

Studienablaufplan für den Masterstudiengang Computer Science ab dem Wintersemester 2026/2027

Gültig auf der Basis der Beschlüsse des Fakultätsrats der Fakultät Informatik vom
21.08.2025, 18.03.2026, 22.04.2026, 20.05.2026, 24.06.2026, 19.08.2026 sowie
30.09.2026

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Studienablaufplan Beginn im Wintersemester

mit Art und Umfang der Lehrveranstaltungen in SWS sowie erforderlichen Leistungen, deren Umfang, Art und Ausgestaltung den Modulbeschreibungen zu entnehmen sind.

Modul- Nummer	Modulname	WiSe	SoSe	WiSe	SoSe	LP
		1. Semester	2. Semester	3. Semester (M)	4. Semester	
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
Pflichtbereich						
INF-25-MA-FP	Forschungsprojekt			100 Stunden Pj 1 PL		13
Wahlpflichtbereich						
Allgemeine Qualifikation						
Auswahl 1 aus 75 Modulen.						
INF-25-Ma-AQUA	Studium generale		x/x/x/x ¹⁾ PL			5
INF-25-MINF	Methoden der Informatiklehre		4 SWS Pj 1 PL			5
Sprachausbildung: siehe Sprachkatalog			4 SWS SK 1 PL			5
Tracks						
Auswahl von 1 aus 2 Tracks.						
Open Track						
Wahlpflichtbereich						

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
Fachgebiete Auswahl von 3 aus 8 Fachgebieten jeweils mit Modulen im Umfang von 12 LP, wobei die Module nur gewählt werden können, wenn diese nicht bereits als Module der Ergänzung gewählt wurden.						
Fachgebiet Theoretical Computer Science and Symbolic Artificial Intelligence						
INF-25-Ma-FTK-AD2	Algorithmen und Datenstrukturen 2	4/2/0/0 1 PL				9
INF-25-Ma-FTK-KM	Knowledge Models	2/2/0/0 1 PL				6
INF-25-Ma-FTK-FLP	Foundations of Logic Programming	2/0/0/0 1 PL				3
INF-25-Ma-FTK-PT	Proof Theory and Sequent Systems	2/0/0/0 1 PL				3
INF-25-Ma-FTK-AD	Advanced Datastructures	2/2/0/0 1 PL				6
INF-25-Ma-FTK-AALAB	Advanced Algorithms Lab	0/0/0/4 1 PL				6
INF-25-Ma-FTK-MC	Model Checking	4/4/0/0 1 PL				12
INF-25-Ma-FTK-AL	Advanced Logics		4/2/0/0 1 PL			9
INF-25-Ma-FTK-BMOEL	Building and Maintaining Ontologies in the Description Logic EL		2/2/0/0 1 PL			6
INF-25-Ma-FTK-EXR	Introduction to Existential Rules		2/0/0/0 1 PL			3
INF-25-Ma-FTK-FCA	Introduction to Formal Concept Analysis		2/2/0/0 1 PL			6
INF-25-Ma-FTK-GaT	Algorithmic Game Theory		2/2/0/0 1 PL			6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FTK-GrT	Algorithmic Graph Theory		4/2/0/0 1 PL			9
INF-25-Ma-FTK-RA	Randomized Algorithms		4/2/0/0 1 PL			9
INF-25-Ma-FTK-Sem	Seminar Theoretical Computer Science and Symbolic Artificial Intelligence		0/0/2/0 1 PL			3
INF-25-Ma-FTK-APSS	Advanced Problem Solving and Search			2/2/0/0 1 PL		6
INF-25-Ma-FTK-CT	Complexity Theory			4/2/0/0 1 PL		9
INF-25-Ma-FTK-KR	Foundations of Knowledge Representation			2/2/0/0 1 PL		6
INF-25-Ma-FTK-MoL	Modal Logic			2/2/0/0 1 PL		6
Fachgebiet Software Technology and Programming Languages						
INF-25-Ma-FSP-CB	Compilerbau	2/2/0/0 1 PL				6
INF-25-Ma-FSP-SESAC	Self-Adaptive Software and Cobotics	2/2/0/0 1 PL				6
INF-25-Ma-FSP-FCPL	Foundations of Certified Programming Language and Compiler Design	2/2/0/0 1 PL				6
INF-25-Ma-FSP-HICSOS	Software Engineering for Highly Configurable Software Systems	2/2/0/0 1 PL				6
INF-25-Ma-FSP-SAAB	Software as a Business	2/2/0/0 1 PL				6
INF-25-Ma-FSP-SMQS	Software Management and Quality Assurance		2/2/0/0 1 PL			6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FSP-CBSE	Component-Based Software Engineering		2/2/0/0 1 PL			6
INF-25-Ma-FSP-AutoSOFT	Automotive Software Engineering		2/0/0/0 1 PL			3
INF-25a-Ma-FSP-FPSS	Future-Proof Software Systems		2/2/0/0 1 PL			6
INF-25-Ma-FSP-FSWT	Advanced Software Engineering			2/2/0/0 1 PL		6
INF-25-Ma-FSP-RETE	Requirements and Test Management			2/2/0/0 1 PL		6
INF-25-Ma-FSP-DPF	Design Patterns and Frameworks			2/2/0/0 1 PL		6
INF-25-Ma-FSP-AutoSAFE	Automotive Software Safety			2/0/0/0 1 PL		3
INF-25-Ma-FSP-MOST	Model-Driven Software Development in Technical Spaces			2/2/0/0 1 PL		6
Fachgebiet Secure Computing						
INF-25-Ma-FSC-CONF	Confidential Computing	2/2/0/0 1 PL				6
INF-25-Ma-FSC-ASec	Sicherheit in Anwendungen	2/0/0/0 1 PL				3
INF-25-Ma-FSC-FCDS	Foundations of Concurrent and Distributed Systems		4/0/0/0 1 PL			6
INF-25-Ma-FSC-PET	Privacy-Enhancing Technologies		2/2/0/0 1 PL			6
INF-25-Ma-FSC-SFT	Software Fault Tolerance		2/2/0/0 1 PL			6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FSC-FCDS.Lab	Concurrent and Distributed Systems Lab		0/0/0/4 1 PL			6
INF-25-Ma-FSC-NSec	Network and Distributed Systems Security		2/2/0/0 2 PL			6
INF-25-Ma-FSC-SSL	Systems Security Lab		2/2/0/0 1 PL			6
INF-25-Ma-FSC-CSec	IT-Sicherheit in Cloud Computing		3/0/0/0 1 PL			3
INF-25-Ma-FSC-SFT.Lab	Software Fault Tolerance Lab			0/0/0/4 1 PL		6
Fachgebiet Systems Architecture						
INF-25-Ma-FSA-SE	Systems Engineering	2/2/0/0 1 PL				6
INF-25a-Ma-FSA-SDE	Scalable Data Engineering	2/2/0/0 1 PL				6
INF-25-Ma-FSA-SDM	Scalable Data Management	2/2/0/0 1 PL				6
INF-25-Ma-FSA-DS	Distributed Systems	2/2/0/0 1 PL				6
INF-25-Ma-FSA-SCC	Service and Cloud Computing	2/2/0/0 1 PL				6
INF-25-Ma-FSA-IoT	IoT Communication	2/2/0/0 2 PL				6
INF-25-Ma-FSA-RNA	Advanced Computer Networks	2/2/0/0 1 PL				6
INF-25-Ma-FSA-WSN	Wireless Sensor Networks		2/2/0/0 1 PL			6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FSA-IWA	Internet and Web Applications		2/2/0/0 1 PL			6
INF-25-Ma-FSA-Res	Resilient Systems		2/2/0/0 2 PL			6
INF-25-Ma-FSA-AOS	Advanced Operating Systems		3/1/0/0 1 PL			6
INF-25-Ma-FSA-OSC	Operating-System Construction		2/4/0/0 1 PL			6
INF-25-Ma-FSA-MKC	Microkernel Construction		2/2/0/0 1 PL			6
INF-25-Ma-FSA-STH	Schedulingtheorie		2/0/0/0 1 PL			3
INF-25-Ma-FSA-EAMA	Engineering Adaptive Mobile Applications		2/2/0/0 1 PL			6
INF-25-Ma-FSA-MOS	Microkernel-Based Operating Systems			2/4/0/0 1 PL		9
INF-25-Ma-FSA-IM	Internet Measurements			2/2/0/0 2 PL		6
INF-25-Ma-FSA-PET	Prediction and Estimation Techniques			2/2/0/0 1 PL		6
INF-25a-Ma-FSA-Dec	Decentralized Systems			2/2/0/0 2 PL		6
INF-25-Ma-FSA-RTS	Real-Time Systems			1/1/0/0 1 PL		3
Fachgebiet Cyber Physical Systems						
INF-25-Ma-FCP-CPS	Foundations of Cyber Physical Systems	2/2/0/0 1 PL				6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FCP-IC	Industrial Communications		2/2/0/0 1 PL			6
INF-25-Ma-FCP-CMS	Cooperative Mobile Systems		2/2/0/0 1 PL			6
INF-25-Ma-FCP-CPSM.Lab1	Cyber Physical Systems Modeling Lab		0/0/0/4 1 PL			6
INF-25-Ma-FCP-C2X	Vehicular Networking		2/2/0/0 1 PL			6
INF-25-Ma-FCP-MA	Model-Driven Automation		3/1/0/0 1 PL			6
INF-25-Ma-FCP-CPSM.Lab2	Cyber Physical Systems Modeling Lab Advanced		0/0/0/4 1 PL			6
INF-25-Ma-FCP-IIoT	Industrial Internet of Things			2/0/0/2 1 PL		6
INF-25-Ma-FCP-EMIN	Engineering and Management of Industrial Networks			3/1/0/0 1 PL		6
INF-25-Ma-FCP-ICPS.Lab	Industrial Cyber Physical Systems Lab			0/0/0/4 1 PL		6
Fachgebiet Visual Computing and Machine Learning						
INF-25-Ma-FVC-FCG	Foundations of Computer Graphics	2/2/0/0 1 PL				6
INF-25-Ma-FVC-FDV	Foundations of Data Visualisation	2/2/0/0 1 PL				6
INF-25-Ma-FVC-ML	Machine Learning	2/2/0/0 20 Stunden Pj 1 PL				6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FVC-CV	Computer Vision	2/2/0/0 20 Stunden Pj 1 PL				6
INF-25-Ma-FVC-FVR	Foundations of Virtual Reality	2/2/0/0 1 PL				6
INF-25-Ma-FVC-CRC	Computer- and Robot-Assisted Surgery	2/2/0/0 1 PL				6
INF-25-Ma-FVC-DLVFA	Deep Learning for Vision - Foundations and Applications	2/2/0/0 1 PL				6
INF-25-Ma-FVC-RL	Robot Learning		2/2/0/0 1 PL			6
INF-25-Ma-FVC-GMA	Geometric Modelling and Animation		2/2/0/0 1 PL			6
INF-25-Ma-FVC-IIV	Interactive Information Visualisation		2/2/0/0 1 PL			6
INF-25-Ma-FVC-SciVis	Scientific Visualisation		2/2/0/0 1 PL			6
INF-25-Ma-FVC-CC	Creative Computing		0/0/0/4 1 PL			6
INF-25-Ma-FVC-CRC.Lab	Computer- and Robot-Assisted Surgery Lab		0/0/0/4 1 PL			6
INF-25-Ma-FVC-PBG	Physics Based Graphics			2/2/0/0 1 PL		6
INF-25a-Ma-FTK-LLM	Large Language Models			2/2/0/0 1 PL		6
INF-25-Ma-FVC-TSP	Touch Sensing and Processing			2/2/0 1 PL		6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25a-Ma-FVC-SC	Spatial Computing			0/0/0/4 1 PL		6
Fachgebiet Human-Computer Interaction and Interactive Media						
INF-25-Ma-FHI-UIE	User Interface Engineering	2/2/0/0 2 PL				6
INF-25-Ma-FHI-AUI	Advanced User Interfaces		2/0/2/0 2 PL			6
INF-25-Ma-FHI-OUT.Lab	OUTPUT.DD Live		0/0/0/4 1 PL			6
INF-25-Ma-FHI-IMIR	Interactive Multimedia Information Retrieval		2/2/0/0 1 PL			6
INF-25-Ma-FHI-ART	Art and Code		2/2/0/0 1 PL			6
INF-25-Ma-FHI-DD	Digital Design		0/0/0/4 1 PL			6
INF-25a-Ma-FHI-OUT.W	OUTPUT.DD Workshop			0/0/0/4 1 PL		6
INF-25a-Ma-FHI-PC	Philosophy and Computing			2/0/2/0 1 PL		6
INF-25-Ma-FHI-XIM	Experiments in Immersive Media			0/0/0/4 1 PL		6
Fachgebiet Computer Engineering and High Performance Computing						
INF-25-Ma-FTI-HPC	High Performance Computing	2/2/0/0 1 PL				6
INF-25-Ma-FTI-PACS	Performance Analysis of Computing Systems	2/2/0/0 1 PL				6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FTI-EPA	Efficient Parallel Algorithms	2/2/0/0 1 PL				6
INF-25-Ma-FTI-HPGPU	Highly Parallel Programming of GPUs	2/1/0/1 1 PL				6
INF-25-Ma-FTI-ADS.Lab	Adaptive Dynamic Systems Lab		0/0/0/4 1 PL			6
INF-25-Ma-FTI-SOP	Structure and Operation Principle of Processors		2/1/0/1 1 PL			6
INF-25-Ma-FTI-DDA	Digitization and Data Analytics		2/2/0/0 1 PL			6
INF-25-Ma-FTI-EMA	Design and Programming of Embedded Multicore Architectures		2/2/0/0 1 PL			6
INF-25-Ma-FTI-LCTP	Linux Cluster in Theorie und Praxis		2/2/0/0 1 PL			6
INF-25-Ma-FTI-ACSR	Adaptive Computing Systems for Robotics		2/2/0/0 1 PL			6
INF-25-Ma-FTI-VirTe	Virtualization Techniques		3/1/0/0 1 PL			6
INF-25-Ma-FTI-ETI	Introduction to Computer Engineering			4/2/0/2 1 PL		12
INF-25-Ma-FTI-HMS	Hardware Modeling and Simulation			2/2/0/0 1 PL		6
Ergänzung Auswahl von Modulen im Umfang von insgesamt 36 Leistungspunkten, wobei diese nur gewählt werden können, wenn sie nicht bereits als Module der Fachgebiete gewählt wurden.						
INF-25-Ma-FTK-AD2	Algorithmen und Datenstrukturen 2	4/2/0/0 1 PL				9

