

Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject Computer Science as a Bachelor's with 1 major with the degree "" (180 ECTS credits)

Responsible: Faculty of Mathematics and Computer Science

Responsible: Institute of Computer Science

Examination regulations version: 2025
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Abbreviations used: Course types: **E** = field trip, **K** = colloquium, **O** = conversatorium, **P** = placement/lab course, **R** = project, **S** = seminar, **T** = tutorial, **Ü** = exercise, **V**

= lecture

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

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

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

= list of modules

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

Conventions for the Unless otherwise 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

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)):

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 sp	ecified in the form X	(y) with course type)	abbreviated as specified abo	ove and number of we	ekly contact hours y
	Method of as	sessm	ent					
	Only after su completion o		ıl if applic	able				
	Other prereq	uisites	if applic	able				
	Participants on of places		ocati- if applic	able				
	Additional in	formati	ion if applic	able				
	Referred to in	า LPO I	if applic	able (examination re	gulations for teachin	g-degree programmes)		

Compulsory Course	es (120 E	CTS cre	edits)										
Computer Science	(8o ECTS	S credit	s)										
10-l-GdP-172-m01	Fundan	nentals	of Progra	mmin	nming								
	ECTS	5	Duratio	4	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	S		V (2)	+ Ü (2)								
	Method	d of ass	essment	If ann of one date)	reditable for bonus								
	Referre			§ 69 l	Nr. 1 b) Nr. 1 b)								
10-I-ADS-152-m01	Algorit	hms an	d data stı	ata structures									
	ECTS	10	Duratio		1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course				+ Ü (2)								
	Method	d of ass	essment	If ann of one date)	vritten examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Executed treditable for bonus								
	Referre	d to in	LPO I		Nr. 1 a) Nr. 1 a)								
10-I-SE-252-m01	Softwa	re Engi	neering					'					
	ECTS	5	Duratio	-	1 semester	Method of grading	numerical grade	Modul level					
	Course	S		V (2)	+ Ü (2)								
	Method	d of ass	essment	If ann of one date)	ounced by the lectue candidate each (a		of the course, the written ex		replaced by an oral examination s (approx. 15 minutes per candi-				
	Referre	d to in	LPO I		Nr. 1 b) Nr. 1 b)								

10-I-PP-191-m01	Practic	al Cour	se in Prog	rammi	ng								
	ECTS	10	Duration	ı		Method of grading	(not) successfully con	npleted	Modul level	undergraduate			
	Course	S		P (6)	•	•			-				
				lf ann	practical examination (programming exercises, approx. 240 hours) and 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 candilate).								
	other prerequisites				ntended learning outcomes of the following module are required: 10-I-GdP. It is therefore strongly recommended to complete his before.								
	Referre			§ 69 I	Nr. 1 c) Nr. 1 d)								
10-I-SWP-252-m01	Practic	al cours	se in softv	vare									
	ECTS	10	Duration	ı	1 semester	Method of grading	(not) successfully con	npleted	Modul level	undergraduate			
	Course	S		P (6)	•	•			-				
	Method	d of ass	essment		cal project (Compl 10 minutes per gro		are project in groups (a	ipprox. 3	oo hours per p	erson) and final presentation (ap-			
	Modules successfully completed			10-l-P	I-PP, 10-I-SE								
	other prerequisites			In add	addition, the knowledge and skills acquired in module 10-I-ADS are required. Prior attendance of this module is therefore ighly recommended.								
	Referre	d to in	LPO I	§ 69 I	Nr. 1 d)								
10-l-RAL-252-m01	Digital	compu	ter systen	15									
	ECTS 10 Duratio			า	1 semester	Method of grading	numerical grade		Modul level	undergraduate			
	Course	S		V (4) -	+ Ü (2)								
	Method of assessment			If ann of one date).	ounced by the lect candidate each (of the course, the writte			replaced by an oral examination s (approx. 15 minutes per candi-			
	Referre	d to in	LPO I	§ 22 l	§ 22 II Nr. 3 b), § 69 I Nr. 1 c)								
10-l-RIÜ-191-m01	Compu	ter Net	works and	Inforn	nation Transmissi	on							
	ECTS	10	Duration	ı	1 semester	Method of grading	numerical grade		Modul level	undergraduate			
	Course	S		V (4) -	+ Ü (2)								
				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								
	Referred to in LPO I			§ 22 Nr. 3 b), § 69 Nr. 1 c)									

