

Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject Aerospace 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: 2023

Examination regulations version: 2023

= 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

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

= list of modules

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

Conventions for the modules in this SFB: ditable for bonus.

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

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)):

15-Feb-2023 (2023-10)

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	on Module title													
	ECTS		Duration	(in semesters)	Method of grading		Module level							
	Courses		To be sp	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	sessm	ent											
	Only after su completion o		ıl if applic	if applicable										
	Other prereq	uisites	if applic	able										
	Participants on of places		ocati- if applic	able										
	Additional in	format	ion if applic	able										
	Referred to in	1 LPO I	if applic	if applicable (examination regulations for teaching-degree programmes)										

Electives Field (90	ECTS cre	dits)										
Seminars (min. 5 E	CTS cred	lits)										
10-Lu-	Semina	ır 1 - Cu	rrent Top	ics in A	Aerospace Comput	er Science						
RI=SEM1-232-mo1	ECTS	5	Duratio	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			S (2) Modu	S (2) Module taught in: German and/or English							
	Method	d of ass	essment		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							
10-Lu-		ır 2 - Cu	rrent Top	ics in /	Aerospace Comput	er Science		'				
RI=SEM2-232-m01	ECTS	5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		S (2) Modu	lle taught in: Germ	an and/or English						
	Method	d of ass	essment			es) and presentation t: German and/or Eng		th subsequent discussior	n on the topic of the seminar			
Aerospace Comput	er Scien	ce (min	. 20 ECTS	credit	s)							
10-LURI=S-	Spaced	raft System Analysis										
SA-232-m01	ECTS	10	Duratio	า	1 semester	Method of grading	numerical grade	Modul level				
	Course	S			+ Ü (2) ıle taught in: Englis	sh						
	Method of assessment			If ann of one date) Langu	ounced by the lect e candidate each (a	curer at the beginning approx. 20 minutes) c	of the course, the wri		replaced by an oral examination s (approx. 15 minutes per candi-			
	Additio	nal Info	rmation	Focus ES, LF		udents of the Master's	s programme Informat	tik (Computer Science, 12	o ECTS credits):			
10-LURI=R-	Rocket	Propul	sion									
P-232-m01	ECTS	5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level				
	Course	S			+ Ü (2) ıle taught in: Germ	an and/or 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: German and/or English creditable for bonus								

10-I=DRLOC-221-	Deep Reinforcement Learning for Optimal Control												
mo1	ECTS	5	Duration	1 semester	Method of grad	ing numerical grade	Modul level						
	Course	S		V (2) + Ü (2) Module taught in:	English	•							
	Method of assessment			If announced by the of one candidate of date). Language of assess	ritten 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 examinatio f one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candiate). anguage of assessment: English reditable for bonus								
10-LURI=GRF-	Orbital	Mecha	nics										
M-232-m01	ECTS	10	Duration	1 semester	Method of grad	ing numerical grade	Modul level	graduate					
	Courses			V (4) + Ü (2)	•		•						
				If announced by the of one candidate of date). or b) project (repo	a) 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). For b) project (report (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic) creditable for bonus								
10-LURI=S-	Space	Dynami	cs										
D-202-m01	ECTS 5 Duration			1 semester	Method of grad	ing numerical grade	Modul level	graduate					
	Courses			V (2) + Ü (2) Module taught in: English									
	Method of assessment			If announced by th	replaced by an oral examination s (approx. 15 minutes per candi-								
10-LURI=AS-	Advanc	ed Sen	sory Syst	ems and Sensor Da	ta Processing		,						
S-202-m01	ECTS	5	Duration	1 semester	Method of grad	ing numerical grade	Modul level	graduate					
	Course	S		V (2) + Ü (2) Module taught in:									
	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: German and/or English creditable for bonus									

10-LU-	Satellit	te Imag	e process	ing	"	-						
RI=SBV-232-m01	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level				
	Course	S			V (4) + Ü (2) Module taught in: German and/or English							
	Method	d of ass	essment	If ann of one date) Langu	written 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 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 reditable for bonus							
10-LURI=SL-	Selecte	ed Topi	cs in Aeros	space	Computing							
R-232-m01	ECTS	5	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S			$V(2) + \ddot{U}(2)$ Module taught in: German and/or English							
	Method of assessment			b) pro c) ora d) ora Langu	a) written examination (approx. 60 to 90 minutes) or b) project (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) Language of assessment: German and/or English creditable for bonus							
Robotics and Teler	natics (n	nin. 20	ECTS cred	its)								
10-LU-	Roboti	CS 1										
RI=RO1-232-m01	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			V (2) + Ü (2) Module taught in: German and/or English								
	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								
	Additional Information			Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): KI, ES, LR, HCI, GE								

