Exclosure to Subject Specific Regulations
from 25.07.2018
for Bachelor-Programme Computer Science
at TUHH
Programme Director: Prof. Heiko Falk
Total: 180 CP
Number of Specilisations to choose: 3

Course Scheme Bachelor Computer Science (CSBS)

Consolidated Version
for Study Cohort: WiSe23/24
en_head_sda
and Approval of Chair from:
12.04.2023
In Force on: 01.10.2023
Out of Force on: 31.03.2028

Information regarding the lectures are available in the TUHH modul manuals as well as in the course catalogue.

	Module							Examination			Course Work		
	Re-com. Term	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/ OM (2)	CP (4)	Grade	Exami-nation Form(3)	Compulsory	Course Work Type	Bonus (in %)
Core Qualification Compulsory Courses: 126 LP Optional Courses: 0 LP													
	1	Diskrete Algebraische Strukturen / Discrete Algebraic Structures	DE / EN	Prof. Mottet	E-EXK6	C	CM	6	Y	KL			
	1	Funktionales Programmieren / Functional Programming	EN	Prof. Schupp	E-16	C	CM	6	Y	KL	Y	ÜA	15
	1	Mathematik I (EN) / Mathematics I (EN)	EN	Prof. Ruprecht	E-10	C	CM	8	Y	KL	Y	ÜA	10
	1	Prozedurale Programmierung für Informatiker / Procedural Programming for Computer Engineers	DE / EN	Prof. Renner	E-24	C	CM	6	Y	KL			
	2	Automatentheorie und Formale Sprachen / Automata Theory and Formal Languages	EN	Prof. Mnich	E-11	C	CM	6	Y	KL	N	ÜA	20
	2	Grundlagen der Betriebswirtschaftslehre / Foundations of Management	DE	Prof. Ihl	W-11	C	CM	6	Y	FFA			
	2	Mathematik II (EN) / Mathematics II (EN)	EN	Prof. Ruprecht	E-10	C	CM	8	Y	KL	Y	ÜA	10
	2	Programmierparadigmen / Programming Paradigms	DE / EN	NN	SD-E	C	CM	6	Y	KL			
	3	Algorithmen und Datenstrukturen / Algorithms and Data Structures	DE / EN	Prof. Mnich	E-11	C	CM	6	Y	KL	N	ÜA	20
	3	Datenbanken / Databases	EN	Prof. Schulte	E-19	C	CM	6	Y	KL			
	3	Mathematik III (EN) / Mathematics III (EN)	EN	Prof. Lindner	0-UNIHH-M	C	CM	8	Y	KL			
	3	Rechnernetze und Internet-Sicherheit / Computernetworks and Internet Security	EN	Prof. Timm-Giel	E-4	C	CM	6	Y	KL			
	3	Technische Informatik / Computer Engineering	DE / EN	Prof. Falk	E-13	C	CM	6	Y	KL	Y	ÜA	10
	4	Berechenbarkeit und Komplexität / Computability and Complexity Theory	DE / EN	Prof. Kliesch	E-25	C	CM	6	Y	KL	Y	ÜA	15

