Modules Computer Science
(see Curriculum §3a)

Matr.-nr.:	
First name:	
Last name:	
E-Mail:	
Option: CS, DS or SC	

Gatekeepers passed in the bachelor programme	
Combinatorial and Numerical Algorithms (CNA)	CNA alternative
Name and ECTS of alternative:	
Foundations of Data Analysis (FDA)	FDA alternative
Name and ECTS of alternative:	
Parallel Computing (PC)	PC alternative
Name and ECTS of alternative:	
Cooperative Systems (CS)	CS alternative
Name and ECTS of alternative:	
Distributed Systems Engineering (DSE)	DSE alternative
Name and ECTS of alternative:	
Foundations of Computer Graphics (GFX)	GFX alternative
Name and ECTS of alternative:	
Signal and Image Processing (SIP)	SIP alternative
Name and ECTS of alternative:	
Information Management & Systems Engineering (ISE)	ISE alternative
Name and ECTS of alternative:	

Modules		
3-1 Algorithms:	Combinatorial and Numerical Algorithms	CNA
	Advanced Algorithms	AAL
	Numerical High Performance Algorithms	HPA
	Software Tools and Libraries for SC	STL
	Distributed and Parallel Algorithms	DPA
	Advanced Topics In Algorithms	AT-AL
3-2 Data Analysis	Foundations of Data Analysis	FDA
	Data Mining	DM
	Computational Optimisation	CO
	Natural Language Processing	NLP
	Visualisation and Visual Data Analysis	VIS
	Advanced Topics in Data Analysis	AT-DA
3-3 Parallel Computing	Parallel Computing	PC
	Cloud Computing	CC
	Distributed Systems Engineering	DSE
	High Performance Computing	HPC
	Program Optimisations and Runtime Systems	POP
	Scientific Data Management	SDM
	Distributed and Parallel Algorithms	DPA
	Advanced Topics in Parallel Computing	AT-PC
3-4 Networks	Cooperative Systems	CS
	Network Technologies for Multimedia Apps	NTM
	Network-Based Communication Ecosystems	NCE
	Network Security	SEC
	Advanced Topics in Networks	AT-NET

3-5 Internet Computing & Software Technology	Distributed Systems Engineering	DSE
	Cloud Computing	CC
	Interoperability	IOP
	Business Process Management	BPM
	Advanced Topics in ICS	AT-ICS
3-6 Computer Graphics	Foundations of Computer Graphics	GFX
	Cloud Gaming	CGA
	Gaming Technologies	GAT
	Image Synthesis	IMS
	Real-Time Computer Graphics	RCG
	Visualisation and Visual Data Analysis	VIS
	Advanced Topics in Computer Graphics	AT-GFX
3-7 Multimedia	Signal and Image Processing	SIP
	Image Processing and Image Analysis	IPA
	Multimedia Content Management	MCM
	Multimedia Representation and Encoding	MRE
	Multimedia Retrieval and C-Based Search	MRS
	Multimedia and Semantic Technologies	MST
	Network Technologies for Multimedia Apps	NTM
	Advanced Topics in Multimedia	AT-MM
3-8 Information Management & Systems Engineering	Information Management & SE	ISE
	Business Intelligence I	BI1
	Business Intelligence II	BI2
	Knowledge Engineering	KE
	Multimedia Content Management	MCM
	Scientific Data Management	SDM
	Advanced Topics in ISE	AT-ISE

Notes *optional*

Please confirm that no courses chosen above have already been used otherwise, directly or indirectly by passing equivalent courses, see Curriculum § 10(3).

Please fill in whether you study computer science, data science, or scientific computing and choose your modules. Note that modules can only be selected, if the prerequisites are fulfilled, i.e. the corresponding gatekeepers have already been selected. When the confirm button is selected, it is checked whether all the rules of the curriculum are observed.

Note: This form is validated using JavaScript. It is recommended to edit this document with Adobe Acrobat Reader (editing with web browsers, tools, etc. will cause problems).