

Module Catalog Master Program Medical Engineering - Valid for the FPO versions 2018, 2019, 2022 & 2023

Study Field "Medical Image and Data Processing"

Please note the module descriptions in Campo!

| Module Group | Module Number | Modules | | SWS | Total Sum | 1st Year | | 2nd Year | | Language | Credit Modalities | Department | Responsible Chair(s) | WS/SS |
|--------------|-------------------------------|--|---------------------|----------------|-----------|----------|----------|----------|----------|----------|-------------------|------------|---|-------|
| | | | | | | WS | SS | WS | SS | | | | | |
| | | | | | | ECTS | ECTS | ECTS | ECTS | | | | | |
| | | Module Name (Name of Lecture) | Abbr. | L+E+S+P | ECTS | ECTS | ECTS | ECTS | | | | | | |
| M 1 | Medical Specialization | | | L+E+S+P | 10 | 5 | 5 | 0 | 0 | | | | | |
| | M 1.1 ¹ | Fundamentals in Anatomy and Physiology for Engineers | OMED/FAP | 4+0+0+0 | 5 | 0 | 5 | 0 | 0 | EN | gCA | MED | Lehrstuhl für Anatomie II (Prof. Dr. Paulsen) | SS |
| | M 1.2 | Applications of nanotechnology in cardiovascular diseases | HNO 18 | 0+0+2+0 | 2,5 | 0 | 2,5 | 0 | 0 | EN | gCA | MED | Professur für Nanomedizin (Stiftungsprofessur der Else Kröner-Fresenius-Stiftung) | WS/SS |
| | M 1.3 | Medizinische Biotechnologie / Medical Biotechnology | MBT | 3+1+0+0 | 5 | 0 | 5 | 0 | 0 | EN | gCA | CBI | Lehrstuhl für Medizinische Biotechnologie (MBT) | SS |
| | M 1.4 | Introduction to medical physics in radiation therapy | MEDPHYS-I | 2+0+0+0 | 2,5 | 2,5 | 0 | 0 | 0 | EN | gCA | MED | Lehrstuhl für Strahlentherapie | WS |
| | M 1.5 | Lab class on medical physics in radiation therapy | MEDPHYS III | 0+0+0+2 | 5 | 0 | 5 | 0 | 0 | EN | gCA | MED | Lehrstuhl für Strahlentherapie | SS |
| | M 1.6 | Special topics of medical physics in radiation therapy | MEDPHYS II | 2+0+0+0 | 2,5 | 0 | 2,5 | 0 | 0 | EN | gCA | MED | Lehrstuhl für Strahlentherapie | SS |
| | M 1.7 | Medical Physics in Nuclear Medicine | MPNM | 2+0+0+0 | 2,5 | 2,5 | 0 | 0 | 0 | EN | gCA | MED | Lehrstuhl für Klinische Nuklearmedizin | WS |
| | M 1.8 | Jüngste Entwicklungen der medizinischen Systembiologie/ Advances in Medical Systems Biology | AdvMedSys | 0+0+3+0 | 2,5 | 0 | 2,5 | 0 | 0 | EN | PfE | MED | Lehrstuhl für Haut- und Geschlechtskrankheiten | WS/SS |
| | M 1.9 | Introduction to simulation, network and data analysis in Medical Systems Biology | IntSysMed_ f_Eng | 2+0+0+0 | 5 | 5 | 0 | 0 | 0 | EN | gCA | MED | Lehrstuhl für Haut- und Geschlechtskrankheiten | WS |