10-LU-	Robotio	CS 2	'										
RI=RO2-232-m01	ECTS	10	Duratio	n	1 semester	Method of grading nu	merical grade	Modul level	graduate				
	Course	S			V (4) + Ü (2) + P (1) Module taught in: German and/or English								
	Method	d 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		ocuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): I, ES, LR, HCI, GE								
10-LU-	Autono	mous N	lobile Sy:	stems	5								
RI=AMS-232-mo1	ECTS	10	Duratio	n	1 semester	Method of grading nu	merical grade	Modul level	graduate				
	Course	S			V (4) + Ü (2) Module taught in: German and/or English								
	Method of assessment			If ann of one date). Langu	ounced by the lectu e candidate each (a _l				replaced by an oral examination s (approx. 15 minutes per candi-				
	Additio	nal Info	rmation		Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): IT, KI, ES, LR, GE								
10-LU-	3D Poir	nt Cloud	Processi	ing									
RI=3D-202-m01	ECTS	5	Duratio		1 semester	Method of grading nu	merical grade	Modul level	graduate				
	Course	S			+ Ü (2) ıle taught in: Germa	n and/or English							
	Method	d of asso	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									

10-LURI=PHO-	Photog	gramme	tric Mach	ine Vis	sion						
TO-232-mo1	ECTS	5	Duratio	1	1 semester	Method of grading nu	merical grade	Modul level			
	Course	S			+ Ü (2) ıle taught in: Germa	n and/or English					
				writte If ann 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 candi-						
10-l=TSD-232-m01	Teleco	mmuni	ation Sys	tems				,			
	ECTS	10	Duration	1	1 semester	Method of grading nu	merical grade	Modul level	graduate		
	Course	S	_		+ Ü (2) ıle taught in: Germa	n and/or English		•			
	Method	d of ass	essment	If anr of on date) 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). creditable for bonus Language of assessment: German and/or English						
	Additio	nal Info	ormation	Focus	ses available for stud	dents of the Master's pro	gramme Informatik (Comp	uter Science, 120	ECTS credits): LR		
10-LURI=SR-	Selecte	ed Topi	cs in Robo	tics a	nd Telematics			,			
T-232-m01	ECTS	5	Duration	1	1 semester	Method of grading nu	merical grade	Modul level	graduate		
	Course	S			+ Ü (2) ıle taught in: Germa	n and/or English					
	Method	d of ass	essment	a) written examination (approx. 60 to 90 minutes) or b) practical project (project documentation (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) Language of assessment: German and/or English creditable for bonus							

10-I=RRS-222-m01													
	ECTS	5	Duration	1 semest	er	Method of grading numerical g	grade	Modul level					
	Courses	5		V (2) + Ü (2) Module taught i	n: Germa	an and/or English			_				
	Method	l of asse	essment	If announced by of one candidat 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 EnglishCreditable for bonus								
	Addition	nal Info	rmation	possible majors for MA 120 Computer Science: LR,IN									
10-l=QC-221-m01	Quantu	m Comr	nunicatio	ns				'					
	ECTS	5	Duration	1 semest	er	Method of grading numerical g	grade	Modul level					
	Courses	5		V (2) + V (2) Module taught i	n: Englis	sh							
	Method	l of asse	essment	If announced by of one candidat date). Language of ass	vritten 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 fone candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). In anguage of assessment: English reditable for bonus								
	Addition	nal Info	rmation	Focuses availab	le for stu	udents of the Master's programme	Informatik (Compu	iter Science, 120	ECTS credits): LR				
10-LURI=R-	Radar Signal Processing												
SP-232-m01	ECTS	5	Duration	1 semest	er	Method of grading numerical g	grade	Modul level					
	Courses			V (2) + Ü (2) Module taught i	n: Germa	an and/or English							
	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 of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 m date). Language of assessment: German and/or English creditable for bonus											
Practica Aerospace	Comput	er Scier	ice (min.	20 ECTS credits)									
10-LURI=R-	Space S	Systems	Design										
SE-232-m01		10	Duration	1 semest	er	Method of grading numerical g	grade	Modul level	graduate				
	Courses	5		R (8) Module taught in: German and/or English									
	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 and in the subsequent semester									

