

Subdivided Module Catalogue for the Subject

Computer Science

as Unterrichtsfach with the degree "Erste Staatsprüfung für das Lehramt an Realschulen"

> Examination regulations version: 2015 Responsible: Faculty of Mathematics and Computer Science Responsible: Institute of Computer Science

JMU Würzburg • generated 18-Apr-2025 • exam. reg. data record L3|079|-|-|H|2015

Abbreviations used

UNIVERSITÄT

WÜRZBURG

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

Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

Notes

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

LASPO2015

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

08-Sep-2015 (2015-121)

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.

LA Realschulen Computer Science (2015)	JMU Würzburg • generated 18-Apr-2025 • exam. reg.	page 2 / 30
	data record Lehramt Realschulen Informatik - 2015	

The subject is divided into

Abbreviation Module title				Method of	page		
Scientific Discipling (60 F	CTS cradite)	creatis	grauing			
General Compulsory Co		CTS credits)					
10-L-EinP-152-m01	Introductio	n to Programming	r -	NIIM	16		
10-l-DB-152-m01	Databasos		 		- 10		
10-I-DD-152-1101	Software T	ochology	5		/		
10-1-31-152-11101	Dractical as	echnology	10		23		
10-I-SWP-RS-152-III01			10	B/NB	25		
		Le Credits)	r				
10-I-IIV-152-m01		Informatics	5	NUM	27		
10-l-111-152-m01	lutorial the	eoretical Informatics	5	B/NB	26		
Compulsory Electives (2	o ECTS crec	lits)					
Algorithms and Data S	tructures (1	o ECTS credits)					
10-I-ADS-152-m01	Algorithms	and data structures	10	NUM	5		
10-I-GADS-152-m01	Algorithms	and Data Structures Level One Course	10	NUM	18		
Programming Practica	l Courses (1	o ECTS credits)					
10-I-PP-152-m01	Practical Co	ourse in Programming	10	B/NB	20		
10-I-EPP-152-m01	Introductor	y Programming Course	10	B/NB	17		
Teaching (12 ECTS credits	5)						
Compulsory Courses (12	ECTS credi	ts)					
	Computer S	Science Education 1 (incl. Practical Course in the Ap-					
10-l-DDl1-152-m01	plication of	Computer Science Systems form an Educational	6	NUM	9		
	Point of Vie	w)					
10-1-DDI2-PS-152-m01	Computer S	Science Education 2 (incl. Seminar in Computer	6	NILIM	10		
Science Education at the 0		ucation at the German Realschule)	0	NOM	10		
Paper (4 ECTS credits)							
Students studying for a teach (studienbegleitendes fachdid (subject studied with a focus lations for teaching-degree pr credits obtained are counted academic and examination re	ing degree l aktisches P on the scier ogrammes) in the subje gulations fo	Realschule must complete a practical training in dida raktikum) which refers to one of the subjects they se ntific discipline) pursuant to Section 34 Subsection 1 . The obligatory accompanying tutorial is offered by tect Erziehungswissenschaften pursuant to Section 10 or teaching-degree programms).	actics and elected as v No. 4 LPO the respecto Subsectio	teaching metho vertieft studiert I (examination tive subject. Th on 3 LASPO (ge	odology res Fach regu- e ECTS neral		
	Practical Tr	aining in Classroom Teaching in Computer Science	,	D /ND			
10-I-SDFD-KS-152-III01	Education i	ncluding Theory (German Realschule)	4	D/ND	22		
Freier Bereich (general as well as subject-specific electives) Teaching degree students must take modules worth a total of 15 ECTS credits in the area Freier Bereich (general as well as sub- ject-specific electives) (Section 9 LASPO (general academic and examination regulations for teaching-degree programmes)). To achieve the required number of ECTS credits, students may take any modules from the areas below. Freier Bereich interdisciplinary: The interdisciplinary additional offer for a teaching degree can be found in the respective An- nex "Ergänzende Bestimmungen für den "Freien Bereich" im Rahmen des Studiums für ein Lehramt".							
Computer Science	all as subia	ct-specific electives) subject specific)					
Interview Interview 10-I-REP-15.2-mo1 Exam Tutorial for the German Staatsexamen					21		
10-I-DS-152-m01	Seminar Co	annuter Science Education	4	NUM	14		
10-L-DV-152-m01	Advanced Topics of Computer Science Education		4	B/NB	15		
10-L-DPO-152-mo1	Robotice in	Education (practical course)	4		12		
	Practical C	Survey on Computer Science Education	4		13		
			4		12		
10-1-077-152-1001	manus-on (0	B/NB	11		
LA Realschulen Computer Science (2015) JMU Würzburg • generated 18-Apr-2025 • exam. reg. page 3 / 30 data record Lehramt Realschulen Informatik - 2015							

	ect
WIID7BIIDC	ice
LA Realschul	en

10-I-TUT1-152-m01	Tutor activity 1	2	B/NB	29
10-I-TUT2-152-m01	Tutor activity 2	2	B/NB	30

Paper (10 ECTS credits)

alschule)

Preparation of a written Hausarbeit (thesis) in accordance with the provisions of Section 29 LPO I (examination regulations for teaching-degree programmes) is a prerequisite for teaching degree students to be admitted to the Erste Staatsprüfung (First State Examination). In accordance with the provisions of Section 29 LPO I, students studying for a teaching degree Realschule may write this thesis in one of the subjects they selected as Unterrichtsfach (subject studied with a focus on the scientific discipline) or in the subject Erziehungswissenschaften (Educational Science). Pursuant to Section 29 Subsection 1 Sentence 2 LPO I, students may also choose to write an interdisciplinary thesis.

LA Realschulen Computer Science (2015)	JMU Würzburg • generated 18-Apr-2025 • exam. reg.	page 4 / 30
	data record Lehramt Realschulen Informatik - 2015	

Module title			Abbreviation		
Algorit	hms and data structures			10-I-ADS-152-m01	
Modul	e coordinator		Module offered by		
Dean o	of Studies Informatik (Compute	r Science)	Institute of Comput	er Science	
ECTS	Method of grading	Only after succ. con	npl. of module(s)		
10	numerical grade				
Duratio	on Module level	Other prerequisites			
1 seme	ester undergraduate				
Conter	Contents				
Design ta type	and analysis of algorithms, re s, lists, trees, graphs, basic gr	cursion vs. iteration, s aph algorithms, progra	ort and search meth Imming in Java.	ods, data structures,	, abstract da-
Intend	ed learning outcomes				
Studer know t are abl	nts are proficient in independe he basic paradigms for the de le to estimate the runtime beh	ntly designing, precise sign of algorithms and avior of algorithms anc	ly describing and an can implement them I prove the correctne	alyzing algorithms. 1 1 in practical program ss of algorithms.	The students ns. Students
Course	s (type, number of weekly con	tact hours, language –	- if other than Germa	n)	
V (4) +	Ü (2)				
Metho ster, in	d of assessment (type, scope, formation on whether module	language — if other th can be chosen to earn	an German, examina a bonus)	tion offered — if not	every seme-
lf anno examir prox. 1 credita	punced by the lecturer at the be nation of one candidate each (5 minutes per candidate). ble for bonus	eginning of the course, approx. 20 minutes) or	the written examina an oral examination	tion may be replaced in groups of 2 cand	d by an oral idates (ap-
Allocat	tion of places	_			
Additio	onal information				
Worklo	bad				
300 h					
Teachi	ng cycle				
Teachi	ng cycle: only in winter semes	ter			
Referre	ed to in LPO I (examination res	gulations for teaching-	degree programmes)		
§ 49 1 § 69 1	Nr. 1 a) Nr. 1 a)	<u> </u>			
Modul	e appears in				
Module appears in Bachelor's degree (1 major) Computer Science (2015)					
Bachelor's degree (1 major) Mathematics (2015) Bachelor's degree (1 major) Economathematics (2015)					
Bachelor's degree (1 major) Economaticematics (2015) Bachelor's degree (1 major) Human-Computer Systems (2015)					
Bachelor's degree (1 major) Computational Mathematics (2015)					
Bachelor's degree (1 major) Aerospace Computer Science (2015)					
First state examination for the teaching degree Realschule Computer Science (2015)					
First st	First state examination for the teaching degree Gymnasium Computer Science (2015)				
Bachel	or's degree (1 major) Aerospac	ce Computer Science (2	2017)		
Bachel	or's degree (1 major) Compute	r Science (2017)			
LA Realsch	ulen Computer Science (2015)	JMU Würzburg data record L	g • generated 18-Apr-2025 • e ehramt Realschulen Informat	xam. reg. ik - 2015	page 5 / 30