| | | | | | | | | | | | | | |
|--------|---|---------------|---------|-----|-----|---|---|---|-------|-----|--------|---|-------|
| M 1.10 | Systems Oncology: bioinformatics and computer modelling in cancer | OncoSys_f_Eng | 2+2+0+0 | 5 | 5 | | | | EN | gCA | MED | Lehrstuhl für Haut- und Geschlechtskrankheiten | SS |
| M 1.11 | Ethics and Philosophy of AI New from SS24 | | 2+0+0+0 | 5 | 5 | 0 | 0 | 0 | EN | gCA | PHIL | Lehrstuhl für Theory and Ethics of Artificial Intelligence (Alexander von Humboldt-Professur) | SS |
| M 1.12 | Medical Device Regulation | MDR | 0+0+2+0 | 2,5 | 2,5 | | | | EN | gCA | FAU MT | Profilzentrum Medizintechnik | WS/SS |
| M 1.13 | Systems Immunology and Infectiology New from SS24 | SYSImInf | 2+2+0+0 | 5 | 5 | | | | EN | gCA | MED | Lehrstuhl für Hämatologie / Internistische Onkologie | SS |
| M1.14 | Seminar und Praktikum zur Biosignalverarbeitung / Seminar and Practical Course Biosignal Processing New from WS 24/25 | BioSigVera | 0+0+3+0 | 5 | 5 | | | | EN/DE | PL | MED | Institut für Physiologie und Pathophysiologie | WS |
| M 1.15 | Movement neuroscience: connections between the brain and muscles in humans Exercise | MNeuro | 2+1+0+0 | 5 | 5 | 0 | 0 | 0 | EN | gCA | AIBE | Juniorprofessur für Neuromuscular Physiology and Neural Interfacing | WS |

¹ Obligatory, if appropriate skills not acquired in the Bachelor programme
Additional medical modules can be used with the agreement of the program director. Please consult with your study advisor beforehand.

| M 2 Engineering Core Modules | | | L+E+S+P | 20 | 10 | 10 | 0 | 0 | | | | | |
|------------------------------|---|---------------|---------|----|----|----|---|---|-------------------|-----|-----|--|-------------------|
| M 2.1 | Digitale Übertragung / Digital Communications Exercise | DÜ / DiCo | 3+1+0+0 | 5 | 5 | 0 | 0 | 0 | WS: EN SS: GER | gCA | EEl | Lehrstuhl für Digitale Übertragung (IDC) | WS: EN SS: GER |
| M 2.2 ³ | Computergraphik / Computer Graphics Exercise | CG-VU | 3+1+0+0 | 5 | 5 | 0 | 0 | 0 | EN | gCA | INF | Lehrstuhl für Informatik 9 (Graphische Datenverarbeitung) | WS |
| M 2.3 | Digitale Signalverarbeitung / Digital Signal Processing Exercise | DSV | 3+1+0+0 | 5 | 5 | 0 | 0 | 0 | EN | gCA | EEl | Lehrstuhl für Multimediakommunikation und Signalverarbeitung (LMS) | WS |
| M 2.4 ¹ | Pattern Recognition Exercise | PR | 3+1+0+0 | 5 | 5 | 0 | 0 | 0 | EN | gCA | INF | Lehrstuhl für Informatik 5 (Mustererkennung) | WS |
| M 2.5 ¹ | Pattern Analysis Exercise | PA | 3+1+0+0 | 5 | 0 | 5 | 0 | 0 | EN | gCA | INF | Lehrstuhl für Informatik 5 (Mustererkennung) | SS |
| M 2.6 | Statistische Signalverarbeitung / Statistical Signal Processing Exercise | STASIP | 3+1+0+0 | 5 | 5 | 0 | 0 | 0 | EN | gCA | EEl | Lehrstuhl für Multimediakommunikation und Signalverarbeitung (LMS) | WS |
| M 2.7 | Parallele Systeme / Parallel Systems Exercise | PSYS-VU | 2+2+0+0 | 5 | 0 | 5 | 0 | 0 | GER/EN | gCA | INF | Lehrstuhl für Informatik 12 (Hardware-Software-Co-Design) | SS |
| M 2.8 | Reconfigurable Computing Exercise | RC-VU | 2+2+0+0 | 5 | 5 | 0 | 0 | 0 | EN | gCA | INF | Lehrstuhl für Informatik 12 (Hardware-Software-Co-Design) | WS |
| M 2.9 | Information Theory and Coding Exercise | ITC ITC-EN | 3+1+0+0 | 5 | 0 | 5 | 0 | 0 | WS: EN SS: GER | gCA | EEl | Lehrstuhl für Digitale Übertragung (IDC) | WS: EN SS: GER |
| M 2.10 | Channel Coding Exercise | KaCo | 3+1+0+0 | 5 | 0 | 5 | 0 | 0 | GER/EN | gCA | EEl | Lehrstuhl für Digitale Übertragung | SS |