10-I-DB-152-m01	Databases													
	ECTS	5	Duration	1	1 semester	Method of grading nur	nerical grade	Modul level	undergraduate					
	Course	s S	•	V (2) ·	+ Ü (2)	<u> </u>		•						
	Method	d of asso	essment	If ann	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									
				date). Langu										
		Referred to in LPO I			§ 49 Nr. 1 b) § 69 Nr. 1 b)									
10-I-MCS-242-m01		ction in			-Computer Interaction									
	ECTS	5	Duration	1	1 semester	Method of grading nui	nerical grade	Modul level	undergraduate					
	Course	S		V (3) ·	+ Ü (1)									
	Method of assessment			b) pre c) ora Langu credit	a) written examination (approx. 120 minutes) or b) presentation (30 to 60 minutes) or c) oral examination of one candidate each (30 to 60 minutes) Language of assessment: German and/or English creditable for bonus									
		d to in L			l Nr. 3 b)			1						
10-I-HWP-152-m01			e in hard											
	ECTS	10	Duration		1 semester	Method of grading (no	t) successfully completed	Modul level	undergraduate					
	Course		_	P (6)										
		,		minut	es per project)	f approx. 3 to 10 project ass	iignments (approx. 250 hou	urs total) and pi	resentation of results (approx. 10					
	Referre	d to in L	.PO I	§ 22 l	l Nr. 3 b)									
Theoretical Informa	atics (10	ECTS cı	edits)											
10-l-Tl-242-m01	Theory	of Com	putation											
	ECTS 10 Durat				1 semester	Method of grading nur	nerical grade	Modul level	undergraduate					
	Course	S	`	V (4) ·	+ Ü (2)	<u> </u>								
	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). creditable for bonus										
	Referred to in LPO I			§ 49 Nr. 1 a) § 69 Nr. 1 a)										

Mathematics (30 E	CTS cred	lits)										
10-I-LOG-152-m01	Logic fo	or infor	matics									
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	undergraduate				
	Course	S		V (2) ·	+ Ü (2)							
	Method	d of ass	essment	If ann of one date). Langu	ounced by the lectue candidate each (a	rox. 60 to 120 minutes). urer at the beginning of the course, the written exar pprox. 20 minutes) or an oral examination in group : German and/or English						
	Referre	d to in I	_PO I	§ 22 l	§ 22 II Nr. 3 b)							
10-M-INF1-152-m01		natics 1			Computer Science							
	ECTS	10	Duration		1 semester	Method of grading numerical grade	Modul level	undergraduate				
	Course	Courses V (4) + Ü (2) Module taught in: Ü: German or English										
	Method	d of ass	essment	b) ora c) ora Langu	a) written examination (approx. 90 to 180 minutes, usually chosen) or b) oral examination of one candidate each (15 to 30 minutes) or c) oral examination in groups (groups of 2, 10 to 15 minutes per candidate) c.anguage of assessment: German and/or English creditable for bonus							
10-M-INF2-152-	Mather	natics 2	for stude	ents in Computer Science								
mo1	ECTS	10	Duratio	n	1 semester	Method of grading numerical grade	Modul level	undergraduate				
	Course	S			+ Ü (2) le taught in: Ü: Geri	man or English						
	Method	d of ass	essment									
10-I-AGT-152-m01	Algorit	hmic Gı	aph Theo	ry	1		'					
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	undergraduate				
	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 oral date). Language of assessment: German and/or English creditable for bonus										
	Referre	d to in I	_PO I	§ 22 l	l Nr. 3 b)							

Compulsory Electiv	es (30 E	CTS cre	dits)									
Software technolog	gy and a	rtificial	intelliger	ıce (5 l	ECTS credits)							
10-I-MSE-252-m01	Model-	based S	ystems E	ngine	ering							
	ECTS	5	Duratio		1 semester	Method of grading	numerical grade	Modul level				
	Courses			V (2)	+ Ü (2)							
	Method	d of asse	essment	If ann of one date)	creditable for bonus							
	Referre	d to in L	o in LPO I § 22 II Nr. 3 b)									
10-l-Al-252-m01	Introdu	ction to	Al									
	ECTS	5	Duratio	n	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 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 exam: German and/or English creditable for bonus							
10-l-DM-242-m01	Data So	cience										
	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	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								
	Referre	d to in L	PO I	§ 22 l	l Nr. 3 b)							