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FTK-KM	Knowledge Models	2/2/0/0 1 PL				6
INF-25-Ma-FTK-FLP	Foundations of Logic Programming	2/0/0/0 1 PL				3
INF-25-Ma-FTK-PT	Proof Theory and Sequent Systems	2/0/0/0 1 PL				3
INF-25-Ma-FTK-AD	Advanced Datastructures	2/2/0/0 1 PL				6
INF-25-Ma-FTK-AALAB	Advanced Algorithms Lab	0/0/0/4 1 PL				6
INF-25-Ma-FTK-MC	Model Checking	4/4/0/0 1 PL				12
INF-25-Ma-FTK-AL	Advanced Logics		4/2/0/0 1 PL			9
INF-25-Ma-FTK-BMOEL	Building and Maintaining Ontologies in the Description Logic EL		2/2/0/0 1 PL			6
INF-25-Ma-FTK-EXR	Introduction to Existential Rules		2/0/0/0 1 PL			3
INF-25-Ma-FTK-FCA	Introduction to Formal Concept Analysis		2/2/0/0 1 PL			6
INF-25-Ma-FTK-GaT	Algorithmic Game Theory		2/2/0/0 1 PL			6
INF-25-Ma-FTK-GrT	Algorithmic Graph Theory		4/2/0/0 1 PL			9
INF-25-Ma-FTK-RA	Randomized Algorithms		4/2/0/0 1 PL			9