| | | | | | | | | | | | | | | | |
|---------------------|--|-----------|---------|-----|-----|-----|---|---|---|---|--------|-----|------|--|-------|
| M 2.11 ³ | Geometric Modeling Exercise | GM-VU | 3+1+0+0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | EN | gCA | INF | Lehrstuhl für Informatik 9 (Graphische Datenverarbeitung) | WS |
| M 2.12 | Scientific Visualization Exercise | SciVis | 2+2+0+0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | EN | gCA | INF | Lehrstuhl für Informatik 9 (Graphische Datenverarbeitung) | SS |
| M 2.13 | Transformationen in der Signalverarbeitung / Transformations in Signal Processing | TSV | 2+0+0+0 | 2,5 | 0 | 2,5 | 0 | 0 | 0 | 0 | EN | gCA | EEI | Lehrstuhl für Multimediakommunikation und Signalverarbeitung (LMS) | SS |
| M 2.14 | Algorithms of Numerical Linear Algebra Exercise | ANLA | 4+2+0+0 | 7,5 | 7,5 | 0 | 0 | 0 | 0 | 0 | EN | gCA | INF | Lehrstuhl für Informatik 10 (Systemsimulation) | WS |
| M 2.15 ² | Functional Analysis for Engineers Exercise | FuncAnEng | 2+2+0+0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | EN | gCA | INF | Lehrstuhl für Informatik 10 (Systemsimulation) | WS |
| M 2.16 | Optimierung für Ingenieure / Optimization for Engineers Exercise | OptIngV | 3+1+0+0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | EN | gCA | NAT | Department Mathematik (Dr. Johannes Hild) | SS |
| M 2.17 | Heterogene Rechnerarchitekturen Online | HETRON | 4+0+0+0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | EN | gCA | INF | Lehrstuhl für Informatik 3 (Rechnerarchitektur) | WS/SS |
| M 2.18 | Künstliche Intelligenz I | KI I | 4+2+0+0 | 7,5 | 7,5 | 0 | 0 | 0 | 0 | 0 | GER/EN | gCA | INF | Professur für Wissensrepräsentation und -verarbeitung | WS |
| M 2.19 | Künstliche Intelligenz II | KI II | 4+2+0+0 | 7,5 | 0 | 7,5 | 0 | 0 | 0 | 0 | GER/EN | gCA | INF | Professur für Wissensrepräsentation und -verarbeitung | SS |
| M 2.20 | Deep Learning Exercise | DL | 2+2+0+0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | EN | gCA | INF | Lehrstuhl für Informatik 5 (Mustererkennung) | WS/SS |
| M 2.21 | Sprach- und Audiosignalverarbeitung / Speech and Audio Signal Processing Exercise | SAV | 3+1+0+0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | EN | gCA | EEI | Lehrstuhl für Multimediakommunikation und Signalverarbeitung (LMS) | SS |
| M 2.22 | Maschinelles Lernen für Zeitreihen / Machine Learning for Time Series Exercise | MLTS | 2+2+0+0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | EN | gCA | AIBE | Lehrstuhl für Maschinelles Lernen und Datenanalytik (MaD) | WS |
| M 2.23 | Reinforcement Learning Exercise | RL | 2+2+0+0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | EN | gCA | AIBE | Lehrstuhl für Maschinelles Lernen und Datenanalytik (MaD) | SS |
| M 2.24 | Data Science Survival Skills Exercise | DSSS | 2+2+0+0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | EN | gCA | AIBE | Juniorprofessur für Artificial Intelligence in Communication Disorders | WS |
| M 2.25 | Advanced Deep Learning Exercise | AdvDL | 2+2+0+0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | EN | gCA | AIBE | Juniorprofessur für Artificial Intelligence in Medical Imaging | WS |

¹ Obligatory, if appropriate skills not acquired in the Bachelor programme.