Bachelor's degree (1 major) Aerospace Computer Science (2020) Bachelor's degree (1 major) Computer Science und Sustainability (2021) Bachelor's degree (1 major) Mathematics (2023)

LA Realschulen Computer Science (2015)	JMU Würzburg • generated 18-Apr-2025 • exam. reg.	page 6 / 30
	data record Lehramt Realschulen Informatik - 2015	

Module title			Abbreviation		
Databa	ases			10-l-DB-152-m01	
Modul	e coordinator		Module offered by		
Dean of Studies Informatik (Computer Science) Institute of Compu			Institute of Comput	er Science	
ECTS	Method of grading	Only after succ. cor	npl. of module(s)		
5	numerical grade				
Durati	on Module level	Other prerequisites	;		
1 seme	ester undergraduate				
Conter	Contents				
Relatic ment.	nal algebra and complex SQL	statements; database	planning and norma	l forms; transaction	manage-
Intend	ed learning outcomes				
The sti	idents possess knowledge ab	out database modellin	g and queries in SOL	as well as transaction	ons
Course	(type, number of weekly cor	tact hours language	if other than Corma		0113.
Course				iii <i>)</i>	
V (2) +	U (2)				
Metho ster, in	d of assessment (type, scope, formation on whether module	language — if other th can be chosen to earr	an German, examina 1 a bonus)	ition offered — if not	every seme-
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 (ap- prox. 15 minutes per candidate). Language of assessment: German and/or English creditable for bonus					
Alloca	tion of places				
Additio	onal information				
Worklo	bad				
150 h					
Teachi	ng cycle				
Teacin					
Referre	ed to in LPO I (examination re	gulations for teaching-	degree programmes)		
§4911	Nr. 1 b)				
§6911	Nr. 1 b)				
Modul	e appears in				
Bache	lor's degree (1 major) Compute	er Science (2015)			
Bache	lor's degree (1 major) Mathem	atics (2015)			
Bachelor's degree (1 major) Business Information Systems (2015)					
Bachelor's degree (1 major) Computational Mathematics (2015)					
Bachelor's degree (1 major) Aerospace Computer Science (2015)					
Bachelor's degree (1 major) Functional Materials (2015)					
First state examination for the teaching degree Realschule Computer Science (2015)					
First st	ate examination for the teaching	ng degree Gymnasium	Computer Science (2	2015)	
Master	s degree (1 major) Physics (2)	016)	(2016)		
Bachel	lor's degree (1 major) Business	S Information Systems	(2010)		
Bacho	lor's degree (1 major) Aerospa lor's degree (1 major) Compute	r Science (2017)	2017)		
LA Realsch	ulen Computer Science (2015)	JMU Würzbur data record	g • generated 18-Apr-2025 • e Lehramt Realschulen Informat	exam. reg. tik - 2015	page 7 / 30

UNIVERSITÄT WÜRZBURG

Bachelor's degree (1 major) Computer Science (2019) Bachelor's degree (1 major) Business Information Systems (2019) Bachelor's degree (1 major) Business Information Systems (2020) Bachelor's degree (1 major) Aerospace Computer Science (2020) Bachelor's degree (1 major) Functional Materials (2021) Bachelor's degree (1 major) Computer Science und Sustainability (2021) Bachelor's degree (1 major) Business Information Systems (2021) Bachelor's degree (1 major) Mathematical Data Science (2022) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2022) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2023) Bachelor's degree (1 major) Mathematics (2023) Bachelor's degree (1 major) Business Information Systems (2023) Bachelor's degree (1 major) Business Information Systems (2024) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2024) Bachelor's degree (1 major) Functional Materials (2025) Bachelor's degree (1 major) Games Engineering (2025)

LA Realschulen Computer Science (2015)	JMU Würzburg • generated 18-Apr-2025 • exam. reg.	page 8 / 30
	data record Lehramt Realschulen Informatik - 2015	

Module title			Abbreviation		
Computer Science Education 1 (incl. Practical Course in the Application of			10-I-DDI1-152-m01		
Compu	ter Scie	ence Systems form an Ed	ucational Point of Vie	ew)	-
Module coordinator		Module offered by			
Dean of	fStudie	es Informatik (Computer S	Science)	Institute of Comput	er Science
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
6	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
2 seme	ster	undergraduate			
Conten	ts				
The mo practica	dule gi al appli	ves an overview of comp ication in the classroom.	uter science didactic	s. It demonstrates a	nd discusses possibilities for a
Intende	ed leari	ning outcomes			
Studen and me topics. well as ses.	ts are f dia for Studer guidel	amiliar (in particular in th teaching topics in comp nts are familiar with both ines and standards for te	ne area of computer s uter science. They are historical and curren aching computer scie	cience in <i>Sekundars</i> e able to didactically t teaching approach ence. They are able t	<i>stufe I</i>) with methods, techniques analyse and prepare practical es, typical teaching methods as o plan, organise and deliver clas-
Course	s (type	, number of weekly conta	ct hours, language —	· if other than Germa	n)
V (2) +	Ü (2) +	P (2)	, , , , , , , , , , , , , , , , , , , ,		,
Methoo ster, inf	l of ass formati	sessment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
written If annot examin prox. 15 credital	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 (ap- prox. 15 minutes per candidate).				
Allocat	ion of p	olaces			
Additio	nal inf	ormation			
Workload					
180 h					
Teaching cycle					
Referre	d to in	LPOI (examination regu	lations for teaching-c	legree programmes)	
§ 49 Nr. 2 § 69 Nr. 2					
Module	Module appears in				
First sta	ate exa	mination for the teaching	degree Realschule C	omputer Science (2	015)
First sta	First state examination for the teaching degree Gymnasium Computer Science (2015)				

Module	title				Abbreviation
Comput	ter Scie	ence Education 2 (incl. Se	eminar in Computer S	cience Education	10-l-DDl2-RS-152-m01
at the G	German	Realschule)			
Module coordinator				Module offered by	
Dean of	f Studie	es Informatik (Computer S	Science)	Institute of Comput	er Science
ECTS	Metho	od of grading	Only after succ. com	ipl. of module(s)	
0 Duratia	nume	Madula laval	 Other prevenuisites		
1 seme	o n ster	undergraduate	Other prerequisites		
Conton	te	undergraduate			
This con ses pos topics i classro	urse di ssibiliti n comp om.	scusses different topics i es for a practical applicat outer science didactics fo	n computer science c tion in the classroom or <i>Realschule</i> includin	lidactics in more de . The seminar supple g, in particular, rele	tail. It demonstrates and discus- ementing the course focuses on vant practical skills for use in the
Intende	ed leari	ning outcomes			
The stu and and assess to apply	dents a alysis c these. y selec	are able to plan, execute of computer science class The students are able to ted computer science sys	and assess projects, ses, master fundamer handle the special pr stems in practice.	are familiar with imp ntal teaching and lea roblems of their sub	portant aspects of the planning arning strategies and are able to ject in <i>Realschule</i> and know how
Course	s (type	, number of weekly conta	ct hours, language —	if other than Germa	in)
V (2) +	Ü (2) +	S (2)			
Methoo ster, inf	l of ass formati	e ssment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
written If annou examin prox. 15 credital	examinunced ation o minut ble for	nation (approx. 60 to 120 by the lecturer at the beg f one candidate each (ap es per candidate). bonus	minutes). inning of the course, pprox. 20 minutes) or	the written examina an oral examination	tion may be replaced by an oral i in groups of 2 candidates (ap-
Allocat	ion of p	olaces			
Additio	nal inf	ormation			
Workload					
180 h					
Teaching cycle					
Referre	d to in	LPO I (examination regu	lations for teaching-c	legree programmes)	
§491N	§ 49 Nr. 2				
Module	e appea	irs in			
First sta	ate exa	mination for the teaching	g degree Realschule C	Computer Science (2	015)