Computer Science	(15 ECTS	credits)									
10-I-SEC-191-m01	IT Secu	rity										
	ECTS	5	Duration	1	1 semester	Method of gradin	g numerical grade		Modul level	undergraduate		
	Course	S	•		+ Ü (2) ıle taught in: Germ	an and/or English						
	Method	l of asse	essment	If anr of on date) Langi	nounced by the lect e candidate each (g of the course, the writt or an oral examination i			replaced by an oral examination s (approx. 15 minutes per candi-		
10-l-lCG-152-m01	Interac	tive Cor	nputer Gr	aphic	5							
	ECTS	5	Duration	1	1 semester	Method of gradin	g numerical grade		Modul level	undergraduate		
	Course	V (2) + \ddot{U} (2)										
				If anr of on date) 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 exof 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							
	Referre	erred to in LPO I § 22 II Nr. 3 b)										
10-I-MSE-252-m01	Model-	based S	ystems E	ms Engineering								
	ECTS	5	Duration	1	1 semester	Method of gradin	g numerical grade		Modul level			
	Course	 S		V (2)	+ Ü (2)	,						
	Method	l of asse	essment	written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced be of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. date). creditable for bonus								
	Referre	d to in L	PO I	§ 22 l	II Nr. 3 b)							
10-l-Al-252-m01	Introdu	ction to	Al									
	ECTS	5	Duration	1	1 semester	Method of gradin	g numerical grade		Modul level			
	Courses $V(2) + \ddot{U}(2)$ Module taught in: German and/or English											
	Method	l of asso	essment							replaced by an oral examination s (approx. 15 minutes per candi-		

10-l-DM-242-m01	Data S	Data Science											
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	S		V (2)	+ Ü (2)								
	Method	d of ass	essment			prox. 60 to 120 minut							
				If ann	ounced by the lect	turer at the beginning	of the course, the written	examination may be	replaced by an oral examination s (approx. 15 minutes per candi-				
				date)		approx. 20 minutes) c	or an oral examination in gr	roups of 2 candidates	s (approx. 15 minutes per candi-				
				Langi	uage of assessmer	nt: German and/or Eng	glish						
				credit	table for bonus								
	Referre	d to in l	_PO I	§ 22 l	§ 22 Nr. 3 b)								
10-I-DL-222-m01		earning											
	ECTS	5	Duration		1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course				+ Ü (2)								
	Method	d of ass	essment	writte	en examination (ap	prox. 60 to 120 minut	es).						
				of one	ounced by the lect	turer at the beginning	of the course, the written of	examination may be i	replaced by an oral examination				
				date)									
				credit	reditable for bonus								
	Referred to in LPO I § 22 II Nr. 3 b)												
10-I-TML-222-m01	Theory of Machine Learning												
	ECTS	5	Duration	า	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	S			V(2) + Ü(2) Medule taught in Corman and /or English								
					Module taught in: German and/or English								
	Method	d of ass	essment		written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination								
									s (approx. 15 minutes per candi-				
				date)	•	.,	_		(app. 5)				
						nt: German and/or Eng	rlish						
	D. C	1			table for bonus								
		d to in l			l Nr. 3 b)								
10-I-APR-172-m01	ECTS		gramming		Loomostor	Method of grading	numarical arada	Modul level	undergraduate				
	Course	5	Duration		1 semester + Ü (2)	Method of grading	numerical grade	Modul level	undergraduate				
						prox. 60 to 120 minut	as)						
	Method	a or ass	essment					examination may be	replaced by an oral examination				
				of on	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 candi-								
				date).									
				Language of assessment: German and/or English creditable for bonus									
	Referro	d to in I	PO I										
	Kelelle	u to iii t	_1 0 1	3 2 2 1	§ 22 II Nr. 3 b)								