² Very profound knowledge of mathematics required.

³ Yearly change between German and English.

| M 3 Medical Engineering Core Modules | | | L+E+S+P | 20 | 10 | 10 | 0 | 0 | | | | | |
|--------------------------------------|---|-------------------|---------|-----|--------------|-----|---|---|-------|-----|------|---|-------|
| M 3.1 | Visual Computing in Medicine | VCMed | 4+0+0+0 | 5 | 2,5 | 2,5 | | | EN | gCA | INF | Lehrstuhl für Informatik 9 (Graphische Datenverarbeitung) | WS+SS |
| M 3.2 | Diagnostic Medical Image Processing (VHB-Kurs) No longer offered from SS 24 | DMIP-VHB | 4+0+0+0 | 5 | VHB (online) | | | | EN | gCA | VHB | Virtuelle Hochschule Bayern (VHB) | WS/SS |
| M 3.3 | Interventional Medical Image Processing No longer offered from SS 24 | IMIP | 4+0+0+0 | 5 | VHB (online) | | | | EN | gCA | INF | Virtuelle Hochschule Bayern (VHB) | WS/SS |
| M 3.4 | Biomedizinische Signalanalyse / Biomedical Signal Analysis Exercise | BioSig | 2+2+0+0 | 5 | 5 | 0 | 0 | | EN | gCA | AIBE | Lehrstuhl für Maschinelles Lernen und Datenanalytik (MaD) | WS |
| M 3.5 | Computer Architectures for Medical Applications Exercise | CAMA | 2+2+0+0 | 5 | 0 | 5 | 0 | 0 | EN | gCA | INF | Lehrstuhl für Informatik 3 (Rechnerarchitektur), Professur für Höchstleistungsrechnen | SS |
| M 3.6 | Magnetic Resonance Imaging 1 Exercise | MRI1 | 2+2+0+0 | 5 | 5 | | | | EN | gCA | INF | Lehrstuhl für Informatik 5 (Mustererkennung) | WS |
| M 3.7 | Magnetic Resonance Imaging 2 + Übung Exercise | MRI2+Ü | 2+2+0+0 | 5 | 0 | 5 | 0 | 0 | EN | gCA | INF | Lehrstuhl für Informatik 5 (Mustererkennung) | SS |
| M 3.8 | Image and Video Compression Exercise | IVC | 3+1+0+0 | 5 | 0 | 5 | 0 | 0 | EN | gCA | EEI | Lehrstuhl für Multimediakommunikation und Signalverarbeitung (LMS) | SS |
| M 3.9 | Auditory Models | AudMo | 2+0+0+0 | 2,5 | 0 | 2,5 | 0 | 0 | EN | gCA | EEI | Professur für Audiosignalanalyse (AudioLabs) | SS |
| M 3.10a ¹ | A look inside the human body - gait analysis and simulation+ | GAS+ | 2+2+0+0 | 5 | 5 | | 0 | 0 | EN | PL | AIBE | Lehrstuhl für Maschinelles Lernen und Datenanalytik (MaD) | WS |
| M 3.10b ¹ | A look inside the human body - gait analysis and simulation | GAS | 2+0+0+0 | 2,5 | 2,5 | | 0 | 0 | EN | gCA | AIBE | Lehrstuhl für Maschinelles Lernen und Datenanalytik (MaD) | WS |
| M 3.11 | Interfacing the Neuromuscular system: Applications for Human/Machine Interfaces and Neurophysiology Exercise | INS | 3+0+0+0 | 5 | 0 | 5 | 0 | 0 | EN | gCA | AIBE | Juniorprofessor für Neuromuscular Physiology and Neural Interfacing | SS |
| M 3.12 | Algorithmic Bioinformatics Exercise | ALGBIOINF | 2+2+0+0 | 5 | 5 | | 0 | 0 | DE/EN | gCA | AIBE | Juniorprofessur für Daten, Sensoren und Geräte / Digitale Transformation | WS |
| M 3.13 | Computational Magnetic Resonance Imaging | Computational MRI | 2+2+0+0 | 5 | 5 | | | | EN | gCA | AIBE | Professur für Computational Imaging | WS |
| M 3.14 | Numerical & Physical Principles of Imaging Algorithms for CT based Radiation Therapy Planning New from SS24 | NumerikCTin RT | 2+0+0+0 | 2,5 | 0 | 2,5 | 0 | 0 | EN | PL | Med | Lehrstuhl für Strahlentherapie | SS |
| M 3.15 | Computational Neurotechnology | Neurotech | 2+2+0+0 | 5 | | 5 | | | EN | gCA | AIBE | Professur für Sensorische Neurotechnologie | SS |
| M 3.16 | AI in Medical Robotics | AIMedRob | 3+1+0+0 | 5 | 5 | | | | EN | gCA | AIBE | Professur für Robotische Planung und Kognition in der Chirurgie | WS |