Module title			Abbreviation		
Hands-on Computer Science			10-I-DPP-152-m01		
Module coordinator				Module offered by	·
Dean o	f Studi	es Informatik (Computer S	Science)	Institute of Comput	er Science
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
6	(not) s	successfully completed			
Duratio	n	Module level	Other prerequisites		
2 seme	ster	undergraduate			
Conten	ts				
Design and implementation of a school project on a topic in computer science, e. g. for project days, school term papers (<i>Facharbeiten</i>), <i>Pluskurse</i> (additional courses for the in-depth study of areas of special interest), work-shops. In the theoretical phase, the students formulate the subject-specific and didactic requirements of the topic, search for a suitable topic, elaborate this topic for the project and draw up a project plan. This is done in groups with students providing each other with advice as well as challenging and reflecting on each other's work. In the practical phase, the students prepare the implementation of the project, implement the project with					e. g. for project days, school term reas of special interest), work- l didactic requirements of the p a project plan. This is done and reflecting on each other's oject, implement the project with
Intende	ed lear	ning outcomes	<u> </u>		
The stu are able le to cri	The students are able to select a topic from the area of computer science that is suitable for a school project and are able to elaborate it. They are familiar with different aspects of project planning and management and are able to critically reflect the process.				suitable for a school project and ing and management and are ab-
Course	s (type	, number of weekly conta	ct hours, language —	if other than Germa	ın)
Ü (2) +	S (2)				
Methoo ster, in	l of ass formati	sessment (type, scope, la ion on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
practica Assess	al assig ment o	gnment (preparing and de ffered: Only in the semes	elivering a school lab ter in which the cours	session) with exami se is offered	ination talk (approx. 15 minutes)
Allocat	ion of p	olaces			
Additio	nal inf	ormation			
Workload					
180 h					
Teaching cycle					
Teaching cycle: Usually every 2 years					
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)				
§ 22 Nr. 2 f) § 22 Nr. 3 f)					
Module	appea	ars in			
First sta First sta	ate exa ate exa	mination for the teaching mination for the teaching	g degree Realschule C g degree Gymnasium	Computer Science (2 Computer Science (2	015) 2015)

Module title				Abbreviation		
Practical Course on Computer Science Education					10-I-DPR-152-m01	
Module	e coord	inator		Module offered by	<u> </u>	
Dean o	f Studi	es Informatik (Computer S	Science)	Institute of Comput	er Science	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)		
4	(not) s	successfully completed				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	undergraduate				
Conten	ts					
Discuss aspects science	sion of s, in pa e didac	problems in programmin rticular subject-specific f tics as well as possible a	g in the computer sci oundations, didactic pproaches in the clas	ence classroom that analyses, the conte ssroom.	t takes into account different mporary debate in computer	
Intende	ed lear	ning outcomes				
The stu classro	dents om, ta	are able to discuss centra king into account subject	ll topics and question -specific, didactic an	ns of programming ir d methodical aspect	n the computer science ts.	
Course	s (type	, number of weekly conta	ct hours, language —	if other than Germa	in)	
Ü (2)	-					
Method ster, in	d of ass formati	sessment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
practica Assess	al assig ment o	nment with examination ffered: Only in the semes	talk (approx. 15 minu ter in which the cour	utes) se is offered		
Allocat	ion of _l	olaces				
Additio	onal inf	ormation				
Worklo	ad					
120 h						
Teachi	ng cycl	e				
Teachir	Teaching cycle: Usually every 2 years					
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)					
§ 22	§ 22 II Nr. 2 f)					
Module						
First sta	ate exa	mination for the teaching	r degree Realschule (omputer Science (2)	015)	
First sta	ate exa	mination for the teaching	degree Gymnasium	Computer Science (2	2015)	
					<i></i>	