10-LURI=EP-	Design	of Plan	etary Bas	es and	Orbital Stations								
B-232-m01	ECTS	10	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S	•	R (8) Modu	R (8) Module taught in: German and/or English								
	Method	d of asse	essment	Langu	oroject report (10 to 15 pages) and presentation of project (15 to 30 minutes) anguage of assessment: German and/or English assessment offered: In the semester in which the course is offered and in the subsequent semester								
10-LU-	Practical course - Space Technology												
RI=PRT-232-mo1	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	Courses			le taught in: German	and/or English							
	Method of assessment				eport on practical course (10 to 15 pages) and presentation of results (15 to 30 minutes) anguage of assessment: German and/or English								
10-LURI=FZ-	Aircraft	Constr	uction										
B-232-m01	ECTS 10 Duratio		1	2 semester	Method of grading	numerical grade	Modul level	graduate					
	Courses			R (8) Modu	le taught in: German	and/or English							
	Method of assessment			Langu	Report on practical course (10 to 15 pages) and presentation of results (15 to 30 minutes) Language of assessment: German and/or English creditable for bonus								
10-LURI=F-	Flight Simulator												
SIM-232-m01	ECTS	10	Duratio	1	2 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	Courses			R (8) Module taught in: German and/or English								
	Method of assessment			Report on practical course (10 to 15 pages) and presentation of results (15 to 30 minutes) Language of assessment: German and/or English creditable for bonus									
10-LURI=P-	Practic	al Robo	tics and 1	elema	tics			,					
TEL-232-m01	ECTS	10	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		P (8) Module taught in: German and/or English									
				Report on practical course (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic Language of assessment: German and/or English									

10-LURI=TD-	Team D	esign P	roject									
P-232-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		R (8) Modu	lle taught in: Germa	ın and/or English						
	Method of assessment			on the	ractical project (project documentation (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion in the topic) anguage of assessment: German and/or English							
10-LURI=FD-	FloatSa	at Desig	n Lab									
W-232-m01	ECTS	10	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		R (8) Modu	lle taught in: Germa	ın and/or English						
	Method	d of ass	essment	20 pa	ractical project: development, construction and presentation of a satellite control system (project documentation (approx. o pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic) anguage of assessment: German and/or English							
10-l=TEL-232-m01	Telecommunication Systems Lab											
	ECTS 10 Duratio			1	1 semester	Method of grading	numerical grade	Modul level				
	Course	S		R (8) Module taught in: German and/or English								
	Method	d of ass	essment	b) ora c) rep	a) written examination (approx. 20 minutes) or b) oral group examination (max. 3 candidates, approx. 15 minutes each) or c) report (4-8 pages) Language of assessment: German and/or English							
	Additio	nal Info	rmation	Focus LR	ses available for stu	dents of the Master's	programme Informatik (Compu	uter Science, 12	o ECTS credits):			
10-LU-	Embed	ded Sys	tems in F	obotic	s and Space Techn	ology						
RI=ESRR-232-mo1	ECTS	10	Duratio	า	1 semester	Method of grading	numerical grade	Modul level				
	Courses			R (8) Modu	R (8) Module taught in: German and/or English							
	Method of assessment			Practical project: development, construction and presentation of an embedded system (project documentation (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic) Language of assessment: German and/or English								