¹ You can either take the 2,5 or the 5 ECTS version, not both.

| M 4 Advanced Seminar Medical Engineering | | | L+E+S+P | 5 | 0 | 0 | 5 | 0 | | | | | |
|--|--|--|---------|---|---|---|---|---|----|----|--|-----------------------|-------|
| Seminar Medical Engineering | | | 0+0+2+0 | 5 | | | 5 | | EN | SA | | see Seminar Catalogue | WS/SS |

| M 5 Medical Engineering Specialization Modules | | | L+E+S+P | 10 | 0 | 5 | 5 | 0 | | | | | |
|--|--|-----------|---------|----|---|---|---|---|--------|-----|------|---|-------|
| M 5.1 | Swarm Intelligence (formerly "Organic Computing") Exercise | SI | 2+2+0+0 | 5 | 0 | 5 | 0 | 0 | GER/EN | gCA | INF | Lehrstuhl für Informatik 12 (Hardware-Software-Co-Design) | SS |
| M 5.3 | Human Computer Interaction Exercise | HCI | 3+1+0+0 | 5 | 0 | 5 | 0 | 0 | EN | gCA | INF | Lehrstuhl für Maschinelles Lernen und Datenanalytik (MaD) | SS |
| M 5.4 | Convex Optimization in Communications and Signal Processing Exercise | ConvOpt | 3+1+0+0 | 5 | 0 | 0 | 5 | 0 | EN | gCA | EEl | Lehrstuhl für Digitale Übertragung (IDC) | WS |
| M 5.5 | Security in Embedded Hardware Exercise | SEH | 2+2+0+0 | 5 | 0 | 5 | 0 | 0 | EN | gCA | INF | Lehrstuhl für Informatik 12 (Hardware-Software-Co-Design) | SS |
| M 5.6 | Image, Video and Multidimensional Signal Processing /Bild-, Video- und mehrdimensionale Signalverarbeitung Exercise | IVMSP | 3+1+0+0 | 5 | 0 | 0 | 5 | 0 | EN | gCA | EEl | Lehrstuhl für Multimediakommunikation und Signalverarbeitung (LMS) | WS |
| M 5.7 | Molecular Communications Exercise | MolCom | 4+0+0+0 | 5 | 0 | 0 | 5 | 0 | EN | gCA | EEl | Lehrstuhl für Digitale Übertragung | WS |
| M 5.8 | Magnetic Resonance Imaging sequence programming | MRIpulseq | 2+0+0+0 | 5 | 0 | 5 | 0 | 0 | EN | gCA | MED | Professur für Multimodale Bildgebung in der klinischen Forschung | WS/SS |
| M 5.9 | Cognitive Neuroscience for AI Developers Exercise | CNAID | 4+0+0+0 | 5 | 0 | 5 | 0 | 0 | EN | gCA | AIBE | Juniorprofessur für Artificial Intelligence in Communication Disorders (Prof. Andreas Kist) | WS/SS |
| M 5.10 | Speech and Language Understanding | SLU | 2+2+0+0 | 5 | | 5 | | | EN | gCA | INF | Lehrstuhl für Informatik 5 (Mustererkennung) | SS |
| M 5.11 | Interaktive Computergraphik/ Interactive Computer Graphics Übung New from SS24 | InCG | 2+2+0+0 | 5 | 0 | 5 | 0 | 0 | EN | PL | INF | Lehrstuhl für Informatik 9 (Graphische Datenverarbeitung) | SS |
| M 5.12 | Globale Beleuchtungsberechnung/Global Illumination Übung New from SS24 | GlobIllum | 2+2+0+0 | 5 | 0 | 5 | 0 | 0 | EN | PL | INF | Lehrstuhl für Informatik 9 (Grafische Datenverarbeitung) | SS |
| M 5.13 | Knowledge Discovery in Databases mit Übung Offered again from SS 24 | KDD | 2+2+0+0 | 5 | | 5 | | | EN | gCA | INF | Lehrstuhl für Informatik 6 (Datenmanagement) | SS |