Robotics in Education (practical course) Module offered by Module correliator Module offered by Dean of Studies Informatik (Computer Science) Institute of Computer Science ECTS Method of grading Only after succ. compl. of module(s) 4 (not) successfully completed Duration Module level Other prerequisites 1 semester undergraduate Contents Discussion of problems in robotics in the computer science classroom that takes into account different aspects, in particular subject-specific foundations, didactic analyses, the contemporary debate in computer science didactics as well as possible approaches in the classroom. Intended learning outcomes	Module title				Abbreviation	
Module coordinator Module offered by Dean of Studies Informatik (Computer Science) Institute of Computer Science ECTS Method of grading Only after succ. compl. of module(s) 4 (not) successfully completed Duration Module level Other prerequisites 1 semester undergraduate Contents Discussion of problems in robotics in the computer science classroom that takes into account different aspects, in particular subject-specific foundations, didactic analyses, the contemporary debate in computer science di-dactics as well as possible approaches in the classroom. Intended learning outcomes The students are able to discuss central topics and questions of robotics in the computer science classroom, taking into account subject-specific, didactic and methodical aspects. Courses (type, number of weekly contact hours, language — if other than German) Ú (a) Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus) Practical assignment (supervision of a group of pupils) with examination talk (approx. 15 minutes) Assessment offered: Only in the semester in which the cou	Robotics in Education (practical course)					10-l-DRO-152-m01
Dean of Studies Informatik (Computer Science) Institute of Computer Science ECTS Method for grading Only after succ. compl. of module(s) 4 (not) successfully completed 1 sem ster Inder graduate 1 sem ster undergraduate Contents Discussion of problems in robotics in the computer science classroom that takes into account different aspects, in particular subject-specific foundations, didactic analyses, the contemporary debate in computer science didactics as well as possible approaches in the classroom. Intended learning outcomes The students are able to discuss central topics and questions of robotics in the computer science classroom, taking into account subject-specific, didactic and methodical aspects. Courses (type, number of weekly contact hours, language — if other than German) ① (2) Wethod of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus) practical assignment (supervision of a group of pupils) with examination talk (approx. 15 minutes) Assessment offered: Only in the semester in which the course is offered Allocation of places	Module	e coord	inator		Module offered by	
ECTS Method of grading Only after succ. compl. of module(s) 4 (not) ====================================	Dean o	f Studi	es Informatik (Computer S	Science)	Institute of Comput	er Science
4 (not) successfully completed Duration Module level Other prerequisites 1 semester undergraduate Contents Discussion of problems in robotics in the computer science classroom that takes into account different aspects, in particular subject-specific foundations, didactic analyses, the contemporary debate in computer science didactics as well as possible approaches in the classroom. Intended learning outcomes The students are able to discuss central topics and questions of robotics in the computer science classroom, taking into account subject-specific, didactic and methodical aspects. Courses (type, number of weekly contact hours, language — if other than German) Ú (2) Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to eam a bonus) practical assignment (supervision of a group of pupils) with examination talk (approx. 15 minutes) Assessment offered: Only in the semester in which the course is offered Additional information Teaching cycle: Teaching cycle: Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 II Nr. 2 f) § 22 II	ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
Duration Module level Other prerequisites 1 semester undergraduate Contents Discussion of problems in robotics in the computer science classroom that takes into account different aspects, in particular subject-specific foundations, didactic analyses, the contemporary debate in computer science di- dactics as well as possible approaches in the classroom. Intended learning outcomes The students are able to discuss central topics and questions of robotics in the computer science classroom, taking into account subject-specific, didactic and methodical aspects. Courses (type, number of weekly contact hours, language — if other than German) 0 (2) Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus) practical assignment (supervision of a group of pupils) with examination talk (approx. 15 minutes) Assessment offered: Only in the semester in which the course is offered Allocation of places Morkload 120 h Teaching cycle Teaching cycle Teaching cycle: Usually every 2 years Referred to in LPO 1 (examination regulations for teaching-degree programmes)	4	(not) s	successfully completed			
1 semester undergraduate Contents	Duratio	on	Module level	Other prerequisites		
Contents Discussion of problems in robotics in the computer science classroom that takes into account different aspects, in particular subject-specific foundations, didactic analyses, the contemporary debate in computer science didactics as well as possible approaches in the classroom. Intended learning outcomes Intended learning outcomes The students are able to discuss central topics and questions of robotics in the computer science classroom, taking into account subject-specific, didactic and methodical aspects. Courses (type, number of weekly contact hours, language — if other than German) U (2) Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus) practical assignment (supervision of a group of pupils) with examination talk (approx. 15 minutes) Assessment offered: Only in the semester in which the course is offered Allocation of places Workload 120 h Teaching cycle Teaching cycle Teaching cycle Teaching cycle Teaching cycle Teaching cycle: Usually every 2 years Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 II Nr. 2 f) § 22 II Nr. 3 f) Module appears in<	1 seme	ster	undergraduate			
Discussion of problems in robotics in the computer science classroom that takes into account different aspects, in particular subject-specific foundations, didactic analyses, the contemporary debate in computer science di- dactics as well as possible approaches in the classroom. Intended learning outcomes The students are able to discuss central topics and questions of robotics in the computer science classroom, ta- king into account subject-specific, didactic and methodical aspects. Courses (type, number of weekly contact hours, language — if other than German) Ü (2) Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus) practical assignment (supervision of a group of pupils) with examination talk (approx. 15 minutes) Assessment offered: Only in the semester in which the course is offered Allocation of places Additional information Workload 120 h Teaching cycle Teaching cycle Teaching cycle Teaching cycle Usually every 2 years Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 II Nr. 2 f) § 22 II Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gymnasium Computer Science (2015)	Conten	ts				
Intended learning outcomes The students are able to discuss central topics and questions of robotics in the computer science classroom, taking into account subject-specific, didactic and methodical aspects. Courses (type, number of weekly contact hours, language — if other than German) Ü (2) Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus) practical assignment (supervision of a group of pupils) with examination talk (approx. 15 minutes) Assessment offered: Only in the semester in which the course is offered Allocation of places Additional information Workload 120 h Teaching cycle Teaching cycle Teaching cycle: Usually every 2 years Referred to in LPO1 (examination regulations for teaching-degree programmes) § 22 II Nr. 2 f) § 22 II Nr. 2 f) § 22 II Nr. 2 f) § 22 II Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gwmasium Computer Science (2015)	Discuss in parti dactics	sion of cular s as wel	problems in robotics in t ubject-specific foundatio l as possible approaches	he computer science ns, didactic analyses in the classroom.	classroom that take , the contemporary o	s into account different aspects, debate in computer science di-
The students are able to discuss central topics and questions of robotics in the computer science classroom, taking into account subject-specific, didactic and methodical aspects. Courses (type, number of weekly contact hours, language — if other than German) Ü (2) Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus) practical assignment (supervision of a group of pupils) with examination talk (approx. 15 minutes) Assessment offered: Only in the semester in which the course is offered Allocation of places Additional information Workload 120 h Teaching cycle Teaching cycle: Usually every 2 years Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 II Nr. 2 f) § 22 II Nr. 2 f) § 22 II Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gwrmasium Computer Science (2015)	Intende	ed lear	ning outcomes			
Courses (type, number of weekly contact hours, language — if other than German) Ü (2) Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus) practical assignment (supervision of a group of pupils) with examination talk (approx. 15 minutes) Assessment offered: Only in the semester in which the course is offered Allocation of places Additional information Workload 120 h Teaching cycle Teaching cycle: Usually every 2 years Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 II Nr. 2 f) § 22 II Nr. 2 f) § 22 II Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) Eirst state examination for the teaching degree Gwmasium Computer Science (2015)	The stu king int	dents a to acco	are able to discuss centra unt subject-specific, dida	Il topics and question actic and methodical	ns of robotics in the aspects.	computer science classroom, ta-
 Ú (2) Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module can be chosen to earn a bonus) practical assignment (supervision of a group of pupils) with examination talk (approx. 15 minutes) Assessment offered: Only in the semester in which the course is offered Allocation of places Additional information Workload 120 h Teaching cycle Teaching cycle: Usually every 2 years Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 II Nr. 2 f) § 22 II Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gymnasium Computer Science (2015) 	Course	s (type	, number of weekly conta	ct hours, language —	if other than Germa	ın)
Method of assessment (type, scope, language — if other than German, examination offered — if not every seme- ster, information on whether module can be chosen to earn a bonus) practical assignment (supervision of a group of pupils) with examination talk (approx. 15 minutes) Assessment offered: Only in the semester in which the course is offered Allocation of places Additional information Workload 120 h Teaching cycle Teaching cycle Teaching cycle Teaching cycle Second to in LPO I (examination regulations for teaching-degree programmes) § 22 II Nr. 2 f) § 22 II Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Realschule Computer Science (2015)	Ü (2)					
practical assignment (supervision of a group of pupils) with examination talk (approx. 15 minutes) Assessment offered: Only in the semester in which the course is offered Allocation of places Additional information Workload 120 h Teaching cycle Teaching cycle: Usually every 2 years Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 Il Nr. 2 f) § 22 Il Nr. 2 f) § 22 Il Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gymnasium Computer Science (2015)	Methoo ster, in	d of ass formati	sessment (type, scope, la ion on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
Allocation of places Additional information Workload 120 h Teaching cycle Teaching cycle Usually every 2 years Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 Nr. 2 f) § 22 Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) Eirst state examination for the teaching degree Gymnasium Computer Science (2015)	practica Assess	al assi ment o	gnment (supervision of a ffered: Only in the semes	group of pupils) with ter in which the cour	examination talk (a se is offered	pprox. 15 minutes)
Additional information Workload 120 h Teaching cycle Teaching cycle: Usually every 2 years Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 II Nr. 2 f) § 22 II Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gymnasium Computer Science (2015)	Allocat	ion of _l	olaces			
Additional information Workload 120 h Teaching cycle Teaching cycle: Usually every 2 years Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 II Nr. 2 f) § 22 II Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gymnasium Computer Science (2015)						
 Workload 120 h Teaching cycle Teaching cycle: Usually every 2 years Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 II Nr. 2 f) § 22 II Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gymnasium Computer Science (2015) 	Additio	nal inf	ormation			
Workload 120 h Teaching cycle Teaching cycle: Usually every 2 years Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 II Nr. 2 f) § 22 II Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gymnasium Computer Science (2015)						
120 h Teaching cycle Teaching cycle: Usually every 2 years Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 II Nr. 2 f) § 22 II Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gymnasium Computer Science (2015)	Worklo	ad				
Teaching cycle Teaching cycle: Usually every 2 years Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 II Nr. 2 f) § 22 II Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gymnasium Computer Science (2015)	120 h					
Teaching cycle: Usually every 2 years Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 II Nr. 2 f) § 22 II Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gymnasium Computer Science (2015)	Teachi	ng cycl	e			
Referred to in LPO I (examination regulations for teaching-degree programmes) § 22 II Nr. 2 f) § 22 II Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gymnasium Computer Science (2015)	Teachir	ng cycle	e: Usually every 2 years			
§ 22 II Nr. 2 f) § 22 II Nr. 3 f) Module appears in First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gymnasium Computer Science (2015)	Referre	d to in	LPOI (examination regu	lations for teaching-o	legree programmes)	
Module appears in First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gymnasium Computer Science (2015)	§ 22 II Nr. 2 f) § 22 II Nr. 3 f)					
First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gympasium Computer Science (2015)	Module	Module appears in				
	First sta First sta	ate exa ate exa	mination for the teaching mination for the teaching	; degree Realschule C ; degree Gymnasium	computer Science (2) Computer Science (2)	015) 2015)

Module	e title				Abbreviation
Seminar Computer Science Education 10-I-DS-152-mc					10-l-DS-152-m01
Module	e coord	inator		Module offered by	
Dean o	f Studi	es Informatik (Computer S	Science)	Institute of Comput	er Science
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
4	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	undergraduate			
Conten	ts				
Selecte	d topic	s in computer science di	dactics.		
Intende	ed lear	ning outcomes			
The stu selves subject	idents g with an t. They	gain initial experience in Id structure a given topic, are also able to actively p	the area of independ , using selected litera participate in a scient	ent scientific work. T ture, as well as to p ific discussion.	hey are able to acquaint them- repare a talk on the respective
Course	s (type	, number of weekly conta	ct hours, language —	if other than Germa	n)
S (2)					
Methoo ster, in	d of ass formati	essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
written pic fror Assess	elabor n the fi ment o	ation (approx. 20 pages) eld of computer science of ffered: Only in the semes	and presentation inc didactics .ter in which the cour:	luding discussion (a se is offered	approx. 45 to 60 minutes) on a to-
Allocat	ion of p	olaces			
Additio	nal inf	ormation			
Worklo	ad				
120 h					
Teachi	ng cycl	e			
Teaching cycle: usually once a year					
Referred to in LPO I (examination regulations for teaching-degree programmes)					
§ 22 Nr. 2 f) § 22 Nr. 3 f)					
Module	Module appears in				
First sta	ate exa	mination for the teaching	g degree Realschule C	omputer Science (2	015)
First sta	First state examination for the teaching degree Gymnasium Computer Science (2015)				