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FTK-Sem	Seminar Theoretical Computer Science and Symbolic Artificial Intelligence		0/0/2/0 1 PL			3
INF-25-Ma-FTK-APSS	Advanced Problem Solving and Search			2/2/0/0 1 PL		6
INF-25-Ma-FTK-CT	Complexity Theory			4/2/0/0 1 PL		9
INF-25-Ma-FTK-KR	Foundations of Knowledge Representation			2/2/0/0 1 PL		6
INF-25a-Ma-FTK-LLM	Large Language Models			2/2/0/0 1 PL		6
INF-25-Ma-FTK-MoL	Modal Logic			2/2/0/0 1 PL		6
INF-25-Ma-FSP-CB	Compilerbau	2/2/0/0 1 PL				6
INF-25-Ma-FSP-SESAC	Self-Adaptive Software and Cobotics	2/2/0/0 1 PL				6
INF-25-Ma-FSP-FCPL	Foundations of Certified Programming Language and Compiler Design	2/2/0/0 1 PL				6
INF-25-Ma-FSP-HICSOS	Software Engineering for Highly Configurable Software Systems	2/2/0/0 1 PL				6
INF-25-Ma-FSP-SAAB	Software as a Business	2/2/0/0 1 PL				6
INF-25-Ma-FSP-SMQS	Software Management and Quality Assurance		2/2/0/0 1 PL			6
INF-25-Ma-FSP-CBSE	Component-Based Software Engineering		2/2/0/0 1 PL			6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FSP-AutoSOFT	Automotive Software Engineering		2/0/0/0 1 PL			3
INF-25a-Ma-FSP-FPSS	Future-Proof Software Systems		2/2/0/0 1 PL			6
INF-25-Ma-FSP-FSWT	Advanced Software Engineering			2/2/0/0 1 PL		6
INF-25-Ma-FSP-RETE	Requirements and Test Management			2/2/0/0 1 PL		6
INF-25-Ma-FSP-AutoSAFE	Automotive Software Safety			2/0/0/0 1 PL		3
INF-25-Ma-FSP-DPF	Design Patterns and Frameworks			2/2/0/0 1 PL		6
INF-25-Ma-FSP-AutoSAFE	Automotive Software Safety			2/0/0/0 1 PL		3
INF-25-Ma-FSP-MOST	Model-Driven Software Development in Technical Spaces			2/2/0/0 1 PL		6
INF-25-Ma-FSC-CONF	Confidential Computing	2/2/0/0 1 PL				6
INF-25-Ma-FSC-ASec	Sicherheit in Anwendungen	2/0/0/0 1 PL				3
INF-25-Ma-FSC-FCDS	Foundations of Concurrent and Dis- tributed Systems		4/0/0/0 1 PL			6
INF-25-Ma-FSC-PET	Privacy-Enhancing Technologies		2/2/0/0 1 PL			6
INF-25-Ma-FSC-SFT	Software Fault Tolerance		2/2/0/0 1 PL			6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FSC-FCDS.Lab	Concurrent and Distributed Systems Lab		0/0/0/4 1 PL			6
INF-25-Ma-FSC-NSec	Network and Distributed Systems Security		2/2/0/0 2 PL			6
INF-25-Ma-FSC-SSL	Systems Security Lab		2/2/0/0 1 PL			6
INF-25-Ma-FSC-CSec	IT-Sicherheit in Cloud Computing		3/0/0/0 1 PL			3
INF-25-Ma-FSC-SFT.Lab	Software Fault Tolerance Lab			0/0/0/4 1 PL		6
INF-25-Ma-FSA-SE	Systems Engineering	2/2/0/0 1 PL				6
INF-25a-Ma-FSA-SDE	Scalable Data Engineering	2/2/0/0 1 PL				6
INF-25-Ma-FSA-SDM	Scalable Data Management	2/2/0/0 1 PL				6
INF-25-Ma-FSA-DS	Distributed Systems	2/2/0/0 1 PL				6
INF-25-Ma-FSA-SCC	Service and Cloud Computing	2/2/0/0 1 PL				6
INF-25-Ma-FSA-IoT	IoT Communication	2/2/0/0 2 PL				6
INF-25-Ma-FSA-RNA	Advanced Computer Networks	2/2/0/0 1 PL				6
INF-25-Ma-FSA-WSN	Wireless Sensor Networks		2/2/0/0 1 PL			6
INF-25-Ma-FSA-IWA	Internet and Web Applications		2/2/0/0 1 PL			6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FSA-Res	Resilient Systems		2/2/0/0 2 PL			6
INF-25-Ma-FSA-AOS	Advanced Operating Systems		3/1/0/0 1 PL			6
INF-25-Ma-FSA-OSC	Operating-System Construction		2/4/0/0 1 PL			6
INF-25-Ma-FSA-MKC	Microkernel Construction		2/2/0/0 1 PL			6
INF-25-Ma-FSA-STH	Schedulingtheorie		2/0/0/0 1 PL			3
INF-25-Ma-FSA-EAMA	Engineering Adaptive Mobile Applications		2/2/0/0 1 PL			6
INF-25-Ma-FSA-MOS	Microkernel-Based Operating Systems			2/4/0/0 1 PL		9
INF-25-Ma-FSA-IM	Internet Measurements			2/2/0/0 2 PL		6
INF-25-Ma-FSA-PET	Prediction and Estimation Techniques			2/2/0/0 1 PL		6
INF-25a-Ma-FSA-Dec	Decentralized Systems			2/2/0/0 2 PL		6
INF-25-Ma-FSA-RTS	Real-Time Systems			1/1/0/0 1 PL		3
INF-25-Ma-FCP-CPS	Cyber Physical Systems	2/2/0/0 1 PL				6
INF-25-Ma-FCP-IC	Industrial Communications		2/2/0/0 1 PL			6
INF-25-Ma-FCP-CMS	Cooperative Mobile Systems		2/2/0/0 1 PL			6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FCP-CPSM.Lab1	Cyber Physical Systems Modeling Lab		0/0/0/4 1 PL			6
INF-25-Ma-FCP-C2X	Vehicular Networking		2/2/0/0 1 PL			6
INF-25-Ma-FCP-MA	Model-Driven Automation		3/1/0/0 1 PL			6
INF-25-Ma-FCP-CPSM.Lab2	Cyber Physical Systems Modeling Lab Advanced		0/0/0/4 1 PL			6
INF-25-Ma-FCP-IIoT	Industrial Internet of Things			2/0/0/2 1 PL		6
INF-25-Ma-FCP-EMIN	Engineering and Management of Industrial Networks			3/1/0/0 1 PL		6
INF-25-Ma-FCP-ICPS.Lab	Industrial Cyber Physical Systems Lab			0/0/0/4 1 PL		6
INF-25-Ma-FVC-FCG	Foundations of Computer Graphics	2/2/0/0 1 PL				6
INF-25-Ma-FVC-FDV	Foundations of Data Visualisation	2/2/0/0 1 PL				6
INF-25-Ma-FVC-ML	Machine Learning	2/2/0/0 20 Stunden Pj 1 PL				6
INF-25-Ma-FVC-CV	Computer Vision	2/2/0/0 20 Stunden Pj 1 PL				6
INF-25-Ma-FVC-FVR	Foundations of Virtual Reality	2/2/0/0 1 PL				6
INF-25-Ma-FVC-CRC	Computer- and Robot-Assisted Surgery	2/2/0/0 1 PL				6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FVC-DLVFA	Deep Learning for Vision - Foundations and Applications	2/2/0/0 1 PL				6
INF-25-Ma-FVC-CRC.Lab	Computer- and Robot-Assisted Surgery Lab		0/0/0/4 1 PL			6
INF-25-Ma-FVC-RL	Robot Learning		2/2/0/0 1 PL			6
INF-25-Ma-FVC-GMA	Geometric Modelling and Animation		2/2/0/0 1 PL			6
INF-25-Ma-FVC-IIV	Interactive Information Visualisation		2/2/0/0 1 PL			6
INF-25-Ma-FVC-SciVis	Scientific Visualisation		2/2/0/0 1 PL			6
INF-25-Ma-FVC-CC	Creative Computing		0/0/0/4 1 PL			6
INF-25-Ma-FVC-TSP	Touch Sensing and Processing			2/2/0 1 PL		6
INF-25-Ma-FVC-PBG	Physics Based Graphics			2/2/0/0 1 PL		6
INF-25a-Ma-FVC-SC	Spatial Computing			0/0/0/4 1 PL		6
INF-25-Ma-FHI-UIE	User Interface Engineering	2/2/0/0 2 PL				6
INF-25-Ma-FHI-AUI	Advanced User Interfaces		2/0/2/0 2 PL			6
INF-25-Ma-FHI-ART	Art and Code		2/2/0/0 1 PL			6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FHI-OUT.Lab	OUTPUT.DD Live		0/0/0/4 1 PL			6
INF-25-Ma-FHI-IMIR	Interactive Multimedia Information Retrieval		2/2/0/0 1 PL			6
INF-25a-Ma-FHI-OUT.W	OUTPUT.DD Workshop			0/0/0/4 1 PL		6
INF-25a-Ma-FHI-PC	Philosophy and Computing			2/0/2/0 1 PL		6
INF-25-Ma-FHI-XIM	Experiments in Immersive Media			0/0/0/4 1 PL		6
INF-25-Ma-FTI-HPC	High Performance Computing	2/2/0/0 1 PL				6
INF-25-Ma-FTI-PACS	Performance Analysis of Computing Systems	2/2/0/0 1 PL				6
INF-25-Ma-FTI-EPA	Efficient Parallel Algorithms	2/2/0/0 1 PL				6
INF-25-Ma-FTI-HPGPU	Highly Parallel Programming of GPUs	2/1/0/1 1 PL				6
INF-25-Ma-FTI-ADS.Lab	Adaptive Dynamic Systems Lab		0/0/0/4 1 PL			6
INF-25-Ma-FTI-SOP	Structure and Operation Principle of Processors		2/1/0/1 1 PL			6
INF-25-Ma-FTI-DDA	Digitization and Data Analytics		2/2/0/0 1 PL			6
INF-25-Ma-FTI-EMA	Design and Programming of Embedded Multicore Architectures		2/2/0/0 1 PL			6
INF-25-Ma-FTI-LCTP	Linux Cluster in Theorie und Praxis		2/2/0/0 1 PL			6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FTI-ETI	Introduction to Computer Engineering			4/2/0/2 1 PL		12
INF-25-Ma-FTI-HMS	Hardware Modeling and Simulation			2/2/0/0 1 PL		6
INF-25-Ma-FTI-ACSR	Adaptive Computing Systems for Robotics		2/2/0/0 1 PL			6
INF-25-Ma-FTI-VirTe	Virtualization Techniques		3/1/0/0 1 PL			6
INF-25-Ma-ERS	Exploration of a Research Subject			40 Stunden Pj 1 PL		6
INF-25-Ma-NGR-AKU	Akustik Grundlagen ²⁾	2/1/0/1 1 PL				6
INF-25-Ma-NVE-AKU	Akustik Vertiefung – Virtuelle Realität ²⁾		2/0/0/0 30 Stunden Pj 1 PL			6
INF-25-Ma-NGR-CLM	Computational Laser Metrology Grundlagen ²⁾	2/1/0/1 2 PL				6
INF-25-Ma-NVE-CLM	Computational Laser Metrology Vertiefung ²⁾		2/1/0/1 2 PL			6
INF-25-Ma-NGR-GEO	Geoinformatik Grundlagen ²⁾	2/2/0/0 2 PL				6
INF-25-Ma-NVE-GEO	Geoinformatik Vertiefung ²⁾		0,5/1,5/0/0 1 PL			6
INF-25-Ma-NGR-MAT	Mathematik Grundlagen ²⁾	4/2/0/0 1 PL				6
INF-25-Ma-NVE-MAT	Mathematik Vertiefung ²⁾		4/2/0/0 1 PL			6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-NGR-PGB	Photogrammetrie Grundlagen ²⁾	2/2/0/0 1 PL				6
INF-25-Ma-NVE-PGB	Photogrammetrie Vertiefung ²⁾		2/2/0/0 1 PL			6
INF-25-Ma-NGR-PROD	Produktionstechnik Grundlagen – Fertigungstechnik und Fertigungsplanung ²⁾	4/1/0/0 2 PL				6
INF-25-Ma-NVE-PROD	Produktionstechnik Vertiefung – Fertigungstechnik und automatisierte Teilefertigung ²⁾		1/1/0/3 2 PL			6
INF-25-Ma-NGR-PSY	Psychologie Grundlagen ²⁾	4/0/0/0 1 PL				6
INF-25-Ma-NVE-PSY	Psychologie Vertiefung ²⁾		4/0/0/0 1 PL			6
INF-25-Ma-NGR-VWL	Volkswirtschaftslehre Grundlagen ²⁾	2/1/0/0 1 PL				6
INF-25-Ma-NVE-VWL	Volkswirtschaftslehre Vertiefung – Mikroökonomie ²⁾		2/1/0/0 1 SWS T 1 PL			6
INF-25-Ma-NGR-BWL	Betriebswirtschaftslehre Grundlagen ²⁾	3/1/0/0 1 SWS T 1 PL				6
INF-25-Ma-NVE-BWL	Betriebswirtschaftslehre Vertiefung ²⁾		3/0/0/0 1 PL			6
INF-25-Ma-NGR-BMT	Biomedizinische Technik Grundlagen ²⁾	2/0/1/0 1 PL				6
INF-25-Ma-NVE-BMT	Biomedizinische Technik – Klinische Vertiefung ²⁾		4/0/0/1 1 PL			6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
Distributed Systems Engineering Track						
Pflichtbereich						
INF-25-Ma-FSA-DS	Distributed Systems	2/2/0/0 1 PL				6
INF-25-Ma-FSA-SE	Systems Engineering	2/2/0/0 1 PL				6
INF-25-Ma-FSA-SDM	Scalable Data Management	2/2/0/0 1 PL				6
INF-25-Ma-FSP-DPF	Design Patterns and Frameworks	2/2/0/0 1 PL				6
INF-25-Ma-FSC-NSec	Network and Distributed Systems Security		2/2/0/0 2 PL			6
INF-25-Ma-FSA-AOS	Advanced Operating Systems		3/1/0/0 1 PL			6
Wahlpflichtbereich						
Auswahl von Modulen im Umfang von 36 Leistungspunkten.						
INF-25-Ma-FSA-IoT	IoT Communication	2/2/0/0 2 PL				6
INF-25-Ma-FSA-RNA	Advanced Computer Networks	2/2/0/0 1 PL				6
INF-25-Ma-FSP-SESAC	Self-Adaptive Software and Cobotics	2/2/0/0 1 PL				6
INF-25-Ma-FSA-OSC	Operating-System Construction		2/4/0/0 1 PL			6
INF-25-Ma-FCP-CMS	Cooperative Mobile Systems		2/2/0/0 1 PL			6