| M 6 Medical Engineering Practical Modules | | L+E+S+P | 10 | 0 | 0 | 10 | 0 | | | | | |
|---|---|-------------------|---------|----|----|----|---|-------|-----|------|--|-------|
| M 6.1 | Academic Laboratory See list on the study program website | 0+0+0+4 | 5 | 0 | 0 | 5 | 0 | EN | uCA | | | WS/SS |
| M 6.2 | Research Laboratory See list on the study program website, and additionally: | 0+0+0+4 | 5 | 0 | 0 | 5 | 0 | EN | uCA | | | WS/SS |
| M 6.1 + M 6.2 | Alternatives for M 6.1 and M 6.2: | | | | | | | | | | | |
| | Project Pattern Recognition | ProjME | 0+0+0+8 | 10 | | 10 | | EN | uCA | INF | Lehrstuhl für Informatik 5 (Mustererkennung) | WS/SS |
| | Project Computer Vision | ProjCV | 0+0+0+8 | 10 | | 10 | | EN | uCA | INF | Lehrstuhl für Informatik 5 (Mustererkennung) | WS/SS |
| | Projekt Innovationslabor für Wearable und Ubiquitous Computing | InnoLabPro | 0+0+0+4 | 10 | | 10 | | EN | uCA | AIBE | Lehrstuhl für Maschinelles Lernen und Datenanalytik (MaD) | WS/SS |
| | Projekt Maschinelles Lernen und Datenanalytik / Project Machine Learning and Data Analytics | ProjMAD | 0+0+0+8 | 10 | | 10 | | DE/EN | uCA | AIBE | Lehrstuhl für Maschinelles Lernen und Datenanalytik (MaD) | WS/SS |
| | Project Representation Learning | PRL | 0+0+0+4 | 10 | 10 | | | EN | uCA | AIBE | Professur für Image Data Exploration and Analysis | WS/SS |
| | The AMOS Project | OSS-AMOS-SD | 2+0+0+6 | 10 | 0 | 10 | 0 | EN | uCA | INF | Professur für Open Source Software | WS/SS |
| | Project Biomedical Network Science | BIONETS | 0+0+0+4 | 10 | 0 | 10 | 0 | EN | uCA | AIBE | Professur für Biomedical Network Science | WS/SS |
| | Computational Imaging Project | Comp Imag Proj | 0+0+0+8 | 10 | | 10 | | DE/EN | uCA | AIBE | Professur für Computational Imaging | WS/SS |
| | Neurotechnology Project | Neurotech Project | 0+0+0+8 | 10 | | 10 | | EN | uCA | AIBE | Professur für Sensorische Neurotechnologie | WS/SS |
| | Research Project on Surgical Robotics | | 0+0+0+4 | 10 | | 10 | | EN | uCA | AIBE | Professur für Robotische Planung und Kognition in der Chirurgie | WS/SS |
| | Projekt Intraoperative Imaging and Machine Learning | IIML | 0+0+0+4 | 10 | | 10 | | EN | uCA | AIBE | Juniorprofessur für Artificial Intelligence in Medical Imaging | WS |
| | Project Systems Immunology | Pr_SYSIm | 0+0+0+3 | 10 | | 10 | | EN | uCA | MED | Lehrstuhl für Hämatologie / Internistische Onkologie | WS/SS |
| | Biomedical Image Analysis Project | BIMAP | 0+0+0+4 | 10 | 0 | 10 | 0 | EN | uCA | AIBE | Juniorprofessur für Artificial Intelligence in Communication Disorders | SS |