Module title	Abbreviation				
Advanced Topics of Computer Scienc		10-l-DV-152-m01			
Module coordinator		Module offered by			
Dean of Studies Informatik (Compute	r Science)	Institute of Comput	er Science		
ECTS Method of grading	Only after succ. con	npl. of module(s)			
4 (not) successfully completed					
Duration Module level	Other prerequisites				
1 semester undergraduate					
Contents					
Discussion of topics in teaching com particular subject-specific foundatior tics as well as possible approaches in	outer science in <i>Gymn</i> is, didactic analyses, t n the classroom.	<i>asium</i> that takes into he contemporary de	account different aspects, in bate in computer science didac-		
Intended learning outcomes					
The students are able to discuss cent into account subject-specific, didacti	ral topics and issues of and methodical aspe	on teaching compute ects.	r science in a <i>Gymnasium</i> , taking		
Courses (type, number of weekly con	tact hours, language –	- if other than Germa	n)		
S (2)					
Method of assessment (type, scope, ster, information on whether module	language — if other th can be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-		
talk (approx. 30 minutes) or practical Assessment offered: Only in the sem	assignment (exercise) ester in which the cour	with examination ta se is offered	lk (approx. 15 minutes)		
Allocation of places					
Additional information					
Workload					
120 h					
Teaching cycle					
Teaching cycle: Usually every 2 years	Teaching cycle: Usually every 2 years				
Referred to in LPO I (examination reg	ulations for teaching-	degree programmes)			
§ 22 II Nr. 2 f) § 22 II Nr. 2 f), § 22 II Nr. 3 f)					
Module appears in					
First state examination for the teachin First state examination for the teachin	ng degree Realschule (ng degree Gymnasium	Computer Science (2 Computer Science (2	015) 2015)		

Module title				Abbreviation		
Introduction to Programming 10-I-EinP-152-mo1					10-l-EinP-152-m01	
Module	e coord	inator		Module offered by		
holder	ofthe	Chair of Computer Scienc	e ll	Institute of Comput	er Science	
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	undergraduate				
Conten	ts					
Data ty ject ori	pes, co entatio	ontrol structures, foundat n in Java, selected topics	ions of procedural pr of C++, further Java o	ogramming, selected concepts, digression	d topics of C, introduction to ob- : scripting languages.	
Intend	ed lear	ning outcomes				
The stu and are	idents e able t	possess a fundamental k o independently develop	nowledge about prog average to high leve	gramming languages l Java programs.	(in particular Java, C and C++)	
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	ın)	
V (2) +	Ü (2)					
Metho ster, in	d of as format	sessment (type, scope, la ion on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
If anno examir prox. 19 credita	exami unced nation o 5 minu ble for	by the lecturer at the beg of one candidate each (ap tes per candidate). bonus	inning of the course, oprox. 20 minutes) or	the written examina an oral examination	tion may be replaced by an oral in groups of 2 candidates (ap-	
Allocat	ion of	places				
Additio	onal inf	ormation	·			
Worklo	ad					
150 h	uu					
Teesh						
Teachi	ng cyci	e				
Teachi	ng cycl	e: only in winter semester	r			
Referre	ed to in	LPOI (examination regu	lations for teaching-o	degree programmes)		
§ 49 N § 69 N	vr. 1 b) vr. 1 b)					
Module appears in						
Bachel	or's de	gree (1 major) Computer S	Science (2015)			
Bachel	Bachelor's degree (1 major) Mathematics (2015)					
Bachel	Bachelor's degree (1 major) Business Information Systems (2015)					
Bachel	Bachelor's degree (1 major) Human-Computer Systems (2015)					
Bachel	Bachelor's degree (1 major) Computational Mathematics (2015)					
Bachel	Bachelor's degree (1 major) Aerospace Computer Science (2015)					
First st	ate exa	mination for the teaching	g degree Realschule (Computer Science (20	015)	
First st	ate exa	mination for the teaching	g degree Gymnasium	Computer Science (2	2015)	
Bachel	or's de	gree (1 major) Business Ir	nformation Systems ((2016)		
Bachel	3achelor's degree (1 major) Business Information Systems (2019)					

Module title				Abbreviation		
Introductory Programming Course					10-I-EPP-152-m01	
Module	coord	inator		Module offered by		
Dean of	fStudie	es Informatik (Computer	Science)	Institute of Comput	er Science	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)		
10	(not) s	successfully completed				
Duratio	n	Module level	Other prerequisites			
1 semes	ster	undergraduate				
Conten	ts					
The pro implem	gramm ented	iing language used is Jav independently.	a. In the practical cou	ırse, small to middle	e-sized java programs are to be	
Intende	ed leari	ning outcomes				
The stu	dents a	are able to independently	v develop and implem	nent small to middle	sized Java programs.	
Courses	s (type	, number of weekly conta	ct hours, language —	if other than Germa	n)	
P (6)						
Method ster, inf	l of ass formati	s essment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
minutes If annou examin prox. 15	s) unced ation o ; minut	by the lecturer at the beg of one candidate each (ap	inning of the course, pprox. 20 minutes) or	the written examina an oral examination	tion may be replaced by an oral in groups of 2 candidates (ap-	
Allocati	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad					
300 h						
Teachir	ng cycl	e				
Referre	d to in	LPOI (examination regu	lations for teaching-c	legree programmes)		
§491N	§ 49 Nr. 1 c)					
Module appears in						
Bachelor's degree (1 major) Business Information Systems (2015) First state examination for the teaching degree Realschule Computer Science (2015) Bachelor's degree (1 major) Business Information Systems (2016) Bachelor's degree (1 major, 1 minor) Digital Humanities (2016) Bachelor's degree (1 major, 1 minor) Digital Humanities (2018) Bachelor's degree (1 major) Business Information Systems (2019)						

Module title				Abbreviation		
Algorithms and Data Structures Level One Course				10-I-GADS-152-m01		
Module	e coord	inator		Module offered by	·	
Dean o	f Studie	es Informatik (Compute	r Science)	Institute of Comput	er Science	
ECTS	Metho	d of grading	Only after succ. con	npl. of module(s)		
10	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	undergraduate				
Conten	its					
Design ta type	and an s, lists,	alysis of algorithms, re trees, graphs, basic gra	cursion vs. iteration, s aph algorithms, progra	ort and search methomming in Java.	ods, data structures,	abstract da-
Intend	ed learı	ning outcomes				
The stu studen prograi	idents a ts are f ms. The	are able to independent amiliar with the basic p students are able to es	ly design algorithms a aradigms of the design timate the run-time be	s well as to precisely n of algorithms and a ehaviour of algorithm	y describe and analy are able to apply the ns and to prove their	se them. The m in practical correctness.
Course	s (type	, number of weekly con	tact hours, language –	- if other than Germa	ın)	
V (4) +	Ü (3)					
Metho ster, in	d of ass formati	essment (type, scope, on on whether module	language — if other th can be chosen to earn	an German, examina a bonus)	tion offered — if not	every seme-
written or oral credita	examiı examin ble for	nation (approx. 60 to 12 ation in groups of 2 car bonus	o minutes) or oral exa ndidates (approx. 15 m	mination of one can inutes per candidate	didate each (approx. e)	. 20 minutes)
Allocat	ion of p	olaces				
Additio	onal inf	ormation	_			
Worklo	ad		_			
300 h						
Teachi	ng cycl	9	-			
Referre	ed to in	LPOI (examination reg	ulations for teaching-	degree programmes)		
§ 49 N	vr. 1 a)					
Module	e appea	rs in				
Bachelor's degree (1 major, 1 minor) Digital Humanities (Minor, 2015) Bachelor's degree (2 majors) Digital Humanities (2015) First state examination for the teaching degree Realschule Computer Science (2015) Bachelor's degree (1 major) Business Information Systems (2016) Bachelor's degree (1 major, 1 minor) Digital Humanities (2016) Bachelor's degree (1 major, 1 minor) Digital Humanities (2018) Bachelor's degree (1 major, 1 minor) Digital Humanities (2018) Bachelor's degree (2 majors) Digital Humanities (2018) Bachelor's degree (2 majors) Digital Humanities (2018) Bachelor's degree (1 major) Business Information Systems (2019) Bachelor's degree (1 major) Business Information Systems (2020) Bachelor's degree (1 major) Business Information Systems (2020) Bachelor's degree (1 major) Business Information Systems (2021) Bachelor's degree (1 major) Business Information Systems (2023) Bachelor's degree (1 major) Business Information Systems (2024) Bachelor's degree (1 major) Business Information Systems (2024) Bachelor's degree (1 major) Business Information Systems (2024)						
LA Realsch	ulen Comp	outer Science (2015)	JMU Würzburg data record L	g • generated 18-Apr-2025 • e ehramt Realschulen Informat	ik - 2015	page 18 / 30