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FCP-C2X	Vehicular Networking		2/2/0/0 1 PL			6
INF-25-Ma-FSP-CBSE	Component-Based Software Engineering		2/2/0/0 1 PL			6
INF-25a-Ma-FSP-FPSS	Future-Proof Software Systems		2/2/0/0 1 PL			6
INF-25-Ma-FSA-IWA	Internet and Web Applications		2/2/0/0 1 PL			6
INF-25-Ma-FSA-WSN	Wireless Sensor Networks		2/2/0/0 1 PL			6
INF-25-Ma-FSC-CONF	Confidential Computing	2/2/0/0 1 PL				6
INF-25-Ma-FSC-FCDS	Foundations of Concurrent and Distributed Systems		4/0/0/0 1 PL			6
INF-25-Ma-FSC-FCDS.Lab	Concurrent and Distributed Systems Lab		0/0/0/4 1 PL			6
INF-25-Ma-FSC-SFT	Software Fault Tolerance		2/2/0/0 1 PL			6
INF-25-Ma-FTI-EMA	Design and Programming of Embedded Multicore Architectures		2/2/0/0 1 PL			6
INF-25-Ma-FTI-LCTP	Linux Cluster in Theorie und Praxis		2/2/0/0 1 PL			6
INF-25-Ma-FSA-Res	Resilient Systems		2/2/0/0 2 PL			6
INF-25-Ma-FSA-MKC	Microkernel Construction		2/2/0/0 1 PL			6
INF-25-Ma-FSA-STH	Schedulingtheorie		2/0/0/0 1 PL			3

Modul- Nummer	Modulname	WiSe 1. Semester	SoSe 2. Semester	WiSe 3. Semester (M)	SoSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FSA-EAMA	Engineering Adaptive Mobile Applications		2/2/0/0 1 PL			6
INF-25a-Ma-FSA-Dec	Decentralized Systems			2/2/0/0 2 PL		6
INF-25-Ma-FSA-RTS	Real-Time Systems			1/1/0/0 1 PL		3
INF-25-Ma-FSA-MOS	Microkernel-Based Operating Systems			2/4/0/0 1 PL		9
INF-25-Ma-FSA-IM	Internet Measurements			2/2/0/0 2 PL		6
INF-25-Ma-FSA-PET	Prediction and Estimation Techniques			2/2/0/0 1 PL		6
INF-25-Ma-FSC-SFT.Lab	Software Fault Tolerance Lab			0/0/0/4 1 PL		6
INF-25-Ma-FTI-ACSR	Adaptive Computing Systems for Robotics		2/2/0/0 1 PL			6
INF-25-Ma-FTI-HMS	Hardware Modeling and Simulation			2/2/0/0 1 PL		6
INF-25-Ma-FSP-MOST	Model-Driven Software Development in Technical Spaces			2/2/0/0 1 PL		6
INF-25-Ma-FSP-RETE	Requirements and Test Management			2/2/0/0 1 PL		6
Abschlussarbeit³⁾				1 LP	28 LP	29
Kolloquium					1 LP	1
LP		30	29	32	29	120

¹⁾ Alternativ, nach Wahl der bzw. des Studierenden, Lehrveranstaltungen im Umfang von 4 SWS inklusive der gemäß dem Katalog studium generale vorgegebenen Prüfungsleistungen.

²⁾ Die Module können jeweils nur in Kombination gemäß Anlage 2 der Prüfungsordnung gewählt werden, wobei nur eine Kombinationsmöglichkeit gewählt werden kann.

³⁾ Die Ausgabe des Themas der Abschlussarbeit erfolgt am Ende des dritten Semesters.