10-I-KT-191-m01	Compu	tationa	l Complex	rity								
	ECTS	5	Duratio	n	1 semester	Method of grading numerical grade	Modul level	undergraduate				
	Course	S		V (2) ·	+ Ü (2)							
	Method	d of ass	essment	If ann of one date). Langu Asses	ounced by the lectue candidate each (a Jage of assessment	orox. 60 to 120 minutes). For are the beginning of the course, the written exant pprox. 20 minutes) or an oral examination in group. German and/or English German examination in the course is offered and in the course.	s of 2 candidate	s (approx. 15 minutes per candi-				
	Referre	d to in I	LPO I	§ 22 l	22 II Nr. 3 b)							
10-I-KD-191-m01		graphy	and Data	Securi								
	ECTS	5	Duratio		1 semester	Method of grading numerical grade	Modul level	undergraduate				
	Course		_		(2) + Ü (2)							
				If ann of one date). Langu Asses	vritten examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per carlate). Is anguage of assessment: German and/or English Is assessment offered: In the semester in which the course is offered and in the subsequent semester creditable for bonus							
	Referre	d to in I	LPO I	§ 22 II Nr. 3 b)								
10-l-3D-152-m01	_		l Processi									
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	undergraduate				
ļ	Course				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								
				§ 22 l	l Nr. 3 b)							

10-I-BS-242-m01	Operat	ing Sys	tems									
	ECTS	5	Duration	n	1 semester	Method of grading nume	erical grade	Modul level	undergraduate			
	Course	·S		V (2)	+ Ü (2)							
	Method	d of ass	essment	If ann of on date) Langu	ounced by the lect e candidate each (a	prox. 60 to 120 minutes). urer at the beginning of the approx. 20 minutes) or an or t: German and/or English	course, the written examral examination in groups	nination may be s of 2 candidates	replaced by an oral examination s (approx. 15 minutes per candi-			
	Referre	d to in I	LPO I		§ 22 II Nr. 3 b), § 69 I Nr. 1 c)							
10-I-RAK-152-m01	Compu	ter Arch	nitecture									
	ECTS	5	Duration	n	1 semester	Method of grading nume	erical grade	Modul level	undergraduate			
	Course	S		V (2)	+ Ü (2)							
	Metho	d of ass	essment	If ann of on date) Langu	itten examination (approx. 60 to 120 minutes). Innounced 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 candite). Inguage of assessment: German and/or English editable for bonus							
	Referre	d to in I	LPO I		l Nr. 3 b) Nr. 1 c): Rechnerar	chitektur						
10-I-SKS-242-m01	Control Principles of Modern Communication Systems											
	ECTS	5	Duration	า	1 semester	Method of grading nume	erical grade	Modul level	undergraduate			
	Course	S		V (2)	/ (2) + Ü (2)							
	Method	d of ass	essment	If ann of on date) Langu	written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per car date). Language of assessment: German and/or English creditable for bonus							
10-GE-ASP-252-		Signal P	rocessing	3								
mo1	ECTS	5	Duration		1 semester	Method of grading nume	erical grade	Modul level				
	Course	S			V (2) + T (2) Module taught in: German or English							
	Method	d of ass	essment	written examination (approx. 60 to 120 minutes). If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus								

10-l-EidO-252-m01	Introduction to Optimization											
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level					
	Courses	5			+ Ü (2) le taught in: Germa	n or English						
	Method	l of asse		If ann of one date).	ounced by the lecture candidate each (a	orox. 60 to 120 minutes). urer at the beginning of the course, the writte pprox. 20 minutes) or an oral examination in an and/or English	en examination may be n groups of 2 candidates	replaced by an oral examination s (approx. 15 minutes per candi-				
10-l-MuS-212-m01	Modelir	ng and S	Simulatio	ition								
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	undergraduate				
	Courses	5		V (2) -	+ Ü (2)		*					
				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							
	Referred				l Nr. 3 b)							
10-l-Gl-152-m01			s of Comp		cience							
	ECTS	5	Duration		1 semester	Method of grading numerical grade	Modul level	undergraduate				
	Courses				+ Ü (2)							
	Method	l of asse		If ann of one date).	ounced by the lecture candidate each (a	orox. 60 to 120 minutes). For the beginning of the course, the written prox. 20 minutes) or an oral examination in the course and/or English						
subsidiary subject Students must sele	ct one of	f the mir	nors offer	ed and	d must achieve the	required number of ECTS credits in this mind	or.					
Mathematics												
10-M-DI-	Introdu	ction to	Discrete	Mathe	ematics for student	s of other subjects						
Maf-152-mo1	ECTS	10	Duration		1 semester	Method of grading numerical grade	Modul level	undergraduate				
	Courses	5		V (4) + Ü (2)								
	Method	l of asse		a) written examination (approx. 90 to 180 minutes, usually chosen) or b) oral examination of one candidate each (15 to 30 minutes) or c) oral examination in groups (groups of 2, 10 to 15 minutes per candidate) Language of assessment: German and/or English creditable for bonus								