10-I-IDW-222-m01	International Project Workshop												
10-1-1F W-232-11101	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level						
	Course			R (6)	1 Semester	Method of grading numerical grade	Modulitevel	L					
	Course	5		` '	Module taught in: English								
	Method	d of ass	essment	b) pra on on c) ora d) ora	actical project (pro the topic) or l examination of o	(approx. 60 to 90 minutes) or ject documentation (approx. 20 pages) with pre one candidate each (approx. 20 minutes) or groups of up to 3 candidates (approx. 15 minutes ant: English		inutes) and subsequent discussi-					
	Additio	nal Info	rmation	Proje	ct will be block tau	ught, 4 - 6 weeks							
Computer Science a	and App	lication	s (min. 15	15 ECTS credits)									
10-l=AG-161-m01	Compu	utational Geometry											
	ECTS	5	Duration	n 1 semester Method of grading numerical grade Modul level				graduate					
	Course	S		V (2)	+ Ü (2)		'						
	Method	d of ass	essment	If ann of one date) Langu	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 of date). Language of assessment: German and/or English creditable for bonus								
	Additio	nal Info	ormation	Focus AT,HC		tudents of the Master's programme Informatik (C	Computer Science, 12	o ECTS credits):					
10-l=DB2-212-m01	Databa	ses 2											
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate					
	Course				+ 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). creditable for bonus Language of assessment: German and/or English									
	Additional Information			Focus	Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,KI,HCI								

10-l=DM-232-m01	Data S	cience										
	ECTS	5	Duration	า	1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	!S		V (2)	+ Ü (2)	·						
				If ann of on 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: German and/or English creditable for bonus							
	Additio	nal Info	rmation	Focus	ses available for stu	udents of the Master's programme Informatik (Co	omputer Science, 12	o ECTS credits): IT,KI,HCI,GE,SEC				
10-I=APR-212-m01	Advanc	ced Prog	gramming									
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	Courses Method of assessment			(2) + Ü (2)							
	Additio				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 Language of assessment: German and/or English							
				Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): SE,KI,LR, HCI, ES,GE,SEC								
10-I=SSS-212-m01	Security of Software Systems											
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate				
	Course	!S			+ Ü (2) ıle taught in: Englis	sh						
	Metho	d of ass	essment	If ann of on date) 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). creditable for bonus Language of assessment: English							
	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=A-	Algorit	hms for	Geograp	hic Info	ormation Systems			'					
GIS-212-m01	ECTS	5	Duration	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	:S		V (2) -	+ Ü (2)	•							
	Method	d of asse	essment	If ann of one date). credit	written examination (approx. 60 to 120 minutes). f announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). creditable for bonus anguage of assessment: German and/or English								
	Additional Information				ocuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,KI,HCI,LR								
10-HCI=M-			er Interfa			- I chies of the master s	programme information	(comparer scrence, 12)	2010 010411371711711711711711				
MUI-161-mo1		5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course			V (2) ·	+ Ü (2)		<u> </u>	ļ.	1				
	Method	d of asse	essment	Langu	sentation of project results (approx. 40 minutes) guage of assessment: German and/or English ditable for bonus								
10-l=ES-161-m01	Embed	ded Sys	tems					'					
	ECTS 8 Duratio		า	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Course			V (4) ·	+ Ü (2)								
	Method of assessment			If ann of one date). Langu	written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral 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								
	Additio	onal Info	rmation		es available for stud ,ES,LR,GE	ents of the Master's	programme Informatik	(Computer Science, 120	o ECTS credits):				
10-l=Kl1-212-m01	Artifici	al Intelli	igence 1										
	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course				+ Ü (2)			,					
	Method of assessment			If ann of one date) 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). creditable for bonus 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,SE,KI,HCI								

10-l=Kl2-212-m01	Artificia	al Intellig	gence 2											
	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). creditable for bonus Language of assessment: German and/or English										
					students of the Master's programme Informati	k (Computer Science, 120	o ECTS credits): AT,SE,KI,HCI,GE							
10-l=LVS-232-m01		Performance Evaluation of Distributed Systems												
	ECTS	5	Duration		Method of grading numerical grade	Modul level	graduate							
	Course	S		V (2) + Ü (2)			_							
				of one candidate each date). Language of assessm creditable for bonus	replaced by an oral examination s (approx. 15 minutes per candi-									
		onal Infor		Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT,IT,GE,IN										
10-l=SB-212-m01	_	s Bench												
	ECTS	5	Duration		Method of grading numerical grade	Modul level								
	Course	-		V (2) + Ü (2)			_							
	Method	l 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). creditable for bonus Language of assessment: German and/or English										
	Additio	nal Infor		Focuses available for SE,IT,ES,HCI,GE	students of the Master's programme Informatil	k (Computer Science, 120	o ECTS credits):							