WiSe	Wintersemester	SoSe	Sommersemester
SWS	Semesterwochenstunden	LP	Leistungspunkte
M	Mobilitätsfenster gemäß § 6 Absatz 1 Satz 3	PL	Prüfungsleistung(en)
V	Vorlesungen	Ü	Übungen
S	Seminare	Pj	Projekte
P	Praktika	T	Tutorien
SK	Sprachkurse		

Studienablaufplan Beginn im Sommersemester

mit Art und Umfang der Lehrveranstaltungen in SWS sowie erforderlichen Leistungen, deren Umfang, Art und Ausgestaltung den Modulbeschreibungen zu entnehmen sind.

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
Pflichtbereich						
INF-25-MA-FP	Forschungsprojekt			100 Stunden Pj 1 PL		13
Wahlpflichtbereich						
Allgemeine Qualifikation Auswahl 1 aus 75 Modulen.						
Sprachausbildung: siehe Sprachkatalog			4 SWS SK 1 PL			5
INF-25-MINF	Methoden der Informatiklehre		4 SWS Pj 1 PL			5
INF-25-Ma-AQUA	Studium generale		x/x/x/x ¹⁾ PL			5
Tracks Auswahl von 1 aus 2 Tracks.						
Open Track						
Wahlpflichtbereich						
Fachgebiete Auswahl von 3 aus 8 Fachgebieten jeweils mit Modulen im Umfang von 12 LP, wobei die Module nur gewählt werden können, wenn diese nicht bereits als Module der Ergänzung gewählt wurden.						
Fachgebiet Theoretical Computer Science and Symbolic Artificial Intelligence						
INF-25-Ma-FTK-BMOEL	Building and Maintaining Ontologies in the Description Logic EL	2/2/0/0 1 PL				6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FTK-AD2	Algorithmen und Datenstrukturen 2		4/2/0/0 1 PL			9
INF-25-Ma-FTK-KM	Knowledge Models		2/2/0/0 1 PL			6
INF-25-Ma-FTK-FLP	Foundations of Logic Programming		2/0/0/0 1 PL			3
INF-25-Ma-FTK-PT	Proof Theory and Sequent Systems		2/0/0/0 1 PL			3
INF-25-Ma-FTK-AD	Advanced Datastructures		2/2/0/0 1 PL			6
INF-25-Ma-FTK-AALAB	Advanced Algorithms Lab		0/0/0/4 1 PL			6
INF-25-Ma-FTK-MC	Model Checking		4/4/0/0 1 PL			12
INF-25-Ma-FTK-APSS	Advanced Problem Solving and Search		2/2/0/0 1 PL			6
INF-25-Ma-FTK-CT	Complexity Theory		4/2/0/0 1 PL			9
INF-25-Ma-FTK-KR	Foundations of Knowledge Representation		2/2/0/0 1 PL			6
INF-25-Ma-FTK-MoL	Modal Logic		2/2/0/0 1 PL			6
INF-25-Ma-FTK-AL	Advanced Logics			4/2/0/0 1 PL		9
INF-25-Ma-FTK-EXR	Introduction to Existential Rules			2/0/0/0 1 PL		3
INF-25-Ma-FTK-FCA	Introduction to Formal Concept Analysis			2/2/0/0 1 PL		6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FTK-GaT	Algorithmic Game Theory			2/2/0/0 1 PL		6
INF-25-Ma-FTK-GrT	Algorithmic Graph Theory			4/2/0/0 1 PL		9
INF-25-Ma-FTK-RA	Randomized Algorithms			4/2/0/0 1 PL		9
INF-25-Ma-FTK-Sem	Seminar Theoretical Computer Science and Symbolic Artificial Intelligence			0/0/2/0 1 PL		3
Fachgebiet Software Technology and Programming Languages						
INF-25-Ma-FSP-CB	Compilerbau		2/2/0/0 1 PL			6
INF-25-Ma-FSP-SESAC	Self-Adaptive Software and Cobotics		2/2/0/0 1 PL			6
INF-25-Ma-FSP-FCPL	Foundations of Certified Programming Language and Compiler Design		2/2/0/0 1 PL			6
INF-25-Ma-FSP-HICSOS	Software Engineering for Highly Configurable Software Systems		2/2/0/0 1 PL			6
INF-25-Ma-FSP-SAAB	Software as a Business		2/2/0/0 1 PL			6
INF-25-Ma-FSP-SMQS	Software Management and Quality Assurance			2/2/0/0 1 PL		6
INF-25-Ma-FSP-CBSE	Component-Based Software Engineering			2/2/0/0 1 PL		6
INF-25-Ma-FSP-AutoSOFT	Automotive Software Engineering			2/0/0/0 1 PL		3

