass	essment	If anno of one date). Langu	announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examinatior fone candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candiate). Anguage of assessment: German and/or English							
ECTS 5 Duration 1 semester Method of grading numerical grade Modul level graduate		Additional Information					dents of the Master'	s programme Informatik (0	Computer Science, 120	ECTS credits):			
Courses V (2) + Ü (2) Method of assessment 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 II Nr. 3 b) 10-I=KT2-161-mo1	10-HCl=3DUI-161-	3D Use	r Interfa	aces									
Method of assessment 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 II Nr. 3 b) Computational Complexity II ECTS 5 Duration I semester Method of grading numerical grade Modul level graduate Courses 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	mo1	ECTS 5 Duratio		Duration	on 1 semester		Method of grading numerical grade		Modul level	graduate			
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													
Referred to in LPO I \$ 22 I Nr. 3 b) 10-I=KT2-161-mo1		Method of assessment			Language of assessment: German and/or English								
To-I=KT2-161-mo1 ECTS 5 Duration 1 semester Method of grading numerical grade Modul level graduate		Additio	nal Info	rmation	Focus	es available for stu	dents of the Master'	s programme Informatik ((Computer Science, 120	o ECTS credits): HCI,GE.			
ECTS 5 Duration 1 semester Method of grading numerical grade Modul level graduate Courses V (2) + 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		Referre	d to in I	LPO I	§ 22	Nr. 3 b)							
Courses 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	10-I=KT2-161-m01	Compu	tationa	l Complex	ity II				,				
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		ECTS	5	Duration	ì	1 semester	Method of grading	numerical grade	Modul level	graduate			
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		Course	S		V (2) +								
Additional Information Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT, SE, IT, ES		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								
		Additio	nal Info	rmation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT, SE, IT, ES								

10-l=Kl1-161-m01	Artificia	al Intell	ligence 1								
	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).	written examination (approx. 60 to 120 minutes). Fannounced 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). anguage of assessment: German and/or English reditable for bonus						
	Additio	nal Info	ormation		es available for st ,IS,HCl	tudents of the Master's programme Informatik (Com	puter Science, 12	o ECTS credits):			
10-l=Kl2-161-m01	Artificia	al Intell	ligence 2				'				
	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	If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examina of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per ca date). 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,SE,IS,HCI,GE							
10-l=LVS-161-m01	Perforn	nance E	valuation	of Dis	tributed Systems		'				
	ECTS	8	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		V (4) -	V (4) + 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	ormation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,IT,GE							

10-l=ML-161-m01	Mather	natical	Logic			-		·				
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		V (2) -	+ Ü (2)		-					
	Method	d of ass	sessment	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							
				Focus AT,SE		dents of the Master's programme Informatik (Co	mputer Science, 120	o ECTS credits):				
10-l=MI-161-m01	Medica	l Infor	natics									
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		V (2) -	$V(2) + \ddot{U}(2)$							
	method of dissessment			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			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,IT,IS,HCI,GE								
10-I=PEB-161-m01	Perforn	nance I	Engineerin	g & Be	enchmarking of Con	nputer Systems						
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate				
	Course			$V(2) + \ddot{U}(2)$								
	Method	d of ass	sessment	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): SE,IT,ES,HCI,GE								