10-M-NUM1af-152-	2- Numerical Mathematics 1 for students of other subjects											
mo1	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	25		V (4) -	+ Ü (2)							
	Metho	d of asse	essment	b) ora c) ora Langu	written examination (approx. 90 to 180 minutes, usually chosen) or oral examination of one candidate each (15 to 30 minutes) or oral examination in groups (groups of 2, 10 to 15 minutes per candidate) anguage of assessment: German and/or English reditable for bonus							
10-M-STO-1af-152-	Stocha	stics 1 fo	or studen	ts of o	ther subjects							
mo1	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	es .		V (4) -	+ Ü (2)							
				b) ora c) ora Langu credit	l examination of one l examination in grou lage of assessment: able for bonus	pprox. 90 to 180 mine e candidate each (15 ups (groups of 2, 10 German and/or Engl						
10-M-ZT-	Introd	uction In	to Numbe	er Theo	ory for students of ot	her subjects						
Haf-152-mo1	ECTS	10	Duration		1 semester	Method of grading	Modul level	undergraduate				
	Course			V (4) -								
	Metho	d of asse	essment	b) ora c) ora Langu	l examination of one l examination in gro	oprox. 90 to 180 mine e candidate each (15 ups (groups of 2, 10 German and/or Engl						
10-M-DGLaf-152-	Ordina	ry Differ	ential Eq	uation	s for students of oth	er subjects						
mo1	ECTS	10	Duration	ו	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	es.		V (4) -	+ Ü (2)							
	Method of assessment				l examination of one l examination in gro	candidate each (15	to 15 minutes per candidate)					

10-M-MFD1-252-	Mathematical Foundations of Data Science 1												
mo1	ECTS 5 Duratio	n 1 semester Method of grading numerical grade Modul level											
	Courses	V (2) + Ü (1)											
	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-M-OML-222-	Optimization for Machine Learning												
mo1	ECTS 10 Duratio												
	Courses	V (4) + Ü (2) Module taught in: German and/or English											
	Method of assessment	a) written examination (approx. 90 to 180 minutes, usually chosen) or											
		b) oral examination of one candidate each (15 to 30 minutes) or											
		c) oral examination in groups (groups of 2, 10 to 15 minutes per candidate) Language of assessment: German and/or English											
		Assessment offered: In the semester in which the course is offered and in the subsequent semester											
		creditable for bonus											
Physics													
11-EFNF-152-m01	Introduction to Physics for Students of other Disciplines												
	ECTS 7 Duratio	n 2 semester Method of grading numerical grade Modul level undergraduate											
	Courses	V(4) + V(3)											
	Method of assessment	written examination (60 to 120 minutes)											
	Additional Information	according to § 2 para. 2 sentence 2 APOLmCh in conjunction with No. I 2nd letter d) and No. I 1st letter d) of annex 1 to the APOLmCh and No. 4 of annex 2 to the APOLmCh											
11-PFNF-152-m01	Laboratory Course Physics for Students of other Disciplines												
	ECTS 3 Duratio												
	Courses	P (4)											
	Method of assessment	a) practical assignment with oral test (approx. 15 minutes, during experiments) and b) written examination (approx. 90 minu-											
		tes).											
		Each experiment comprises preparation, performance and evaluation. Test as well as performance of experiments can each be repeated once.											
	Participants and allo- cation of places	Only as part of pool of general transferable skills (ASQ): 10 places (lottery)											
	Additional Information	according to § 2 para. 2 sentence 2 APOLmCh in conjunction with No. I 2nd letter d) and No. I 1st letter d) of annex 1 to the APOLmCh and No. 4 of annex 2 to the APOLmCh											