Module title					Abbreviation	
Thesis	Compu	ter Science (Teaching De	egree at the German I	Realschule)	10-I-HA-RS-152-m01	
Module	e coord	inator		Module offered by	·	
Dean o	f Studi	es Informatik (Computer	Science)	Institute of Comput	ter Science	
ECTS	Metho	od of grading	Only after succ. com	npl. of module(s)		
10	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
		undergraduate				
Conten	ts					
Resear time fra	ching a ame an	nd writing on a defined p d adhering to the princip	problem in computer les of good scientific	science or computer practice.	science didactics within a given	
Intende	ed lear	ning outcomes				
The stu practice	idents a e.	are able to research and	write on a defined pro	oblem, adhering to t	he principles of good scientific	
Course	s (type	, number of weekly conta	ct hours, language —	- if other than Germa	an)	
No cou	rses as	signed to module				
Method ster, in	d of ass formati	essment (type, scope, la on on whether module ca	inguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
Hausar to 300 Langua ons for	beit (th hours) ige of a teachi	esis) pursuant to Section ssessment: German; exc ng-degree programmes)	n 29 LPO I (examinati eptions pursuant to S	on regulations for te Section 29 Subsectio	aching-degree programmes) (250 on 4 LPO I (examination regulati-	
Allocat	ion of p	olaces				
Additio	onal inf	ormation				
Worklo	ad					
300 h						
Teachi	Teaching cycle					
Referred to in LPO I (examination regulations for teaching-degree programmes)						
§ 29						
Module	Module appears in					
First sta	First state examination for the teaching degree Realschule Computer Science (2015)					

LA Realschulen Computer Science (2015)	JMU Würzburg • generated 18-Apr-2025 • exam. reg.	page 19 / 30
	data record Lehramt Realschulen Informatik - 2015	

Module	e title				Abbreviation
Practical Course in Programming				10-l-PP-152-m01	
Module	e coord	inator		Module offered by	
Dean o	f Studi	es Informatik (Computer	Science)	Institute of Comput	er Science
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
10	(not) s	successfully completed			
Duratio	on	Module level	Other prerequisites		
	-	undergraduate			
Conten	Its				
The pro	ogramm	ning language Java. Indep	endent creation of sr	nall to middle-sized,	, high-quality Java programs.
Intend	ed lear	ning outcomes			
The stu	dents	are able to independently	/ develop small to mi	ddle-sized, high-qua	ality Java programs.
Course	s (type	, number of weekly conta	ct hours, language —	if other than Germa	n)
P (6)					
Metho ster, in	d of ass formati	sessment (type, scope, la ion on whether module ca	nguage — if other tha an be chosen to earn	in German, examina a bonus)	tion offered — if not every seme-
written If anno examir prox. 1	examin ounced nation c 5 minut	nation (approx. 60 to 120 by the lecturer at the beg of one candidate each (ap tes per candidate).	minutes). inning of the course, oprox. 20 minutes) or	the written examina an oral examination	tion may be replaced by an oral in groups of 2 candidates (ap-
Allocat	ion of	olaces			
Additio	onal inf	ormation			
Worklo	ad				
300 h					
Teachi	ng cycl	e			
Teachi	ng cycle	e: every semester			
Referre	ed to in	LPO I (examination regu	lations for teaching-d	legree programmes)	
§ 49 N § 69 N	Nr. 1 c) Nr. 1 d)				
Module	e appea	ars in			
Bachelor's degree (1 major) Computer Science (2015) Bachelor's degree (1 major) Mathematics (2015) Bachelor's degree (1 major) Human-Computer Systems (2015) Bachelor's degree (1 major) Computational Mathematics (2015) Bachelor's degree (1 major) Aerospace Computer Science (2015) First state examination for the teaching degree Realschule Computer Science (2015) First state examination for the teaching degree Gymnasium Computer Science (2015) Master's degree (1 major) Functional Materials (2016) Dashelarte degree (1 major) Functional Materials (2016)					
Bachel Master Master	or's de 's degr 's degr	gree (1 major) Computer : ee (1 major) Functional M ee (1 major) Functional M	Science (2017) aterials (2022) aterials (2025)		

Module title				Abbreviation		
Exam Tutorial for the German Staatsexamen					10-I-REP-152-m01	
Module	coord	inator		Module offered by		
Dean of	fStudie	es Informatik (Computer S	Science)	Institute of Comput	er Science	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)		
4	(not) s	successfully completed				
Duratio	n	Module level	Other prerequisites			
2 seme	ster	undergraduate				
Conten	ts					
Revisio	n of co	ntents of modules coveri	ng the subject as wel	l as the subject dida	ectics of computer science.	
Intende	ed leari	ning outcomes				
The stu nation.	dents l	have refreshed their skills	s for the solution of th	ne type of problems	asked in the written state exami-	
Courses	s (type	, number of weekly conta	ct hours, language —	if other than Germa	n)	
Ü (2)						
Method ster, inf	l of ass formati	sessment (type, scope, la on on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-	
One exe	ercise p	per area covered in the st	ate examination			
Allocati	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad					
120 h						
Teachir	ng cycl	e				
Referre	d to in	LPO I (examination regu	lations for teaching-c	legree programmes)		
§ 22 N	Nr. 2 f)	· · · ·		0 1 0 /		
§ 22	vr. 3 b)					
Module	appea	ars in				
First sta	ate exa	mination for the teaching	g degree Realschule C	omputer Science (20	015)	
First sta	ate exa	mination for the teaching	g degree Gymnasium	Computer Science (2	2015)	
Master'	Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)					
Supple	Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)					
Master'	s teach	ning degree Gymnasium I	WINT Teacher Education	on PLUS, Elite Netwo	Drk Bavaria (ENB) (2020)	
Supple Master	s teach	y course mini reacher Ed	MINT Teacher Educati	on PLUS Flite Netwo	D) (2020) ork Bavaria (ENB) (2025)	
Supplei	mentar	v course MINT Teacher Fo	ducation PLUS. Elite N	Vetwork Bavaria (FNI	B) (2025)	
	Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)					

Module	title				Abbreviation	
Practica	Practical Training in Classroom Teaching in Computer Science Education inclu-					
ding Th	eory (C	German Realschule)				
Module	e coord	inator		Module offered by		
Dean of	f Studie	es Informatik (Computer :	Science)	Institute of Comput	er Science	
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)		
4	(not) s	successfully completed				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	undergraduate				
Conten	ts					
The mo	dule in	troduces students to the	classroom practice o	f their <i>Unterrichtsfa</i>	ch (subject studied with a focus	
on the s	scientif	ic discipline). Using spee	ific teaching models	, examples and proje	ects in different grades, the mo-	
dule int	troduce	es students to subject-sp	ecific techniques. In t	the university course	e accompanying the placement,	
explore	ts refle	onal subject-specific and	didactic aspects. In	this context, the cou	their teaching placements and use discusses selected practi-	
cal asp	ects of	teaching computer scien	ce in accordance wit	h applicable guideli	nes and curricula. The course fo-	
cuses c	on rece	nt developments in class	room practice, also ta	aking into account a	spects of school pedagogy and	
learnin	g psycł	nology that can support t	he successful practic	al implementation o	f subject-specific conceptual de-	
signs.						
Intende	ed leari	ning outcomes				
The stu	dents a	are familiar with the most	important component	nts of planning and o	organising classes. They are ab-	
le to tea	ach the	to connect ideas from sol	ent grades as well as i	to critically reflect re	cent developments in education.	
didacti	cs and	to incorporate these into	their teaching.	anning psychology v	with their expension in the area of	
Course	s (type	, number of weekly conta	ct hours, language —	if other than Germa	n)	
P (o) + 2	S (2)					
Method	d of ass	essment (type, scope, la	nguage — if other tha	an German, examina	tion offered — if not every seme-	
ster, in	formati	on on whether module ca	an be chosen to earn	a bonus)		
Written	elabor	ration of teaching practic	e (15 to 20 pages)			
Conten	ts and	duration of placement as	specified in Section	34 Subsection 1 Ser	ntence 1 No. 4 LPO I (examination	
tasks a	s sneci	fied by placement schoo	l filles); participation	in manualory leach	ing practice, completion of all set	
Allocat	ion of r	places				
	<u></u>					
Additio	nal inf	ormation				
Worklo	ad					
120 h						
Teachir	Teaching cycle					
Referred to in LPO I (examination regulations for teaching-degree programmes)						
§34 1	Nr. 4					
Module	Module appears in					
First state examination for the teaching degree Realschule Educational Science (2015)						