10-l=PM-182-m01	Professional Project Management											
	ECTS 4	5	Duration)	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			V (4)				•				
	Method	of asses				prox. 60 to 120 minut		·				
									replaced by an oral examination			
				date).		approx. 20 minutes) c	or an oral examination	in groups of 2 candidate	s (approx. 15 minutes per candi-			
				Langu	Language of assessment: German and/or English creditable for bonus							
	other pre	erequisit	tes	We re	We recommend completing module 10-I=PRJAK in parallel.							
	Addition	nal Inforn		Focus HCI, G		udents of the Master's	s programme Informati	k (Computer Science, 12	o ECTS credits): SE, IT, IS, ES, LR,			
10-I=RAM-161-m01	Compute	er Arithn	netic					'				
	ECTS 4	5	Duration)	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			V (2) +	- Ü (2)		•	*				
	Method	of asses		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 Inforn		Focus AT,ES	es available for stu	udents of the Master's	s programme Informati	k (Computer Science, 12	o ECTS credits):			
10-l=R01-182-m01	Robotics 1											
	ECTS 8	8	Duration	1	graduate							
	Courses			V (4) + Ü (2) Module taught in: English								
	Method	of asses		Separ Langu	written examination (approx. 60 to 90 minutes) Separate written examination for Master's students. Language of assessment: English creditable for bonus							
	Addition	nal Inforn		Focus GE.	es available for stu	udents of the Master's	s programme Informati	k (Computer Science, 12	o ECTS credits): IS, ES, LR, HCI,			
10-l=RO2-152-mo1	Robotics	5 2	,					'				
	ECTS 8	8	Duration)	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	,		V (4) +	- Ü (2)							
	Method	Method of assessment			written examination (approx. 60 to 90 minutes) creditable for bonus							
	Addition	al Inforn	nation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): IT, ES, LR								
	Referred	Referred to in LPO I			§ 22 II Nr. 3 b)							
Master's with 1 major Cor	mputer Scienc	ce (2018)					JMU Würzburg • genera	ted 19-Apr-2025 • exam. reg. data	record 88 079 - - H 2018 page 16 / 30			

10-l=ST-161-m01	Discrete Event Simulation											
	ECTS	8 Duratio	on	1 semester	Method of grading numerical grade	Modul level	graduate					
	Courses		V (4) +	Ü (2)								
	Method	of assessment	If anno 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								
	Addition	nal Information	Focuse	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): IT,IS,ES,GE								
10-HCI=RIS-182-	Real-Tin	ne Interactive S	ystems			'						
mo1	ECTS	5 Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate					
	Courses		V (2) +	Ü (2)								
		of assessment	If anno of one date). Langua credita	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								
		nal Information	Cf. Sec	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): HCI. Cf. Section 3 Subsection 3 Sentence 8 FSB (subject-specific provisions).								
		to in LPO I	§ 22 II	§ 22 II Nr. 3 b)								
10-I=SAR-161-m01	Softwar	e Architecture										
	ECTS	5 Duratio		1 semester	Method of grading numerical grade	Modul level	graduate					
	Courses		V (2) +	` '								
			If anno of one date). Langua credita	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	nal Information		Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,IT,ES								
	Referred	to in LPO I	§ 22 II	Nr. 3 b)								

10-l=SSD-152-m01	Spaced	raft Sy	stem Desi	gn									
	ECTS	8	Duration	n	1 semester	Method of grading numerical grade	Modul level	graduate					
	Course	!S		V (4) +	· Ü (2)	·		•					
	Metho	d of ass	sessment		written examination (approx. 60 to 120 minutes)								
					able for bonus								
						tudents of the Master's programme Informati	k (Computer Science, 12	o ECTS credits): ES, LR					
	Referre				Nr. 3 b)		,						
10-HCI=M-				User Interfaces)									
LUI-161-m01		5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate					
	Course			V (2) +									
	Metho	d of ass	sessment	Langu		results (approx. 40 minutes) nt: German and/or English							
	Additio	onal Inf	ormation	Focus	cuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): HCI,GE.								
	Referre	d to in	LPO I	§ 22	§ 22 II Nr. 3 b)								
10-l=Pl-172-m01	Probab	babilistic Inference											
	ECTS	5	Duration	n	1 semester	Method of grading numerical grade	Modul level	graduate					
	Course	!S		V (2) +	· Ü (2)								
	Method of assessment			If anno 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 candate). Language of assessment: German and/or English creditable for bonus								
	Additio	nal Inf	ormation	Focus	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT, IT, IS, HCI.								
10-l=VG-161-m01	Visuali	zation	of Graphs				'						
	ECTS	5	Duration	n [1 semester	Method of grading numerical grade	Modul level	graduate					
	Course	!S		V (2) +	· Ü (2)								
	Method	d of ass	sessment	If anno 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								
	Additional Information			Focus AT,IT,I	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,IT,HCI,GE								
	Referre	ed to in	LPO 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)	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							
						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-		d Topic	s in IT Se	curity								
KITS-172-m01	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S			+ Ü (2) le taught in: Englis	h						
	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								
	Additio	nal Info	rmation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE, IS, LR, HCI, ES.								
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)	+ 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	Focus	es available for stu	idents of the Master's	programme Informatik (Co	mputer Science, 12	o ECTS credits): IT.			