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FSP-FSWT	Advanced Software Engineering		2/2/0/0 1 PL			6
INF-25-Ma-FSP-RETE	Requirements and Test Management		2/2/0/0 1 PL			6
INF-25-Ma-FSP-DPF	Design Patterns and Frameworks		2/2/0/0 1 PL			6
INF-25-Ma-FSP-AutoSAFE	Automotive Software Safety		2/0/0/0 1 PL			3
INF-25-Ma-FSP-MOST	Model-Driven Software Development in Technical Spaces		2/2/0/0 1 PL			6
INF-25a-Ma-FSP-FPSS	Future-Proof Software Systems			2/2/0/0 1 PL		6
Fachgebiet Secure Computing						
INF-25-Ma-FSC-PET	Privacy-Enhancing Technologies	2/2/0/0 1 PL				6
INF-25-Ma-FSC-NSec	Network and Distributed Systems Security	2/2/0/0 2 PL				6
INF-25-Ma-FSC-CONF	Confidential Computing		2/2/0/0 1 PL			6
INF-25-Ma-FSC-SFT.Lab	Software Fault Tolerance Lab		0/0/0/4 1 PL			6
INF-25-Ma-FSC-ASec	Sicherheit in Anwendungen		2/0/0/0 1 PL			3
INF-25-Ma-FSC-FCDS	Foundations of Concurrent and Distributed Systems			4/0/0/0 1 PL		6
INF-25-Ma-FSC-SFT	Software Fault Tolerance			2/2/0/0 1 PL		6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FSC- FCDS.Lab	Concurrent and Distributed Systems Lab			0/0/0/4 1 PL		6
INF-25-Ma-FSC- SSL	Systems Security Lab			2/2/0/0 1 PL		6
INF-25-Ma-FSC- CSec	IT-Sicherheit in Cloud Computing			3/0/0/0 1 PL		3
Fachgebiet Systems Architecture						
INF-25-Ma-FSA- WSN	Wireless Sensor Networks	2/2/0/0 1 PL				6
INF-25-Ma-FSA- IWA	Internet and Web Applications	2/2/0/0 1 PL				6
INF-25-Ma-FSA- Res	Resilient Systems	2/2/0/0 2 PL				6
INF-25-Ma-FSA- EAMA	Engineering Adaptive Mobile Appli- cations	2/2/0/0 1 PL				6
INF-25-Ma-FSA- SE	Systems Engineering		2/2/0/0 1 PL			6
INF-25a-Ma- FSA-SDE	Scalable Data Engineering		2/2/0/0 1 PL			6
INF-25-Ma-FSA- SDM	Scalable Data Management		2/2/0/0 1 PL			6
INF-25-Ma-FSA- DS	Distributed Systems		2/2/0/0 1 PL			6
INF-25-Ma-FSA- SCC	Service and Cloud Computing		2/2/0/0 1 PL			6
INF-25-Ma-FSA- IoT	IoT Communication		2/2/0/0 2 PL			6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FSA-RNA	Advanced Computer Networks		2/2/0/0 1 PL			6
INF-25-Ma-FSA-MOS	Microkernel-Based Operating Systems		2/4/0/0 1 PL			9
INF-25-Ma-FSA-IM	Internet Measurements		2/2/0/0 2 PL			6
INF-25-Ma-FSA-PET	Prediction and Estimation Techniques		2/2/0/0 1 PL			6
INF-25a-Ma-FSA-Dec	Decentralized Systems		2/2/0/0 2 PL			6
INF-25-Ma-FSA-RTS	Real-Time Systems		1/1/0/0 1 PL			3
INF-25-Ma-FSA-AOS	Advanced Operating Systems			3/1/0/0 1 PL		6
INF-25-Ma-FSA-OSC	Operating-System Construction			2/4/0/0 1 PL		6
INF-25-Ma-FSA-MKC	Microkernel Construction			2/2/0/0 1 PL		6
INF-25-Ma-FSA-STH	Schedulingtheorie			2/0/0/0 1 PL		3
Fachgebiet Cyber Physical Systems						
INF-25-Ma-FCP-CMS	Cooperative Mobile Systems	2/2/0/0 1 PL				6
INF-25-Ma-FCP-CPS	Foundations of Cyber Physical Systems		2/2/0/0 1 PL			6
INF-25-Ma-FCP-IIoT	Industrial Internet of Things		2/0/0/2 1 PL			6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FCP-EMIN	Engineering and Management of Industrial Networks		3/1/0/0 1 PL			6
INF-25-Ma-FCP-ICPS.Lab	Industrial Cyber Physical Systems Lab		0/0/0/4 1 PL			6
INF-25-Ma-FCP-IC	Industrial Communications			2/2/0/0 1 PL		6
INF-25-Ma-FCP-CPSM.Lab1	Cyber Physical Systems Modeling Lab			0/0/0/4 1 PL		6
INF-25-Ma-FCP-C2X	Vehicular Networking			2/2/0/0 1 PL		6
INF-25-Ma-FCP-MA	Model-Driven Automation			3/1/0/0 1 PL		6
INF-25-Ma-FCP-CPSM.Lab2	Cyber Physical Systems Modeling Lab Advanced			0/0/0/4 1 PL		6
Fachgebiet Visual Computing and Machine Learning						
INF-25-Ma-FVC-RL	Robot Learning	2/2/0/0 1 PL				6
INF-25-Ma-FVC-FCG	Foundations of Computer Graphics		2/2/0/0 1 PL			6
INF-25-Ma-FVC-FDV	Foundations of Data Visualisation		2/2/0/0 1 PL			6
INF-25-Ma-FVC-ML	Machine Learning		2/2/0/0 20 Stunden Pj 1 PL			6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FVC-CV	Computer Vision		2/2/0/0 20 Stunden Pj 1 PL			6
INF-25a-Ma-FTK-LLM	Large Language Models		2/2/0/0 1 PL			6
INF-25-Ma-FVC-TSP	Touch Sensing and Processing		2/2/0 1 PL			6
INF-25-Ma-FVC-PBG	Physics Based Graphics		2/2/0/0 1 PL			6
INF-25-Ma-FVC-FVR	Foundations of Virtual Reality		2/2/0/0 1 PL			6
INF-25-Ma-FVC-CRC	Computer- and Robot-Assisted Surgery		2/2/0/0 1 PL			6
INF-25a-Ma-FVC-SC	Spatial Computing		0/0/0/4 1 PL			6
INF-25-Ma-FVC-DLVFA	Deep Learning for Vision - Foundations and Applications		2/2/0/0 1 PL			6
INF-25-Ma-FVC-GMA	Geometric Modelling and Animation			2/2/0/0 1 PL		6
INF-25-Ma-FVC-IIV	Interactive Information Visualisation			2/2/0/0 1 PL		6
INF-25-Ma-FVC-SciVis	Scientific Visualisation			2/2/0/0 1 PL		6
INF-25-Ma-FVC-CC	Creative Computing			0/0/0/4 1 PL		6
INF-25-Ma-FHI-ART	Art and Code			2/2/0/0 1 PL		6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FVC-CRC.Lab	Computer- and Robot-Assisted Surgery Lab			0/0/0/4 1 PL		6
Fachgebiet Human-Computer Interaction and Interactive Media						
INF-25-Ma-FHI-OUT.Lab	OUTPUT.DD Live	0/0/0/4 1 PL				6
INF-25-Ma-FHI-IMIR	Interactive Multimedia Information Retrieval	2/2/0/0 1 PL				6
INF-25-Ma-FHI-UIE	User Interface Engineering		2/2/0/0 2 PL			6
INF-25a-Ma-FHI-OUT.W	OUTPUT.DD Workshop		0/0/0/4 1 PL			6
INF-25a-Ma-FHI-PC	Philosophy and Computing		2/0/2/0 1 PL			6
INF-25-Ma-FHI-XIM	Experiments in Immersive Media		0/0/0/4 1 PL			6
INF-25-Ma-FHI-AUI	Advanced User Interfaces			2/0/2/0 2 PL		6
Fachgebiet Computer Engineering and High Performance Computing						
INF-25-Ma-FTI-ADS.Lab	Adaptive Dynamic Systems Lab	0/0/0/4 1 PL				6
INF-25-Ma-FTI-SOP	Structure and Operation Principle of Processors	2/1/0/1 1 PL				6
INF-25-Ma-FTI-DDA	Digitization and Data Analytics	2/2/0/0 1 PL				6
INF-25-Ma-FTI-EMA	Design and Programming of Embedded Multicore Architectures	2/2/0/0 1 PL				6
INF-25-Ma-FTI-LCTP	Linux Cluster in Theorie und Praxis	2/2/0/0 1 PL				6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FTI-HPC	High Performance Computing		2/2/0/0 1 PL			6
INF-25-Ma-FTI-PACS	Performance Analysis of Computing Systems		2/2/0/0 1 PL			6
INF-25-Ma-FTI-EPA	Efficient Parallel Algorithms		2/2/0/0 1 PL			6
INF-25-Ma-FTI-HPGPU	Highly Parallel Programming of GPUs		2/1/0/1 1 PL			6
INF-25-Ma-FTI-ETI	Introduction to Computer Engineering		4/2/0/2 1 PL			12
INF-25-Ma-FTI-HMS	Hardware Modeling and Simulation		2/2/0/0 1 PL			6
INF-25-Ma-FTI-ACSR	Adaptive Computing Systems for Robotics			2/2/0/0 1 PL		6
INF-25-Ma-FTI-VirTe	Virtualization Techniques			3/1/0/0 1 PL		6
Ergänzung Auswahl von Modulen im Umfang von insgesamt 36 Leistungspunkten, wobei diese nur gewählt werden können, wenn sie nicht bereits als Module der Fachgebiete gewählt wurden.						
INF-25-Ma-FTK-BMOEL	Building and Maintaining Ontologies in the Description Logic EL	2/2/0/0 1 PL				6
INF-25-Ma-FTK-AD2	Algorithmen und Datenstrukturen 2		4/2/0/0 1 PL			9
INF-25-Ma-FTK-KM	Knowledge Models		2/2/0/0 1 PL			6
INF-25-Ma-FTK-FLP	Foundations of Logic Programming		2/0/0/0 1 PL			3

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FTK-PT	Proof Theory and Sequent Systems		2/0/0/0 1 PL			3
INF-25-Ma-FTK-AD	Advanced Datastructures		2/2/0/0 1 PL			6
INF-25-Ma-FTK-AALAB	Advanced Algorithms Lab		0/0/0/4 1 PL			6
INF-25-Ma-FTK-MC	Model Checking		4/4/0/0 1 PL			12
INF-25-Ma-FTK-APSS	Advanced Problem Solving and Search		2/2/0/0 1 PL			6
INF-25-Ma-FTK-CT	Complexity Theory		4/2/0/0 1 PL			9
INF-25-Ma-FTK-KR	Foundations of Knowledge Representation		2/2/0/0 1 PL			6
INF-25-Ma-FTK-MoL	Modal Logic		2/2/0/0 1 PL			6
INF-25-Ma-FTK-AL	Advanced Logics			4/2/0/0 1 PL		9
INF-25-Ma-FTK-EXR	Introduction to Existential Rules			2/0/0/0 1 PL		3
INF-25-Ma-FTK-FCA	Introduction to Formal Concept Analysis			2/2/0/0 1 PL		6
INF-25-Ma-FTK-GaT	Algorithmic Game Theory			2/2/0/0 1 PL		6
INF-25-Ma-FTK-GrT	Algorithmic Graph Theory			4/2/0/0 1 PL		9
INF-25-Ma-FTK-RA	Randomized Algorithms			4/2/0/0 1 PL		9