Economics												
12-EBWL-G-242-	Organia	zation										
mo1	ECTS 5 Duration			n	1 semester	Method of grading numerical grade	Modul level	undergraduate				
	Course	S		V (2)	+ T (2)		•					
	Method	d of ass	essment		n examination (app	prox. 60 minutes)						
				credit	able for bonus		,					
12-Ebus-F-242- mo1	E-Busir		1									
11101		5	Duratio	,	1 semester	Method of grading numerical grade	Modul level	undergraduate				
	Course	S 			+ T (2) lle taught in: Germa	ın and/or English						
	Method	d of ass	essment	b) ter c) ter d) ora Langu	a) written examination (approx. 60 minutes) or b) term paper (approx. 15 pages) or c) term paper (approx. 10 pages) and presentation (approx. 10 minutes); (weighted 2:1) 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							
12-MDT-242-m01	Management & Digital Transformation											
	ECTS	5	Duratio	n	1 semester	Method of grading numerical grade	Modul level	undergraduate				
	Course	S		V (2) + Ü (2) Module taught in: German and/or English								
	Method	d of ass	essment	a) written examination (approx. 60 minutes) or b) term paper (15 to 20 pages) or c) term paper (10 to 15 pages) and presentation (approx. 20 minutes); (weighted 2:1) 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								
12-ExtUR-G-242-	Accoun	Accounting										
mo1	ECTS	5	Duratio	n	1 semester	Method of grading numerical grade	Modul level	undergraduate				
	Course	S		V (2)	V (2) + T (2)							
	Method	d of ass	essment	written examination (approx. 60 minutes) creditable for bonus								
12-IntUR-G-242-	Manag	erial Ac	counting									
mo1	ECTS	5	Duratio	n	1 semester	Method of grading numerical grade	Modul level	undergraduate				
	Course	S		V (2)	+ T (2)							
	Method	d of ass	essment		n examination (app able for bonus	prox. 60 minutes)						

12-BPL-G-242-m01	Operat	ions M	anagemer	nt			,						
	ECTS	5	Duratio	n	1 semester	Method of grading numerical gra	ide Modul leve	el undergraduate					
	Course	S	·		(2) + T (2) odule taught in: German and/or English								
	Method	d of ass	sessment	a) written examination (approx. 60 minutes) or b) portfolio (approx. 20 hours) Language of assessment: German and/or English creditable for bonus									
12-I&F-G-242-m01	Investment and Finance												
	ECTS	5	Duratio	n	1 semester	Method of grading numerical gra	ide Modul leve	el undergraduate					
	Course	S		V (2)	+ T (2)								
	Method	d of ass	sessment		en examination (a table for bonus	pprox. 60 minutes)							
12-Mark-G-242-	Market	ting					-						
mo1	ECTS	5	Duratio	n	1 semester	Method of grading numerical gra	ide Modul leve	el undergraduate					
	Course	S		V (2) + T (2) Module taught in: German and/or English									
	Method	d of ass	sessment	written examination (approx. 60 minutes) Language of assessment: German and/or English creditable for bonus									
12-WiPo-G-242-	Public	Policy											
mo1	ECTS	5	Duratio	n	1 semester	Method of grading numerical gra	ide Modul leve	el undergraduate					
	Course	·S		V (2) + T (2) Module taught in: German and/or English									
	Method	d of ass	sessment	a) written examination (approx. 60 minutes) or b) portfolio (approx. 20 hours) Language of assessment: German and/or English creditable for bonus									
12-Mik2-G-242-	Microe	conomi	ics: Marke	ts and	Competition		'	,					
mo1	ECTS	5	Duratio	n	1 semester	Method of grading numerical gra	ide Modul leve	el undergraduate					
	Course	S		V (2) + T (2) Module taught in: German and/or English									
	Method	d of ass	sessment	Lang		pprox. 6o minutes) nt: German and/or English							