10-I=AKIS-161-m01	Selecte	d Topic	s in Intell	igent :								
	ECTS	5	Duration	1	1 semester	Method of grading n	umerical grade	Modul level	graduate			
	Course	S	,	V (2)	+ Ü (2)	•		•	•			
	Method	l of ass	essment	If ann of one date) Langu	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 candilate). anguage of assessment: German and/or English reditable for bonus							
	Additio	nal Info	rmation	Focus	es available for stu	dents of the Master's pr	ogramme Informatik (Co	mputer Science, 120	o ECTS credits): IS.			
10-l=A-	Selecte	d Topic	s in Embe	edded	Systems							
KES-161-m01	ECTS	5	Duration		1 semester	Method of grading n	umerical grade	Modul level	graduate			
	Course	S		V (2)	+ Ü (2)							
	Method	101 833	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): ES.								
10-l=STM-162-m01	NLP and	d Text I	Mining									
	ECTS	5	Duration		1 semester	Method of grading n	umerical 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	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 II Nr. 3 b)								

10-I=AKL-	Selected Topics in Aerospace Engineering											
R-161-m01	ECTS 5	5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	,-		V (2)	+ Ü (2)	·		•				
	Method o	of asses		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								
	Additiona	al Inforr	nation	Focus	ocuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): LR.							
10-I=AKH- CI-182-m01	Selected	Topics	in HCI		·							
	ECTS 5	;	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses	·		V (2)	(2) + Ü/S (2)							
	metriou u), u3363		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								
	Additiona	al Inforr	nation	Focus	ses available for stu	idents of the Master's i	orogramme Informatik	(Computer Science, 12	o ECTS credits): HCI.			
10-l=AKII-182-m01	Selected Topics in Computer Science											
	ECTS 5	;	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses		Ì	V (2)	+ Ü/S (2)				<u> </u>			
	Method o	of asses		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 examin of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per cadate). Language of assessment: German and/or English creditable for bonus								
Projects and Tarini	ng											
10-l=RSE-182-m01	Space Sy	stems	Design									
	ECTS 1	.0	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			R (6)	•	•		•				
	Method of assessment			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.)								
	Additiona	al Inforr		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).								
Master's with 1 major Co	mnuter Science	0 (2018)					IMII Wiirzburg • generate	d 10-Anr-2025 • exam. reg. data	record 88 070 - - H 2018 nage 22 / 30			

