

**Master Artificial Intelligence
Minor "Artificial Intelligence in Biomedical Engineering" (AIBE)**

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Course Title	Acronym	Lecturer/s	Lab/s	Language	Type	WS/SS	SWS	ECTS	Exam Details
Module Title									
AI in medical robotics									
AI in Medical Robotics	AIMedRob	Mathis-Ullrich	SPARC	Eng	Lecture + Exercises	WS	2+2	5	written exam, 60min
Algorithmische Bioinformatik									
Algorithmic Bioinformatics	ALGBIOINF	Blumenthal	BIONETS	Eng	Lecture + Exercises	WS	2+2	5	oral exam, 30min
Biomedizinische Signalanalyse									
Biomedizinische Signalanalyse/ Biomedical Signal Analysis	BioSig	Eskofier/Jäger/Krauβ	MAD	Eng	Lecture + Exercises	WS	2+2	5	written exam, 90min
Cognitive Neuroscience for AI Developers									
Cognitive Neuroscience for AI Developers	CNAID	Kist/Krauβ/Maier/Schilling	ANKI & LME - Pattern Recognition Lab & ExpHNO - Experimental Otorhinolaryngology	Eng	Lecture	SS	4	5	written exam, 90min
Computational Magnetic Resonance Imaging									
Computational Magnetic Resonance Imaging	Computational MRI	Knoll	CIL	Eng	Lecture + Exercises	WS	2+2	5	oral exam, 30min
Computational Neurotechnology / Numerische Neurotechnologie									
Computational Neurotechnology	COMPNEURO	Reichenbach	NEUROTECH	Eng	Lecture + Exercises	SS	2+2	5	written exam, 60min
Human-Robot Co-Adaptation									
Human-Robot Co-Adaptation	HRC	Castellini/Thürauf	AIROB	Eng	Lecture + Exercises	WS	2+2	5	written exam, 60min
Intent Detection and Feedback									
Intent Detection and Feedback	IDF	Castellini/Thürauf	AIROB	Eng	Lecture + Exercises	SS	2+2	5	written exam, 60min
Interfacing the Neuromuscular system: Applications for Human/Machine Interfaces and Neurophysiology									
Interfacing the Neuromuscular system: Applications for Human/Machine Interfaces and Neurophysiology	INS	Del Vecchio	N-SQUARED	Eng	Lecture	SS	2	5	written exam, 60min
Kolloquium im Bereich Mustererkennung									

Kolloquium Magnetic Resonance Imaging	MRI	Bickelhaupt/ Giese/Knoll/ Laun/ Maier/ Nagel/ Zaiss	CIL & LME – Pattern Recognition Lab	Eng	Colloquium	WS/SS	2	2,5	seminar performance, assessed
Medizintechnik II (Bildgebende Verfahren)									
Medizintechnik II	MT2 + MT2-RUE + MT2-TUE	Knoll/Kainz	CIL & IDEA	Ger/Eng	Lecture + Exercises	SS	4+2+2	5	modular exam (report, code implementation, presentation, homework)
Movement Neuroscience: Connections between Brain and Muscles in Humans									
Movement Neuroscience: Connections between the Brain and Muscles in Humans	MN	Del Vecchio	N-SQUARED	Eng	Lecture	WS	3	5	written exam, 60min
Rehabilitation and Assistive Robotics									
Rehabilitation and Assistive Robotics	RAR	Castellini/ Thürauf	AIROB	Eng	Lecture + Exercises	SS	2+2	5	written exam, 60min
Seminar Biosignals in Rehabilitation Robotics									
Seminar Biosignals in Rehabilitation Robotics	SEM-BRR	Egle	AIROB	Eng	Main Seminar	WS/SS	4	5	seminar performance, assessed
Surgical Technologies Innovation									
Surgical Technologies Innovation	STI	Mathis-Ullrich	SPARC	Eng	Lecture + Exercises	WS	4	5	modular exam (report, presentation)

Detailed information is available on [Campo](#).
Please take note of the data in the respective [course catalog](#) and [module handbook](#).