Linguistics											
o4-DtLABA-BM-	Level One Mo	dule Germ	an Ling	guistics							
SW-241-m01	ECTS 5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses		V (2) +	/ (2) + S (2)							
	Method of ass	sessment	written examination (approx. 75 minutes)								
	Referred to in	LPO I		§ 43 Nr. 2 b)							
D. I. A.D. A. A. A.				§ 63 Nr. 2 b)							
o4-DtLABA-AM- SW1-241-mo1				natical Structures of German							
3W1 241 mo1	ECTS 5	Duratio		1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses		V (1) +					_			
	Method of ass			n examination (app	rox. 75 minutes)						
	Referred to in	LPO I		Nr. 2 b) Nr. 2 b)							
Biology			3 - 5 -								
07-1A1TI-152-m01	Evolution and	the Anima	al King	dom							
	ECTS 5	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses		V (2) +	- Ü (3)	•						
	Method of ass	sessment	written examination (approx. 60 minutes) creditable for bonus								
	other prerequ	isites	Admission prerequisite to assessment: exercises. Regular attendance (minimum 80%) and successful completion of exercises (approx. 25 to 30 hours) are prerequisites for admission to assessment.								
	Referred to in	LPO I	§ 41 Nr. 1 (4 ECTS credits) and § 41 Nr. 4 (1 ECTS credits) § 61 Nr. 1 (4 ECTS credits) and § 61 Nr. 4 (1 ECTS credits)								
07-2A2GEN-	Genetics, Neu	robiology	, Behav	viour	· ·		'				
V-152-mo1	ECTS 5 Duratio		า	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses		V (3)				•				
	Method of ass	sessment	written examination (approx. 60 to 90 minutes) creditable for bonus								
	other prerequ	isites	Admission prerequisite to assessment: exercises. Regular attendance (minimum 80%) and successful completion of exercises (approx. 25 to 30 hours) are prerequisites for admission to assessment.								
	Referred to in	LPO I	§ 61 Nr. 2 (2 ECTS credits) § 61 Nr. 3 (1 ECTS credits) § 61 Nr. 4 (1 ECTS credits)								
07-M-BST-152-m01	Mathematical	Biology a					1				
	ECTS 4	Duratio		1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses		V (2) +	- Ü (2)							
	Method of ass	sessment		n examination (app able for bonus	rox. 60 minutes)						
Bachelor's with 1 major	Computer Science (20	25)				JMU Würzburg • genera	ted 19-Apr-2025 • exam. reg. data r	record 82 079 - - H 2025 page 17 / 20			

07-3A3OE-	Plant and	Plant and Animal Ecology											
KO-152-m01	ECTS 6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Courses	·	V (2)	+ Ü (2)			•	-					
	Method of	f assessment		written examination (approx. 90 minutes) creditable for bonus									
	Referred t	o in LPO I	§ 61 l	Nr. 4									
07-3A3GEM-	Genes, Molecules, Technologies												
T-152-m01	ECTS 6	Duratio		1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Courses		V (4)										
	Method of	f assessment		en examination (app table for bonus	orox. 90 minutes)								
Law													
02-G&Hre-G-212-	Commerci	ial and Busine	ss Lav	for Economics and	Management								
mo1	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Courses			+ Ü (2)									
	Method of	f assessment		written examination (approx. 120 minutes) Assessment offered: Usually once a year, summer semester									
02-EReWi-G-212-	Civil Law 1	for Economics	and M	anagement									
mo1	ECTS 5	Duratio		1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Courses			+ Ü (2)									
	Method of	fassessment	writte	en examination (app	orox. 120 minutes)								
Geography													
04-Geo-FER-	Introduction to Geographical Remote Sensing												
NE-152-m01	ECTS 5	Duratio		1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Courses		V (2) + T (2) Module taught in: German and/or English										
	Method of	fassessment	written examination (approx. 45 minutes) Language of assessment: German and/or English creditable for bonus										
	Referred t	o in LPO I	§ 66	§ 66 Nr. 2									
o4-Geo-FER-	Application	ons of Remote	Sensi	ng in Geography									
NA-152-m01	ECTS 5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate					
	Courses			V (2) + T (2) Module taught in: German and/or English									
	Method of	f assessment	Langi	written examination (approx. 45 minutes) Language of assessment: German and/or English creditable for bonus									