10-l=FPR-182-m01	Design of Planetary Bases and Orbital Stations												
101 21 102 11101	ECTS	10	Duration		1 semester	Method of grading nu	merical grade	Modul level	graduate				
	Course		Baration	R (6)	1 Jennester	Method of Stading No	meneat grade	modul level	1 S. addate				
			essment	project 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 topic. 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	nal Info	rmation			dents of the Master's pro 3 Sentence 8 FSB (subje	gramme Informatik (Compu ct-specific provisions).	ter Science, 12	o ECTS credits): LR.				
10-l=PRT-182-m01	Practic	al cours	se - Rocke	t Engir	neering and Payload	ls							
	ECTS	10	Duration	1	1 semester	Method of grading (n	ot) successfully completed	Modul level	graduate				
	Course	S		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	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=FZB-182-m01	Aircraft	Aircraft Construction											
	ECTS	10	Duration	n	1 semester	Method of grading nu	merical grade	Modul level	graduate				
	Course	S	•	R (6)									
	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): LR. Cf. Section 3 Subsection 3 Sentence 8 FSB (subject-specific provisions).								
10-l=F-	Flight S	Simulat	or										
SIM-182-mo1	ECTS	10	Duration	1	1 semester	Method of grading nu	merical grade	Modul level	graduate				
	Course	S		R (6)									
	Method of assessment			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									
	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=GRL-	Game Research Lab - Theory											
T-182-m01	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	!S		R (4)								
	Metho	d of ass	essment		project report (10 to 15 pages) and presentation of project (15 to 30 minutes)							
					anguage of assessment: German and/or English reditable for bonus							
	Additio	nal Info	ormation		ocuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): GE.							
	Additio	mat mit	Jillation		ocuses available for students of the master's programme informatik (Computer Science, 120 EC15 credits): GE. If. Section 3 Subsection 3 Sentence 8 FSB (subject-specific provisions).							
10-l=GRAR-182-	Game Research Lab - Architectures											
mo1	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	!S		R (4)				,	1-			
				Langu	roject report (10 to 15 pages) and presentation of project (15 to 30 minutes) anguage of assessment: German and/or English editable for bonus							
	Additional Information				ocuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): GE. f. Section 3 Subsection 3 Sentence 8 FSB (subject-specific provisions).							
10-l=GRDE-182-	Game I	Researc	h Lab - De	sign	ŗn							
m01	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	!S		R (4)								
	Method of assessment			Langu		ages) and presentation t: German and/or Engli	n of project (15 to 30 min sh	utes)				
	Additio	onal Info	ormation		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	Researc	h Lab - Ap	plicat	ions							
mo1	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	!S		R (4)	R (4)							
	Metho	d of ass	essment	Langu	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): 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								
	Additional Information			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT.								
Master's with 1 major Co		(2210)					IMII Würzhurg • generated 10	Anr agas a gyam rog data r	ecord 88 070 - - H 2018			

10-I-PAT2-182-m01	Practical	l Cours	e - Algor	ithms	and Theory 2			1					
	ECTS :	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses		•	R (6)	•	•							
	Method	of asse	essment	Langu	report (10 to 15 pages) and presentation of results (15 to 30 minutes) Language of assessment: German and/or English creditable for bonus								
	Addition	al Info	rmation	Focus	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT.								
10-I-PSE1-182-m01	Practical	l Cours	e - Softw	are En	re Engineering 1								
	ECTS 2	10	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses			R (6)									
	Method	of asse	essment	Langu	t (10 to 15 pages) an lage of assessment: able for bonus								
	Addition	onal Information Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE.											
10-I-PSE2-182-m01	Practical	l Cours	e - Softw	Software Engineering 2									
	ECTS 2	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									
	Addition	al Info	rmation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE.									
10-I-PIT1-182-m01	Practical	tical Course - Internet Technology 1											
	ECTS :	10	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Courses			R (6)	R (6)								
	Method	of asse	essment	Langu		d presentation of res German and/or Engl	ults (15 to 30 minutes) ish)					
	Addition	al Info	rmation	Focus	es available for stud	dents of the Master's	programme Informati	k (Computer Science, 12	o ECTS credits): IT.				
10-I-PIT2-182-m01	Practica	l Cours	e - Intern	et Tec	hnology 2								
	ECTS 2	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									
	Addition	al Info	rmation	Focus	es available for stud	dents of the Master's	programme Informati	k (Computer Science, 12	o ECTS credits): IT.				

10-I-PIS1-182-m01	Practical Course - Intelligent Systems 1											
	ECTS	10	Duration	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	!S		R (6)	? (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): IS.							
10-I-PIS2-182-m01	Practic											
	ECTS 10 Duration				1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course			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	Focus	es available for stud	ents of the Master's	programme Informatik	(Computer Science, 120	ECTS credits): IS.			
10-I-PES1-182-m01	Practic	al Cours	se - Embe	dded Systems 1								
	ECTS 10 Duration		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): ES.								
10-I-PES2-182-m01	Practical Course - Embedded 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	rmation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): ES.								
10-I-PHCl1-182-	Practic	al Cours	se - Huma	nn Computer Interaction 1								
mo1	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								
	Additional Information			Focus	es available for stud	ents of the Master's	programme Informatik	(Computer Science, 120	ECTS credits): HCI.			