	Module							Examination			Course Work		
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	4	Graphentheorie und Optimierung / Graph Theory and Optimization	DE / EN	Prof. Taraz	E-10	C	CM	6	Y	KL			
	4	Software-Engineering / Software Engineering	EN	Prof. Schupp	E-16	C	CM	6	Y	KL	Y	ÜA	15
	4	Stochastik / Stochastics	DE / EN	Prof. Schulte	E-10	C	CM	6	Y	KL			
	5	Seminare Informatik / Seminars Computer Science	DE / EN	Dozenten des SD E	SD-E	C	CM	6	N	RE			
	5	Software-Fachpraktikum / Software Industrial Internship		Dozenten des SD E	SD-E	C	CM	6	N	SA lt. FPrO			
	1-6	Nichttechnische Angebote im Bachelor / Non-technical Courses for Bachelors	DE / EN	Richter	0-TUHH	C	OM	6	Selection out of seperatly published Catalogue				
Specialisation I. Computer and Software Engineering Compulsory Courses: 0 LP Optional Courses: 12 LP													
	4	Grundlagen der Betriebssysteme / Fundamentals of Operating Systems	DE / EN	Prof. Dietrich	E-EXK4	EC	CM	6	Y	KL			
	4	Maschinelles Lernen I / Machine Learning I	DE / EN	Prof. Ay	E-21	EC	CM	6	Y	KL	N	ÜA	20
	4	Wissenschaftliche Programmierung / Scientific Programming	DE / EN	Prof. Knopp	E-5	EC	CM	6	Y	FFA			
	5	Data Mining / Data Mining	EN	Prof. Schulte	E-19	EC	CM	6	Y	KL	Y	FFST	20
	5	Einführung in die Informationssicherheit / Introduction to Information Security	EN	Prof. Scandariato	E-22	EC	CM	6	Y	KL	N	FFST	5
	5	Rechnerarchitektur / Computer Architecture	DE / EN	Prof. Falk	E-13	EC	CM	6	Y	KL	N	FFST	15
	6	Betriebssystembau für Einkernsysteme / Operating System Construction for Single-Core Systems	DE / EN	Prof. Dietrich	E-EXK4	EC	CM	6	Y	MP	N	FFST	10
	6	Compilerbau / Compiler Construction	EN	Prof. Schupp	E-16	EC	CM	6	Y	FFA			
	6	Eingebettete Systeme / Embedded Systems	EN	Prof. Falk	E-13	EC	CM	6	Y	KL	Y	FFST	10
	6	Softwareentwicklung / Software Development	EN	Prof. Schupp	E-16	EC	CM	6	Y	FFA			
Specialisation II. Mathematics and Engineering Science Compulsory Courses: 0 LP Optional Courses: 18 LP													
	4	Mathematik IV (EN) / Mathematics IV (EN)	EN	Prof. Lindner	0-UNIHH-M	EC	CM	6	Y	KL			
	5	Kombinatorische Strukturen und Algorithmen / Combinatorial Structures and Algorithms	DE / EN	Prof. Taraz	E-10	EC	CM	6	Y	MP			
	5	Quantenmechanik für Studierende der Ingenieurswissenschaften / Quantum Mechanics for Engineers	DE	Prof. Rübhausen	0-UNIHH	EC	CM	6	Y	MP	N	SA	0
	5	Rechnergestützte Geometrie / Computational Geometry	DE	Dr. Batra	E-19	EC	CM	6	Y	KL			
	5	Statistik / Statistics	DE / EN	Prof. Schulte	E-10	EC	CM	6	Y	KL			
	6	Algebraische Methoden in der Regelungstechnik / Algebra and Control	DE / EN	Dr. Batra	E-19	EC	CM	6	Y	MP			

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6	Einführung in Medizintechnische Systeme / Introduction into Medical Technology and Systems	DE	Prof. Schlaefer	E-1	EC	CM	6	Y	KL	Y	SA	10
										Y	RE	10
6	Labor Cyber-Physical Systems / Lab Cyber-Physical Systems	DE / EN	Prof. Falk	E-13	EC	CM	6	Y	SA			
6	Löser für schwachbesetzte lineare Gleichungssysteme / Solvers for Sparse Linear Systems	EN	Prof. Le Borne	E-10	EC	CM	6	Y	MP			
6	Signale und Systeme / Signals and Systems	DE / EN	Prof. Bauch	E-8	EC	CM	6	Y	KL			
Specialisation III. Subject Specific Focus Compulsory Courses: 0 LP Optional Courses: 12 LP												
5	Technischer Ergänzungskurs I für CSBS / Technical Complementary Course I for CSBS		Dozenten des SD E	SD-E	EC	OM	6	according to Subject Specific Regulations				
6	Technischer Ergänzungskurs II für CSBS / Technical Complementary Course II for CSBS		Dozenten des SD E	SD-E	EC	OM	6	according to Subject Specific Regulations				
Thesis Compulsory Courses: 12 LP Optional Courses: 0 LP												
6	Bachelorarbeit / Bachelor Thesis		Professoren der TUHH	0-TUHH	C	CM	12	Y	AB			

Explanation:

[1]C=Compulsory, EC=Elective Compulsory
[2]CM=Compulsory Defined Module, OM=Optional Defined Module
[3]KL=Written exam, SA=Written elaboration, FFST=Subject theoretical and practical work, FFA=Subject theoretical and practical work, MP=Oral exam, RE=Presentation, AB=Thesis, ÜA=Excercises, SA lt. FPrO=Written elaboration (accord. to Internship Regulations)
[4]CP=Credit Points
[5]VL=Lecture, SE=Seminar, GÜ=Recitation Section (small), PBL=Project-/problem-based Learning, PR=Practical Course, PS=Project Seminar, HÜ=Recitation Section (large)
[6]DE=German, EN=English, DE/EN=German and English
[7]SWS=Contact hours