Module title				Abbreviation		
Software Technology 10-I-ST-152-m01						
Module coordinator				Module offered by		
Dean of Studies Informatik (Computer Science)			er Science)	Institute of Comput	er Science	
ECTS Method of grading Only after succ. compl. of module(s)						
10	numer	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	undergraduate				
Conten	its					
Object bases cesses	-oriente and obj , unifie	d software developme ect-relational mapping d process, agile softwa	nt with UML, developm ;, foundations of web p re development, projec	ent of graphical user rogramming (HTML, X ct management, qua	r interfaces, foundat XML), software deve lity assurance.	ions of data- lopment pro-
Intend	ed learr	ing outcomes				
The stu softwa	ıdents p re syste	oossess a fundamenta ms.	theoretical and praction	cal knowledge on the	e design and develop	oment of
Course	s (type,	number of weekly con	tact hours, language –	- if other than Germa	n)	
V (4) +	Ü (2)					
Metho ster, in	d of ass formati	essment (type, scope, on on whether module	language — if other the can be chosen to earn	an German, examina a bonus)	tion offered — if not	every seme-
written If anno examir prox. 1 credita	examir unced l nation o 5 minut ble for	nation (approx. 60 to 1: by the lecturer at the b f one candidate each (es per candidate). bonus	20 minutes). eginning of the course, approx. 20 minutes) or	the written examina an oral examination	tion may be replaced in groups of 2 cand	d by an oral idates (ap-
Allocat	ion of p	olaces				
Additio	onal info	ormation				
Worklo	ad					
300 h						
Teachi	ng cycl	9				
Teachi	ng cycle	e: only in summer seme	ester			
Referre	ed to in	LPOI (examination reg	gulations for teaching-o	degree programmes)		
§ 49 N § 69 N	Nr. 1 b) Nr. 1 b)	· · · · · · · · · · · · · · · · · · ·				
Module	e appea	rs in				
Bachel	or's deg	gree (1 major) Compute	er Science (2015)			
Bachel	or's deg	gree (1 major) Mathema	atics (2015)			
Bachelor's degree (1 major) Economathematics (2015)						
Bachelor's degree (1 major) Fullian-Computer Systems (2015) Bachelor's degree (1 major) Computational Mathematics (2015)						
Bachelor's degree (1 major) Computational Mathematics (2015) Bachelor's degree (1 major) Aerospace Computer Science (2015)						
First state examination for the teaching degree Realschule Computer Science (2015)						
First st	ate exa	mination for the teachi	ng degree Gymnasium	Computer Science (2	2015)	
Bachel	Bachelor's degree (1 major) Business Information Systems (2016)					
Bachel	or's deg	gree (1 major) Aerospa	ce Computer Science (2	2017)		
Bachel	or's deg	gree (1 major) Economa	athematics (2017)			
LA Realsch	ulen Comp	uter Science (2015)	JMU Würzburg data record L	g • generated 18-Apr-2025 • e ehramt Realschulen Informat	xam. reg. ik - 2015	page 23 / 30

UNIVERSITÄT WÜRZBURG



Bachelor's degree (1 major) Computer Science (2017) Bachelor's degree (1 major) Computer Science (2019) Bachelor's degree (1 major) Business Information Systems (2019) Module studies (Bachelor) Orientierungsstudien (2020) Bachelor's degree (1 major) Business Information Systems (2020) Bachelor's degree (1 major) Aerospace Computer Science (2020) Bachelor's degree (1 major) Computer Science und Sustainability (2021) Bachelor's degree (1 major) Business Information Systems (2021) Bachelor's degree (1 major) Economathematics (2021) Bachelor's degree (1 major) Economathematics (2022) Bachelor's degree (1 major) Mathematics (2023) Bachelor's degree (1 major) Business Information Systems (2023) Bachelor's degree (1 major) Economathematics (2023) Bachelor's degree (1 major) Business Information Systems (2024) Bachelor's degree (1 major) Economathematics (2024) Bachelor's degree (1 major) Digital Business & Data Science (2024)

LA Realschulen Computer Science (2015)	JMU Würzburg • generated 18-Apr-2025 • exam. reg.	page 24 / 30
	data record Lehramt Realschulen Informatik - 2015	

Module title					Abbreviation
Practic	al cour	se in software (German F	Realschule)		10-I-SWP-RS-152-m01
Module	Module coordinator Module				
Dean o	f Studi	es Informatik (Computer	Science)	Institute of Comput	er Science
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
10	(not) s	successfully completed	10-I-ST and either 10	-I-PP or 10-I-EPP	
Duratio	on	Module level	Other prerequisites		
1 seme	ster	undergraduate	In addition, the know	wledge and skills ac	quired in module 10-I-ADS and/
			or 10-I-GADS are req	uired. Prior attendar	nce of these modules is therefore
			highly recommende	d.	
Conten	ts				
Comple cation tion an	etion of of solu d deliv	a project assignment in tion components (e. g. Ul ery of the runnable softw	groups, problem ana ML) and milestones, u are product in a collo	lysis, creation of req user manual, progra quium.	uirements specifications, specifi- mming documentation, presenta-
Intende	ed lear	ning outcomes			
The stu small to	idents eams.	possess the practical ski	lls for the design, dev	velopment and exect	ition of a software project in
Course	s (type	, number of weekly conta	ict hours, language —	· if other than Germa	n)
P (6)					
Methoo ster, in	d of ass formati	sessment (type, scope, la ion on whether module c	inguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
practic sentati	al proje on (app	ect (Completion of a large prox. 10 minutes per grou	er software project in ; ip)	groups (approx. 300	hours per person) and final pre-
Allocat	ion of j	olaces			
Additio	onal inf	ormation			
Worklo	ad				
300 h					
Teaching cycle					
Referred to in LPO I (examination regulations for teaching-degree programmes)					
§ 49 Nr. 1 c)					
Module	e appea	ars in			
First state examination for the teaching degree Realschule Computer Science (2015)					

LA Realschulen Computer Science (2015)	JMU Würzburg • generated 18-Apr-2025 • exam. reg.	page 25 / 30
	data record Lehramt Realschulen Informatik - 2015	

Module title				Abbreviation	
Tutorial Theoretical Informatics				10-I-TIT-152-m01	
Module coordinator				Module offered by	
Dean of St	tudies l	nformatik (Computer S	Science)	Institute of Comput	er Science
ECTS M	lethod o	of grading	Only after succ. com	pl. of module(s)	
5 (n	not) suc	cessfully completed			
Duration	M	odule level	Other prerequisites		
1 semeste	er un	ndergraduate			
Contents					
Computab guages, co	oility, de ontext-s	ecidability, countabilit sensitive languages, c	ty, finite automata, re omplexity of calculat	gular sets, generativ ions, P-NP problem,	ve grammars, context-free lan- NP completeness.
Intended	learning	g outcomes			
The stude tability, fir complexit	ents pos nite aut ty of cor	sess a fundamental a omata, regular sets, g nputations, P-NP prob	nd applicable knowle enerative grammars, lem, NP completenes	edge in the areas of context-free languages.	computability, decidability, coun- ges, context-sensitive languages,
Courses (t	type, nu	umber of weekly conta	ct hours, language —	if other than Germa	n)
Ü (2)					
Method of ster, inform	f asses mation	sment (type, scope, la on whether module ca	nguage — if other tha an be chosen to earn	an German, examina a bonus)	tion offered — if not every seme-
a) comple b) written Method of	etion of examin f assess	approx. 11 exercises w nation (approx. 180 to sment to be selected b	vith approx. 4 compor 240 minutes) by the candidate.	nents each (50% to l	pe completed correctly) or
Allocation	n of plac	ces			
Additiona	l inform	nation			
Workload					
150 h					
Teaching	cvcle				
	,				
Referred t	to in LP	OI (examination regu	lations for teaching-d	legree programmes)	
§ 49 Nr. : § 69 Nr. :	1 a) 1 a)				
Module appears in					
Bachelor's degree (1 major) Computer Science (2015)					
Bachelor's	Bachelor's degree (1 major) Mathematics (2015)				
Bachelor's	Bachelor's degree (1 major) Computational Mathematics (2015)				
Bachelor's degree (1 major) Aerospace Computer Science (2015)					
First state	examir	nation for the teaching	g degree Realschule C	omputer Science (2	015)
First state	e examir	nation for the teaching	degree Gymnasium	Computer Science (2	2015)
Master's t	teaching	g degree Gymnasium I	WINT Teacher Educati	on PLUS, Elite Netwo	ork Bavaria (ENB) (2016)
Bachelor's	Bachelor's degree (1 major) Aerospace Computer Science (2017)				