Medicine													
03-M-MT-152-m01	Practic	al Cours	se in med	ical te	rminology								
	ECTS	5	Duratio	n	1 semester	Method of grading	(not) successfully completed	Modul level	unknown				
	Course	S		P (o)									
	Method	d of asse	essment	writte	n examination (app	rox. 60 to 90 minutes	5)						
03-M-IM-152-m01	Internal Medicine												
	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	unknown				
	Course	_		V (o)									
	Method of assessment		essment	oral examination (one candidate each: approx. 15 minutes, or groups of up to 3 candidates: approx. 10 minutes per candidate) Assessment will usually have reference to one of the sub-specialities of internal medicine, e. g. cardiology, pulmonology, nephrology, endocrinology, oncology, gastroenterology, rheumatology, infectious disease.									
Key Skills Area (20	ECTS cr	edits)											
General Key Skills In addition to the m				dents r	may also take modul	les offered by JMU as	part of the pool of general tran	ısferable skills ((ASQ).				
General Key Skills	(subject	-specifi	c)										
10-I-TUT1-152-m01	Tutor a	Tutor activity 1											
	ECTS	2	Duratio			Method of grading	(not) successfully completed	Modul level	undergraduate				
	Courses			T (2)									
	Method	d of asse	essment	<u> </u>	Wrap-up report on tutoring activities (5 to 10 pages)								
	Referred to in LPO I			§ 22 Nr. 2 f) § 22 Nr. 3 f)									
10-I-TUT2-152-m01	1 Tutor activity 2												
	ECTS	2	Duratio	n		Method of grading	(not) successfully completed	Modul level	undergraduate				
	Course	S		T (2)									
	Method	d of asse	essment	Wrap-up report on tutoring activities (5 to 10 pages)									
	Referred to in LPO I			§ 22 Nr. 2 f) § 22 Nr. 3 f)									
10-I-TUT3-152-m01	Tutor a	ctivity 3	3										
	ECTS	2	Duratio	n		Method of grading	(not) successfully completed	Modul level	undergraduate				
	Course	S		T (2)									
	Method	d of asse	essment	Wrap	up report on tutorin	g activities (5 to 10 p	ages)						

Subject-specific Ke	y Skills	(15 ECTS	S credits)								
10-I-SEM1-152-m01	Semina	ır - Sele	cted Topi	cs in C	omputer Science 1						
	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	undergraduate			
	Courses	 S		S (2)							
	Method	l of asse	essment	written elaboration (approx. 10 to 15 pages) and presentation (approx. 30 to 45 minutes) with subsequent discussion on a topic from the field of computer science Language of assessment: German and/or English							
	Referre	d to in L	PO I	§ 22 l	l Nr. 3 b)						
10-I-SEM2-152-	Semina	r - Sele	cted Topi	cs in C	omputer Science 2						
mo1	ECTS	5	Duration	1	1 semester	Method of grading numerical grade	Modul level	undergraduate			
	Courses	S		S (2)	•	·	•				
	Method	l of asse	essment			ng activities (5 to 10 pages) : German and/or English					
10-l-ASV-252-m01	Applied	l Statist	ics and V	isualiz	zation						
	ECTS	3	Duration	ı	1 semester	Method of grading (not) successfully complete	d Modul level				
	Courses	S		V (1) +	P (2)	·	•				
				b) Written exam (approx. 60-75 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-PV-252-m01	Project Presentation										
	ECTS	2	Duration	1	1 semester	Method of grading numerical grade	Modul level	undergraduate			
	Courses	S		S (3)	<u>.</u>						
		d to in L		Presentation of a self-developed project analogous to a trade fair presentation for computer science laypersons with discussion (approx. 10-15 minutes) Language of assessment: German and/or English creditable for bonus							
Thesis (see FCTC and		u to iii L	. 01	§ 22 II Nr. 3 b)							
Thesis (10 ECTS cre	· ·	,									
10-I-BA-152-m01			sis Inforn					T			
		10	Duration		1 semester	Method of grading numerical grade	Modul level	undergraduate			
	Courses				urses assigned to n						
				Langu		: German and/or English					
	Additio	nal Info	rmation	Time to complete: 10 weeks.							