	Discret	e Event	Simulation	on				1			
	ECTS	5	Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		V (2)	+ Ü (2)						
	Method	d of ass	essment	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			ses available for stu ES,GE,IN	udents of the Master's programme Informatik (C	Computer Science, 12	o ECTS credits):			
10-I=SNA-232-m01	Statist	ical Net	work Ana	lysis	'		'				
	ECTS	5	Duratio	n	1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S	,		+ Ü (2) ıle taught in: Englis	sh	,				
	Method of assessment			written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: 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): IN							
10-l=MLN1-221-	Machir	ie Learr	ning for No	etwork	(S 1		,				
mo1	ECTS	5	Duratio		1 semester	Method of grading numerical grade	Modul level				
	Course	S		V (2) + Ü (2) Module taught in: English							
				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	ormation	Focus	ses available for stu	udents of the Master's programme Informatik (C	Computer Science, 12	o ECTS credits): AT,IT,SE,KI,HCI			

10-xtAl=CV-202-	Compu	ter Visi	on											
mo1	ECTS 5 Duration		1	1 semester	Method of grading	numerical grade	Modul level	graduate						
	Course	Courses			V (2) + Ü (2) Module taught in: English									
	Method	d of ass	essment	If ann of one date). Langu	Written examination (approx. 60 to 120 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: English Creditable for bonus									
10-l=IP-222-m01	Image	Image Processing and Computational Photography												
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level						
	Course	S			+ Ü (2) le taught in: English	l		·						
	Method of assessment			If ann of one date). Langu	written examination (approx. 60 to 120 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: English Creditable for bonus									
10-l=PCV-232-m01	Practic	al Comp	uter Visi	on										
	ECTS	10	Duration	า	1 semester	Method of grading	numerical grade	Modul level						
	Courses			R (8) Modu	le taught in: Germar	n and/or English			-					
	Method of assessment			a) practical report (10 to 15 pages) and presentation of results (approx. 15 to 30 minutes) or b) 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	s programme Informatik	(Computer Science, 120	ECTS credits): KI,LR;HCI					

10-I=PIP-232-m01	Image I	Process	ing and C	omput	ational Photograph	y Lab								
	ECTS 10 Duration			1	1 semester	Method of grading numerical grade	Modul level							
	Course	S		R (8) Modu	R (8) Module taught in: German and/or English									
	Method	l of asso	essment	a) practical report (10 to 15 pages) and presentation of results (approx. 15 to 30 minutes) or b) 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-l=AKA-232-m01	Selecte	Selected Topics in Algorithms												
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	graduate						
	Course	S		V (2) -	+ Ü (2)									
				b) pra on on c) ora d) ora Langu credit	a) written examination (approx. 60 to 120 minutes) or 50 practical project (project documentation (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic) or 50 oral examination of one candidate each (approx. 20 minutes) or 51 oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) Language of assessment: German and/or English creditable for bonus									
				AT	es available for stud	dents of the Master's programme Informatik (Co	omputer Science, 12	o ECIS credits):						
10-l=AKT-232-m01		_ <u>-</u>	1		r		1							
		5	Duration		1 semester	Method of grading numerical grade	Modul level	graduate						
	Course			V (2) -										
	Method of assessment			a) written examination (approx. 60 to 120 minutes) or b) practical project (project documentation (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) Language of assessment: German and/or English creditable for bonus										
	Additio	nal Info	rmation	Focus AT	o ECTS credits):									

10-I=AK-	Selecte	Selected Topics in Software Engineering												
SE-232-m01	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Course	S		V (2)	+ Ü (2)		·	•						
	Method of assessment			a) written examination (approx. 60 to 120 minutes) or b) practical project (project documentation (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) Language of assessment: German and/or English creditable for bonus										
						students of the Master'	s programme Informati	ik (Computer Science, 12	o ECTS credits): SE.					
10-l=A-			cs in IT Se		1									
KITS-232-m01	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			b) practical project (project documentation (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 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-232-m01	Selecte	d Topic	cs in Inter	net Te	chnologies									
	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate					
	Course	5		V (2)	+ Ü (2)									
	Method of assessment			a) written examination (approx. 60 to 120 minutes) or b) practical project (project documentation (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) Language of assessment: German and/or English creditable for bonus										
	Additio	nal Info	ormation	Focus	ses available for	students of the Master'	s programme Informati	ik (Computer Science, 12	o ECTS credits): IT.					

