

Exclosure to Subject Specific Regulations
 from 25.07.2018
 for Master-Programme Informatik-
 Ingenieurwesen
 at TUHH
 Programme Director: Prof. Görschwin Fey
 Total: 120 CP
 Number of Specilisations to choose: 4



Course Scheme Master Computational Science and Engineering (IIWMS)

Consolidated Version
 for Study Cohort: WiSe20/21
 en_head_sda
 and Approval of Chair from:
 30.04.2020
 In Force on: 01.10.2020
 Out of Force on: 30.09.2023

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

Re-com. Term	Module						Examination			Course Work		
	Module Name (German / English)	Language	ModuleResponsability	Institute	C/EC (1)	CM/OM (2)	CP (4)	Grade	Examination Form(3)	Compulsory	Course Work Type	Bonus (in %)
Core qualification Compulsory Courses: 24 LP Optional Courses: 0 LP												
3	Forschungsprojekt / Research Project	DE / EN	Prof. Turau	SD-E	C	CM	12	Y	STA			
1-3	Betrieb & Management / Business & Management	DE / EN	Prof. Meyer	W-1	C	OM	6	Selection out of seperatly published Catalogue				
1-3	Nichttechnische Angebote im Master / Non-technical Courses for Master (lt. letzter PO Nichttechnische Ergänzungskurse im Master)	DE / EN	Richter	0-TUHH	C	OM	6	Selection out of seperatly published Catalogue				
Specialisation I. Computer Science Compulsory Courses: 0 LP Optional Courses: 18 LP												
1	Software-Sicherheit / Software Security	EN	Prof. Gollmann	E-15	EC	CM	6	Y	KL			
1	Softwareverifikation / Software Verification	EN	Prof. Schupp	E-16	EC	CM	6	Y	KL	Y	ÜA	15
2	Algorithmische Spieltheorie / Algorithmic Game Theory (lt. letzter PO Algorithmen für Netzwerke)	DE / EN	Prof. Mnich	E-11	EC	CM	6	Y	KL			
2	Entwurf von Dependable Systems / Design of Dependable Systems	DE / EN	Prof. Fey	E-13	EC	CM	6	Y	MP	Y	FFST	0
3	Kommunikationsnetze / Communication Networks	EN	Prof. Timm-Giel	E-4	EC	CM	6	Y	RE			
3	Verteilte Algorithmen / Distributed Algorithms	DE / EN	Prof. Turau	E-17	EC	CM	6	Y	MP			
Specialisation II. Engineering Science Compulsory Courses: 0 LP Optional Courses: 12 LP												
1	Digitale Nachrichtenübertragung / Digital Communications	DE / EN	Prof. Bauch	E-8	EC	CM	6	Y	KL	Y	SA	0
2	Informationstheorie und Codierung / Information Theory and Coding	DE / EN	Prof. Bauch	E-8	EC	CM	6	Y	KL			
3	Digitale Signalverarbeitung und Digitale Filter / Digital Signal Processing and Digital Filters	EN	Prof. Bauch	E-8	EC	CM	6	Y	KL			

		Module					Examination			Course Work		
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3	Theorie und Entwurf regelungstechnischer Systeme / Control Systems Theory and Design	EN	Prof. Werner	E-14	EC	CM	6	Y	KL			
Specialisation III. Mathematics Compulsory Courses: 0 LP Optional Courses: 12 LP												
1	Lineare und Nichtlineare Optimierung / Linear and Nonlinear Optimization	DE / EN	Prof. Mnich	E-11	EC	CM	6	Y	MP			
1	Mathematische Bildverarbeitung / Mathematical Image Processing	DE / EN	Prof. Lindner	E-10	EC	CM	6	Y	MP			
2	Numerische Mathematik II / Numerical Mathematics II	DE / EN	Prof. Le Borne	E-10	EC	CM	6	Y	MP			
2	Randomisierte Algorithmen und Zufällige Graphen / Randomised Algorithms and Random Graphs	DE / EN	Prof. Taraz	E-10	EC	CM	6	Y	MP			
3	Mathematik neuronaler Netzwerke / Mathematics of Neural Networks	DE / EN	Dr. Zemke	E-10	EC	CM	6	Y	MP			
Specialisation IV. Subject Specific Focus Compulsory Courses: 0 LP Optional Courses: 24 LP												
2	Technischer Ergänzungskurs I für IIV / Technical Complementary Course I for Computational Science and Engineering		Prof. Turau	SD-E	EC	OM	12	according to Subject Specific Regulations				
3	Technischer Ergänzungskurs II für IIV / Technical Complementary Course II for Computational Science and Engineering		Prof. Turau	SD-E	EC	OM	12	according to Subject Specific Regulations				
Thesis Compulsory Courses: 30 LP Optional Courses: 0 LP												
4	Masterarbeit / Master Thesis		Professoren der TUHH	0-TUHH	C	CM	30	Y	AB			

Explanation:

¹C=Compulsory, EC=Elective Compulsory

²CM=Compulsory Defined Module, OM=Optional Defined Module

³KL=Written exam, SA=Written elaboration, FFA=Subject theoretical and practical work, FFST=Subject theoretical and practical work, MP=Oral exam, RE=Presentation, STA=Study work, ÜA=Exercises, AB=Thesis

⁴CP=Credit Points

⁵VL=Lecture, SE=Seminar, UE=Recitation Section (small), PBL=Project-/problem-based Learning, PR=Practical Course, PK=Projection Course, HÜ=Recitation Section (large)

⁶DE=German, EN=English, DE/EN=German and English

⁷SWS=Contact hours