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FTK-Sem	Seminar Theoretical Computer Science and Symbolic Artificial Intelligence			0/0/2/0 1 PL		3
INF-25-Ma-FSP-CB	Compilerbau		2/2/0/0 1 PL			6
INF-25-Ma-FSP-SESAC	Self-Adaptive Software and Cobotics		2/2/0/0 1 PL			6
INF-25-Ma-FSP-FCPL	Foundations of Certified Programming Language and Compiler Design		2/2/0/0 1 PL			6
INF-25-Ma-FSP-HICSOS	Software Engineering for Highly Configurable Software Systems		2/2/0/0 1 PL			6
INF-25-Ma-FSP-SAAB	Software as a Business		2/2/0/0 1 PL			6
INF-25-Ma-FSP-FSWT	Advanced Software Engineering		2/2/0/0 1 PL			6
INF-25-Ma-FSP-RETE	Requirements and Test Management		2/2/0/0 1 PL			6
INF-25-Ma-FSP-DPF	Design Patterns and Frameworks		2/2/0/0 1 PL			6
INF-25-Ma-FSP-AutoSAFE	Automotive Software Safety		2/0/0/0 1 PL			3
INF-25-Ma-FSP-MOST	Model-Driven Software Development in Technical Spaces		2/2/0/0 1 PL			6
INF-25-Ma-FSP-SMQS	Software Management and Quality Assurance			2/2/0/0 1 PL		6
INF-25-Ma-FSP-CBSE	Component-Based Software Engineering			2/2/0/0 1 PL		6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FSP-AutoSOFT	Automotive Software Engineering			2/0/0/0 1 PL		3
INF-25a-Ma-FSP-FPSS	Future-Proof Software Systems			2/2/0/0 1 PL		6
INF-25-Ma-FSC-PET	Privacy-Enhancing Technologies	2/2/0/0 1 PL				6
INF-25-Ma-FSC-NSec	Network and Distributed Systems Security	2/2/0/0 2 PL				6
INF-25-Ma-FSC-CONF	Confidential Computing		2/2/0/0 1 PL			6
INF-25-Ma-FSC-SFT.Lab	Software Fault Tolerance Lab		0/0/0/4 1 PL			6
INF-25-Ma-FSC-FCDS	Foundations of Concurrent and Distributed Systems			4/0/0/0 1 PL		6
INF-25-Ma-FSC-SFT	Software Fault Tolerance			2/2/0/0 1 PL		6
INF-25-Ma-FSC-FCDS.Lab	Concurrent and Distributed Systems Lab			0/0/0/4 1 PL		6
INF-25-Ma-FSC-SSL	Systems Security Lab			2/2/0/0 1 PL		6
INF-25-Ma-FSA-WSN	Wireless Sensor Networks	2/2/0/0 1 PL				6
INF-25-Ma-FSA-IWA	Internet and Web Applications	2/2/0/0 1 PL				6
INF-25-Ma-FSA-Res	Resilient Systems	2/2/0/0 2 PL				6
INF-25-Ma-FSA-EAMA	Engineering Adaptive Mobile Applications	2/2/0/0 1 PL				6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FSA-SE	Systems Engineering		2/2/0/0 1 PL			6
INF-25a-Ma-FSA-SDE	Scalable Data Engineering		2/2/0/0 1 PL			6
INF-25-Ma-FSA-SDM	Scalable Data Management		2/2/0/0 1 PL			6
INF-25-Ma-FSA-DS	Distributed Systems		2/2/0/0 1 PL			6
INF-25-Ma-FSA-SCC	Service and Cloud Computing		2/2/0/0 1 PL			6
INF-25-Ma-FSA-IoT	IoT Communication		2/2/0/0 2 PL			6
INF-25-Ma-FSA-RNA	Advanced Computer Networks		2/2/0/0 1 PL			6
INF-25-Ma-FSA-MOS	Microkernel-Based Operating Systems		2/4/0/0 1 PL			9
INF-25-Ma-FSA-IM	Internet Measurements		2/2/0/0 2 PL			6
INF-25-Ma-FSA-PET	Prediction and Estimation Techniques		2/2/0/0 1 PL			6
INF-25a-Ma-FSA-Dec	Decentralized Systems		2/2/0/0 2 PL			6
INF-25-Ma-FSA-RTS	Real-Time Systems		1/1/0/0 1 PL			3
INF-25-Ma-FSA-AOS	Advanced Operating Systems			3/1/0/0 1 PL		6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FSA-OSC	Operating-System Construction			2/4/0/0 1 PL		6
INF-25-Ma-FSA-MKC	Microkernel Construction			2/2/0/0 1 PL		6
INF-25-Ma-FSA-STH	Schedulingtheorie			2/0/0/0 1 PL		3
INF-25-Ma-FCP-CMS	Cooperative Mobile Systems	2/2/0/0 1 PL				6
INF-25-Ma-FCP-CPS	Foundations of Cyber Physical Systems		2/2/0/0 1 PL			6
INF-25-Ma-FCP-IIoT	Industrial Internet of Things		2/0/0/2 1 PL			6
INF-25-Ma-FCP-EMIN	Engineering and Management of Industrial Networks		3/1/0/0 1 PL			6
INF-25-Ma-FCP-ICPS.Lab	Industrial Cyber Physical Systems Lab		0/0/0/4 1 PL			6
INF-25-Ma-FCP-IC	Industrial Communications			2/2/0/0 1 PL		6
INF-25-Ma-FCP-CPSM.Lab1	Cyber Physical Systems Modeling Lab			0/0/0/4 1 PL		6
INF-25-Ma-FCP-C2X	Vehicular Networking			2/2/0/0 1 PL		6
INF-25-Ma-FCP-MA	Model-Driven Automation			3/1/0/0 1 PL		6
INF-25-Ma-FCP-CPSM.Lab2	Cyber Physical Systems Modeling Lab Advanced			0/0/0/4 1 PL		6
INF-25-Ma-FVC-RL	Robot Learning	2/2/0/0 1 PL				6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FVC-FCG	Foundations of Computer Graphics		2/2/0/0 1 PL			6
INF-25-Ma-FVC-FDV	Foundations of Data Visualisation		2/2/0/0 1 PL			6
INF-25-Ma-FVC-ML	Machine Learning		2/2/0/0 20 Stunden Pj 1 PL			6
INF-25-Ma-FVC-CV	Computer Vision		2/2/0/0 20 Stunden Pj 1 PL			6
INF-25a-Ma-FTK-LLM	Large Language Models		2/2/0/0 1 PL			6
INF-25-Ma-FVC-TSP	Touch Sensing and Processing		2/2/0 1 PL			6
INF-25-Ma-FVC-PBG	Physics Based Graphics		2/2/0/0 1 PL			6
INF-25-Ma-FVC-FVR	Foundations of Virtual Reality		2/2/0/0 1 PL			6
INF-25a-Ma-FVC-SC	Spatial Computing		0/0/0/4 1 PL			6
INF-25-Ma-FVC-CRC	Computer- and Robot-Assisted Surgery		2/2/0/0 1 PL			6
INF-25-Ma-FVC-DLVFA	Deep Learning for Vision - Foundations and Applications		2/2/0/0 1 PL			6
INF-25-Ma-FVC-CRC.Lab	Computer- and Robot-Assisted Surgery Lab			0/0/0/4 1 PL		6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FVC-GMA	Geometric Modelling and Animation			2/2/0/0 1 PL		6
INF-25-Ma-FVC-IIV	Interactive Information Visualisation			2/2/0/0 1 PL		6
INF-25-Ma-FVC-SciVis	Scientific Visualisation			2/2/0/0 1 PL		6
INF-25-Ma-FVC-CC	Creative Computing			0/0/0/4 1 PL		6
INF-25-Ma-FHI-OUT.Lab	OUTPUT.DD Live	0/0/0/4 1 PL				6
INF-25-Ma-FHI-IMIR	Interactive Multimedia Information Retrieval	2/2/0/0 1 PL				6
INF-25-Ma-FHI-UIE	User Interface Engineering		2/2/0/0 2 PL			6
INF-25a-Ma-FHI-OUT.W	OUTPUT.DD Workshop		0/0/0/4 1 PL			6
INF-25a-Ma-FHI-PC	Philosophy and Computing		2/0/2/0 1 PL			6
INF-25-Ma-FHI-XIM	Experiments in Immersive Media		0/0/0/4 1 PL			6
INF-25-Ma-FHI-ART	Art and Code			2/2/0/0 1 PL		6
INF-25-Ma-FHI-AUI	Advanced User Interfaces			2/0/2/0 2 PL		6
INF-25-Ma-FTI-ADS.Lab	Adaptive Dynamic Systems Lab	0/0/0/4 1 PL				6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FTI-SOP	Structure and Operation Principle of Processors	2/1/0/1 1 PL				6
INF-25-Ma-FTI-DDA	Digitization and Data Analytics	2/2/0/0 1 PL				6
INF-25-Ma-FTI-EMA	Design and Programming of Embedded Multicore Architectures	2/2/0/0 1 PL				6
INF-25-Ma-FTI-LCTP	Linux Cluster in Theorie und Praxis	2/2/0/0 1 PL				6
INF-25-Ma-FTI-HPC	High Performance Computing		2/2/0/0 1 PL			6
INF-25-Ma-FTI-PACS	Performance Analysis of Computing Systems		2/2/0/0 1 PL			6
INF-25-Ma-FTI-EPA	Efficient Parallel Algorithms		2/2/0/0 1 PL			6
INF-25-Ma-FTI-HPGPU	Highly Parallel Programming of GPUs		2/1/0/1 1 PL			6
INF-25-Ma-FTI-ETI	Introduction to Computer Engineering		4/2/0/2 1 PL			12
INF-25-Ma-FTI-HMS	Hardware Modeling and Simulation		2/2/0/0 1 PL			6
INF-25-Ma-FTI-ACSR	Adaptive Computing Systems for Robotics			2/2/0/0 1 PL		6
INF-25-Ma-FTI-VirTe	Virtualization Techniques			3/1/0/0 1 PL		6
INF-25-Ma-ERS	Exploration of a Research Subject			40 Stunden Pj 1 PL		6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-NGR-AKU	Akustik Grundlagen ²⁾		2/1/0/1 1 PL			6
INF-25-Ma-NVE-AKU	Akustik Vertiefung – Virtuelle Realität ²⁾			2/0/0/0 30 Stunden Pj 1 PL		6
INF-25-Ma-NGR-CLM	Computational Laser Metrology Grundlagen ²⁾		2/1/0/1 2 PL			6
INF-25-Ma-NVE-CLM	Computational Laser Metrology Vertiefung ²⁾			2/1/0/1 2 PL		6
INF-25-Ma-NGR-GEO	Geoinformatik Grundlagen ²⁾		2/2/0/0 2 PL			6
INF-25-Ma-NVE-GEO	Geoinformatik Vertiefung ²⁾			0,5/1,5/0/0 1 PL		6
INF-25-Ma-NGR-MAT	Mathematik Grundlagen ²⁾		4/2/0/0 1 PL			6
INF-25-Ma-NVE-MAT	Mathematik Vertiefung ²⁾			4/2/0/0 1 PL		6
INF-25-Ma-NGR-PROD	Produktionstechnik Grundlagen – Fertigungstechnik und Fertigungsplanung ²⁾		4/1/0/0 2 PL			6
INF-25-Ma-NVE-PROD	Produktionstechnik Vertiefung – Fertigungstechnik und automatisierte Teilefertigung ²⁾			1/1/0/3 2 PL		6
INF-25-Ma-NGR-PSY	Psychologie Grundlagen ²⁾		4/0/0/0 1 PL			6
INF-25-Ma-NVE-PSY	Psychologie Vertiefung ²⁾			4/0/0/0 1 PL		6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-NGR-VWL	Volkswirtschaftslehre Grundlagen ²⁾		2/1/0/0 1 PL			6
INF-25-Ma-NVE-VWL	Volkswirtschaftslehre Vertiefung – Mikroökonomie ²⁾			2/1/0/0 1 SWS T 1 PL		6
INF-25-Ma-NGR-BWL	Betriebswirtschaftslehre Grundlagen ²⁾		3/1/0/0 1 SWS T 1 PL			6
INF-25-Ma-NVE-BWL	Betriebswirtschaftslehre Vertiefung ²⁾			3/0/0/0 1 PL		6
INF-25-Ma-NGR-BMT	Biomedizinische Technik Grundlagen ²⁾		2/0/1/0 1 PL			6
INF-25-Ma-NVE-BMT	Biomedizinische Technik – Klinische Vertiefung ²⁾			4/0/0/1 1 PL		6
INF-25-Ma-NGR-PGB	Photogrammetrie Grundlagen ²⁾		2/2/0/0 1 PL			6
INF-25-Ma-NVE-PGB	Photogrammetrie Vertiefung ²⁾			2/2/0/0 1 PL		6
Distributed Systems Engineering Track						
Pflichtbereich						
INF-25-Ma-FSC-NSec	Network and Distributed Systems Security	2/2/0/0 2 PL				6
INF-25-Ma-FSA-AOS	Advanced Operating Systems	3/1/0/0 1 PL				6
INF-25-Ma-FSA-DS	Distributed Systems		2/2/0/0 1 PL			6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FSA-SE	Systems Engineering		2/2/0/0 1 PL			6
INF-25-Ma-FSA-SDM	Scalable Data Management		2/2/0/0 1 PL			6
INF-25-Ma-FSP-DPF	Design Patterns and Frameworks		2/2/0/0 1 PL			6
Wahlpflichtbereich						
Auswahl von Modulen im Umfang von 36 Leistungspunkten.						
INF-25-Ma-FSA-IWA	Internet and Web Applications	2/2/0/0 1 PL				6
INF-25-Ma-FSA-WSN	Wireless Sensor Networks	2/2/0/0 1 PL				6
INF-25-Ma-FSA-Res	Resilient Systems	2/2/0/0 2 PL				6
INF-25-Ma-FSA-EAMA	Engineering Adaptive Mobile Applications	2/2/0/0 1 PL				6
INF-25-Ma-FSA-IoT	IoT Communication		2/2/0/0 2 PL			6
INF-25-Ma-FSA-RNA	Advanced Computer Networks		2/2/0/0 1 PL			6
INF-25a-Ma-FSA-Dec	Decentralized Systems		2/2/0/0 2 PL			6
INF-25-Ma-FSA-RTS	Real-Time Systems		1/1/0/0 1 PL			3
INF-25-Ma-FSA-MOS	Microkernel-Based Operating Systems		2/4/0/0 1 PL			9
INF-25-Ma-FSA-IM	Internet Measurements		2/2/0/0 2 PL			6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FSA-PET	Prediction and Estimation Techniques		2/2/0/0 1 PL			6
INF-25-Ma-FSA-OSC	Operating-System Construction			2/4/0/0 1 PL		6
INF-25-Ma-FSA-MKC	Microkernel Construction			2/2/0/0 1 PL		6
INF-25-Ma-FSA-STH	Schedulingtheorie			2/0/0/0 1 PL		3
INF-25-Ma-FSC-ASec	Sicherheit in Anwendungen		2/0/0/0 1 PL			3
INF-25-Ma-FSC-CONF	Confidential Computing		2/2/0/0 1 PL			6
INF-25-Ma-FSC-SFT.Lab	Software Fault Tolerance Lab		0/0/0/4 1 PL			6
INF-25-Ma-FSC-FCDS	Foundations of Concurrent and Distributed Systems			4/0/0/0 1 PL		6
INF-25-Ma-FSC-FCDS.Lab	Concurrent and Distributed Systems Lab			0/0/0/4 1 PL		6
INF-25-Ma-FSC-SFT	Software Fault Tolerance			2/2/0/0 1 PL		6
INF-25-Ma-FSC-CSec	IT-Sicherheit in Cloud Computing			3/0/0/0 1 PL		3
INF-25-Ma-FSP-SESAC	Self-Adaptive Software and Cobotics		2/2/0/0 1 PL			6
INF-25-Ma-FSP-MOST	Model-Driven Software Development in Technical Spaces		2/2/0/0 1 PL			6
INF-25-Ma-FSP-RETE	Requirements and Test Management		2/2/0/0 1 PL			6