10-l=A-	Selecte	ed Topic	s in Intel	ligent	Systems			,			
KIS-232-m01	ECTS 5 Duration		า	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V (2)	+ Ü (2)			•			
				a) written examination (approx. 60 to 120 minutes) or b) practical project (project documentation (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) Language of assessment: German and/or English creditable for bonus							
	Additio	nal Info	rmation	Focus KI	ses available for stud	dents of the Master's	programme Informatik	(Computer Science, 12	o ECTS credits):		
10-l=A-	Selecte	ed Topic	s in Embe	edded	Systems						
KES-232-m01	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		V (2)	+ Ü (2)			·			
	Method of assessment			a) written examination (approx. 60 to 120 minutes) or b) practical project (project documentation (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 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): ES.							
10-I=AKL-		<u>-</u> _	1		space Engineering						
R-232-m01	ECTS Course	5	Duratio		1 semester	Method of grading	numerical grade	Modul level	graduate		
			essment	a) written examination (approx. 60 to 120 minutes) or b) practical project (project documentation (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) Language of assessment: German and/or English creditable for bonus							
	Additional Information			Focus	ses available for stud	dents of the Master's	programme Informatik	(Computer Science, 12	o ECTS credits): LR.		

10-I=AKH-	Selecte	ed Topic	s in HCI										
Cl-232-m01	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V (2) ·	+ Ü/S (2)								
				b) pra on on c) ora d) ora Langu credit	a) written examination (approx. 60 to 120 minutes) or b) practical project (project documentation (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 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): HCI.											
10-l=AKII-232-m01	Selecte	ed Topic	s in Comp	uter S	cience								
	ECTS 5 Duratio			1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V (2) ·	+ Ü/S (2)								
	Method	1 01 dSS	essment	b) pra on on c) ora d) ora Langu	actical project (proj 1 the topic) or 1l examination of or al examination in gr	ne candidate each (ap	oprox. 20 pages) with pres prox. 20 minutes) or dates (approx. 15 minutes	9 ,5	inutes) and subsequent discussi-				
10-LURI=AK-	Selecte	ed Topic	s in Phys	ics 1									
P1-232-m01	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level					
	Course	S		V (2) + Ü (2) Module taught in: German and/or English									
	Method	d of ass	essment	b) pra on on c) ora d) ora Langu	a) written examination (approx. 60 to 120 minutes) or b) practical project (project documentation (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discuston on the topic) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) Language of assessment: German and/or English creditable for bonus								

10-LURI=AK-	Selected	l Topics in Phys	ics 2										
P2-232-m01	ECTS	8 Duration	n 1 semester	Method of grading numerical grade	Modul level								
	Courses		V (4) + Ü (2) Module taught in: German and/or English										
	Method	of assessment	a) written examination (approx. 60 to 120 minutes) or b) practical project (project documentation (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discussion on the topic) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) Language of assessment: German and/or English creditable for bonus										
10-LURI=A-	Selected	Selected Topics in Astronomy and Astrophysics											
KAA-232-m01	ECTS	5 Duration	n 1 semester	Method of grading numerical grade	Modul level								
	Courses		V (2) + Ü (2) Module taught in: Germ	V (2) + Ü (2) Module taught in: German and/or English									
			a) written examination (approx. 60 to 120 minutes) or b) practical project (project documentation (approx. 20 pages) with presentation (30 to 45 minutes) and subsequent discuss on on the topic) or c) oral examination of one candidate each (approx. 20 minutes) or d) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) Language of assessment: German and/or English creditable for bonus										
Master Project Mo	dules (30	ECTS credits)											
10-LURI-MA-	Conclud	ing Colloquium	Aerospace Computer Sci	ience									
MK-212-m01	ECTS	5 Duration		Method of grading numerical grade	Modul level	graduate							
	Courses		K (o)										
	Method	of assessment	final colloquium (approx. 60 minutes) Language of assessment: German and/or English										
10-LURI-MA-202-	Master's	s Thesis Aerosp	ace Computer Science										
mo1	ECTS 25 Duratio		n 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 or English										
	Additional Information		Time to complete: 6 mo	nths									