10-I-PHCl2-182-	Practical Course - Human Computer Interaction 2											
mo1	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								
	ما داده			creditable for bonus Focuses available for students of the Master's programme Informatile (Computer Science, 100 FCTS credits). UCL								
ACT					Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): HCI.							
10-I=AGE-182-m01		<u>-</u> _			Engineering							
		5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate				
	Course				+ Ü (2)							
	Method	d of ass				prox. 60 to 120 minutes).	a evamination may be i	replaced by an oral examination				
				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							
	۸ ططنه: م	nallafa	rmation		creditable for bonus							
10-I=AKA-161-m01	Additional Information Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): GE. Selected Topics in Algorithms											
10-I=AKA-161-III01												
	ECTS 5 Duratio				1 semester	Method of grading numerical grade	Modul level	graduate				
	Course			$V(2) + \ddot{U}(2)$ written examination (approx. 60 to 120 minutes).								
	method	ı oı ass	essment				n examination may be i	replaced by an oral examination				
				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								
	۸dditio	nal Info	rmation	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits):								
	Additio	mat mic		AT								
10-I=AKT-161-m01	Selecte	ed Topic	s in Theo	ry	1		,					
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	S		V (2)	+ Ü (2)		•					
	Method	d of ass		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).								
					date). Language of assessment: German and/or English							
					able for bonus	, 5						
	Additio	nal Info		Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits):								
				AT								

10-l=AK-	Selected Topics in Software Engineering											
SE-161-m01	ECTS 5 Duration		า	1 semester Method of grading numerical grade		Modul level	graduate					
	Courses			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								
	Additio	nal Info	rmation	Focus	es available for stu	dents of the Master's	programme Informatik (Co	omputer Science, 120	o ECTS credits): SE.			
10-l=A-	Selected Topics in IT Security											
KITS-172-m01	ECTS 5 Duratio				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). 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): SE, IS, LR, HCI, ES.								
10-l=AKIT-161-m01	Selected Topics in Internet Technologies											
	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	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): IT.							

10-I=AKIS-161-m01	Selecte	d Topic	s in Intell	igent							
	ECTS	5	Duration	1	1 semester	Method of grading Inc	ımerical grade	Modul level	graduate		
	Course	S	,	V (2) -	+ 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	Focus	es available for stu	dents of the Master's pr	ogramme Informatik (Com	puter Science, 12	o ECTS credits): IS.		
10-l=A-	Selected Topics in Embedded Systems										
KES-161-m01	ECTS 5 Duratio				1 semester	Method of grading n	umerical grade	Modul level	graduate		
	Course	S		V (2) ·	+ Ü (2)						
	Wethor	101 033	CSSITETT	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-l=STM-162-m01	NLP and	d Text I	Mining								
	ECTS	5	Duration		1 semester	Method of grading n	umerical 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							
	Additio	nal Info	rmation	Focus	es available for stu	dents of the Master's pr	ogramme Informatik (Com	puter Science, 12	o ECTS credits): AT, IT, HCI.		
	Referred to in LPO I			§ 22 l	l Nr. 3 b)						

10-I=AKL-	Selecte	d Topic	s in Aeros	space l	Engineering						
R-161-mo1	ECTS 5 Duration			1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			V (2) -	/ (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). Separate written examination for Master's students. Language of assessment: German and/or English creditable for bonus							
	Additional Information			Focus	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): LR.						
Thesis (30 ECTS cre	edits)										
10-I-MA-MK-182-	Concluding Colloquium Computer Science										
mo1	ECTS 5 Duratio		1	1 semester	Method of grading	(not) successfully completed	Modul level	graduate			
	Course	5		K (o)							
	Method	l of asse	essment	final colloquium (approx. 60 minutes) Language of assessment: German and/or English							
10-I-MA-161-m01	Master	's Thesi	s Comput	ter Science							
	ECTS 25 Duratio		Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			No courses assigned to module							
	Method of assessment			Master's thesis (50 to 100 pages) Language of assessment: German and/or English							
	Additional Information			Time t	Time to complete: 6 months						