LA Realschulen Computer Science (2015)	JMU Würzburg • generated 18-Apr-2025 • exam. reg.	page 26 / 30
	data record Lehramt Realschulen Informatik - 2015	

Module title			Abbreviation			
Theore	Theoretical Informatics 10-I-TIV-152-m01					
Module	e coord	inator		Module offered by		
Dean o	Dean of Studies Informatik (Computer Science) Institute of Computer Science					
ECTS	Metho	od of grading	Only after succ. compl. of module(s)			
5	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	undergraduate				
Conten	ts					
Compu guages	itability 5, conte	, decidability, countabi xt-sensitive languages,	lity, finite automata, re complexity of calculat	egular sets, generativ ions, P-NP problem,	/e grammars, contex NP completeness.	tt-free lan-
Intend	ed learr	ning outcomes				
The stu tability comple	idents p , finite exity of	oossess a fundamental automata, regular sets, computations, P-NP pro	and applicable knowl generative grammars, blem, NP completene	edge in the areas of context-free langua ss.	computability, decid ges, context-sensitiv	lability, coun- ve languages,
Course	s (type,	, number of weekly con	tact hours, language –	- if other than Germa	n)	
V (4)						
Metho ster, in	d of ass formati	essment (type, scope, on on whether module	language — if other th can be chosen to earn	an German, examina a bonus)	tion offered — if not	every seme-
written If anno examir prox. 1	examinunced l exation o mation o minut	nation (approx. 60 to 12 by the lecturer at the be f one candidate each (es per candidate).	o minutes). ginning of the course, approx. 20 minutes) or	the written examina an oral examination	tion may be replace in groups of 2 cand	d by an oral idates (ap-
Allocat	ion of p	olaces				
Additio	onal info	ormation				
Worklo	ad					
150 h						
Teachi	ng cycl	e				
Referre	ed to in	LPOI (examination reg	gulations for teaching-	degree programmes)		
§ 49 N § 69 N	Nr. 1 a) Nr. 1 a)					
Module	e appea	rs in				
Bachel	or's deg	gree (1 major) Compute	r Science (2015)			
Bachel	or's deg	gree (1 major) Mathema	itics (2015)			
Bachel	or's deg	gree (1 major) Computa	tional Mathematics (20	015)		
Bachelor's degree (1 major) Aerospace Computer Science (2015)						
First state examination for the teaching degree Realschule Computer Science (2015)						
First state examination for the teaching degree Gymnasium Computer Science (2015)						
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)						
Bachelor's degree (1 major) Computer Science (2017)						
Bachelor's degree (1 major) Computer Science (2017)						
Master Supple	's teach mentar	ning degree Gymnasiun y course MINT Teacher	n MINT Teacher Educat Education PLUS, Elite	ion PLUS, Elite Netwo Network Bavaria (EN	ork Bavaria (ENB) (2 B) (2020)	020)
LA Realsch	ulen Comp	uter Science (2015)	JMU Würzburg data record L	g • generated 18-Apr-2025 • e ehramt Realschulen Informat	xam. reg. ik - 2015	page 27 / 30

Julius-Maximilians-UNIVERSITÄT WÜRZBURG

Bachelor's degree (1 major) Aerospace Computer Science (2020) Bachelor's degree (1 major) Computer Science und Sustainability (2021) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2022) Bachelor's degree (1 major) Artificial Intelligence and Data Science (2023) Bachelor's degree (1 major) Mathematics (2023)

LA Realschulen Computer Science (2015)	JMU Würzburg • generated 18-Apr-2025 • exam. reg.	page 28 / 30
	data record Lehramt Realschulen Informatik - 2015	

Module title				Abbreviation	
Tutor a	Tutor activity 1				10-l-TUT1-152-m01
Module coordinator				Module offered by	
Dean of	f Studie	es Informatik (Computer :	Science)	Institute of Comput	er Science
ECTS	Metho	od of grading	Only after succ. com	pl. of module(s)	
2	(not) s	successfully completed			
Duratio	n	Module level	Other prerequisites		
		undergraduate			
Conten	ts				
Tutoring	g activi	ties in the area of compu	iter science.		
Intende	ed learı	ning outcomes			
Imparti	ng kno	wledge and skills to stud	ents of computer scie	ence.	
Course	s (type	, number of weekly conta	ct hours, language —	· if other than Germa	n)
T (2)					
Method	l of ass formati	essment (type, scope, la	nguage — if other tha	an German, examina a bonus)	tion offered — if not every seme-
Wran-u	n renoi	t on tutoring activities (5	to 10 pages)		
	ion of r		10 10 pages)		
Allocal		Jaces			
Additio	natini	ormation			
workto	au				
60 fi		-			
Teachir	ig cycl	8			
Referre	d to in	LPO I (examination regu	lations for teaching-c	legree programmes)	
§ 22	Vr. 2 f)				
<u>9</u> 22 II I	vr. 3 f)	•			
Module appears in					
Bachelo	Bachelor's degree (1 major) Computer Science (2015)				
First state examination for the teaching degree Realschule Computer Science (2015)					
Bachel	rist state examination for the teaching degree Gymnasium Computer Science (2015)				
Bachel	Bachelor's degree (1 major) Computer Science (2017)				
Bachel	Dachelor's degree (1 major) Computer Science (2019) Pachelor's degree (1 major) Computer Science and Susteinability (2021)				
Bachel	or's de	gree (1 major) Artificial In	telligence and Data S	Science (2022)	
Bachel	or's de	gree (1 major) Artificial In	telligence and Data S	icience (2023)	
Bachelo	or's de	gree (1 major) Artificial In	telligence and Data S	icience (2024)	

LA Realschulen Computer Science (2015)	JMU Würzburg • generated 18-Apr-2025 • exam. reg.	page 29 / 30
	data record Lehramt Realschulen Informatik - 2015	1

Module title				Abbreviation		
Tutor a	ctivity	2		10-I-TUT2-152-m01		
Module coordinator				Module offered by		
Dean of	f Studie	es Informatik (Computer 9	Science)	Institute of Comput	er Science	
ECTS	Metho	od of grading	Only after succ. com	Ipl. of module(s)		
2	(not) s	successfully completed				
Duratio	n	Module level	Other prerequisites			
		undergraduate				
Conten	ts					
Tutorin	g activi	ties in the area of compu	iter science.			
Intende	ed learı	ning outcomes				
Imparti	ng kno	wledge and skills to stud	ents of computer scie	ence.		
Course	s (type	, number of weekly conta	ct hours, language —	if other than Germa	n)	
T (2)						
Method	l of ass	essment (type, scope, la	nguage — if other tha	an German, examina	tion offered — if not every seme-	
ster, in	formati	on on whether module ca	an be chosen to earn	a bonus)		
Wrap-u	p repoi	t on tutoring activities (5	to 10 pages)			
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad					
60 h						
Teachir	ng cycl	e				
Referre	d to in	LPOI (examination regu	lations for teaching-c	legree programmes)		
§ 22	Nr. 2 f)					
§ 22	Vr. 3 f)					
Module appears in						
Bachel	Bachelor's degree (1 major) Computer Science (2015)					
First state examination for the teaching degree Realschule Computer Science (2015)						
First state examination for the teaching degree Gymnasium Computer Science (2015)						
Bachel	Bachelor's degree (1 major) Computer Science (2017)					
Bachel	Bachelor's degree (1 major) Computer Science (2019)					
Bachel	or's de	gree (1 major) Computer S	Science und Sustaina	ibility (2021)		
Bachel	or's de	gree (1 major) Artificial In	telligence and Data S	cience (2022)		
Bachel	or's de	gree (1 major) Artificial In	telligence and Data S	cience (2023)		
Bachel	Bachelor's degree (1 major) Artificial Intelligence and Data Science (2024)					

LA Realschulen Computer Science (2015) JMU Würzburg • generated 18-Apr-2025 • exam. reg. page 30 / 30 data record Lehramt Realschulen Informatik - 2015