Modul- Nummer	Modulname	SoSe 1. Semester	WiSe 2. Semester	SoSe 3. Semester (M)	WiSe 4. Semester	LP
		V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	V/Ü/S/P	
INF-25-Ma-FSP-CBSE	Component-Based Software Engineering			2/2/0/0 1 PL		6
INF-25a-Ma-FSP-FPSS	Future-Proof Software Systems			2/2/0/0 1 PL		6
INF-25-Ma-FCP-CMS	Cooperative Mobile Systems	2/2/0/0 1 PL				6
INF-25-Ma-FCP-C2X	Vehicular Networking			2/2/0/0 1 PL		6
INF-25-Ma-FTI-EMA	Design and Programming of Embedded Multicore Architectures	2/2/0/0 1 PL				6
INF-25-Ma-FTI-LCTP	Linux Cluster in Theorie und Praxis	2/2/0/0 1 PL				6
INF-25-Ma-FTI-HMS	Hardware Modeling and Simulation		2/2/0/0 1 PL			6
INF-25-Ma-FTI-ACSR	Adaptive Computing Systems for Robotics			2/2/0/0 1 PL		6
Abschlussarbeit ³⁾				1 LP	28 LP	29
Kolloquium					1 LP	1
LP		30	29	32	29	120

¹⁾ Alternativ, nach Wahl der bzw. des Studierenden, Lehrveranstaltungen im Umfang von 4 SWS inklusive der gemäß dem Katalog studium generale vorgegebenen Prüfungsleistungen.

²⁾ Die Module können jeweils nur in Kombination gemäß Anlage 2 der Prüfungsordnung gewählt werden, wobei nur eine Kombinationsmöglichkeit gewählt werden kann.

³⁾ Die Ausgabe des Themas der Abschlussarbeit erfolgt am Ende des dritten Semesters.

WiSe Wintersemester

SWS Semesterwochenstunden

M Mobilitätsfenster gemäß § 6 Absatz 1 Satz 3

SoSe Sommersemester

LP Leistungspunkte

PL Prüfungsleistung(en)

V	Vorlesungen
S	Seminare
P	Praktika
SK	Sprachkurse

Ü	Übungen
Pj	Projekte
T	Tutorien