| M 7 Flexible Budget Faculty of Engineering | | | 10 | 0 | 0 | 10 | 0 | | | | | |
|--|--|---------|--------------------|------------|----------|----------|--------|----------|------------|--------------|--|--|
| Flexible Budget Faculty of Engineering any graded module on Master's level offered by the Faculty of Engineering | | | | 0 | 0 | 0 | 0 | 0 | gCA | | | only <u>graded</u> modules of the Faculty of Engineering on Master's level (no conditional subjects) |
| M 7 Apart from all graded modules on Master's level offered by the Faculty of Engineering, the following modules from the Faculty of Economics can be used for M7: | | | | | | | | | | | | |
| | InnLead | 4+0+0+0 | 5 | 0 | 0 | 5 | 0 | EN | gCA | WiSo | Lehrstuhl für Wirtschaftsinformatik, insbesondere | WS |
| M 7.1 | Service Innovation | ServInn | 2+2+0+0 | 5 | 0 | 5 | 0 | EN | gCA | WiSo | Lehrstuhl für Wirtschaftsinformatik, insbesondere Innovation und Wertschöpfung | SS |
| M 7.2 | Designing Technology Exercise | InnTec | 2+2+0+0 | 5 | 0 | 0 | 5 | EN | gCA | WiSo | Lehrstuhl für Wirtschaftsinformatik, insbesondere Innovation und Wertschöpfung | WS |
| M 7.3 | Organizing Digital Transformation New from SS24 | | 2+0+0+0 | 5 | 0 | 5 | 0 | EN | gCA | WiSo | Lehrstuhl für Wirtschaftsinformatik, insbesondere Innovation und Wertschöpfung | SS |
| M 7.4 | Implementing Innovation consisting of: Innovation Strategy III: Platforms and Systems for Innovation Innovation Design | IS III | 1+1+0+0 2+0+0+0 | 2,5 2,5 | 0 2,5 | 2,5 0 | 0 0 | EN EN | gCA gCA | WiSo WiSo | Lehrstuhl für Wirtschaftsinformatik, insbesondere Innovation und Wertschöpfung | WS+SS SS WS/SS |
| M 7.5 | Technology and Innovation Management | TIM | 2+0+0+0 | 5 | 0 | 5 | 0 | EN | gCA | WiSo | Lehrstuhl für Betriebswirtschaftslehre, insbesondere Industrielles Management | SS |
| M 7.6 | Becoming an innovative engineer No longer offered from SS 24 | InnoEng | 2+0+0+0 | 2,5 | 0 | 0 | 2,5 | EN | gCA | AIBE | Lehrstuhl für Maschinelles Lernen und Datenanalytik | WS/SS |

| M 8 Free Choice Uni | | | 5 | 5 | 0 | 0 | 0 | | | | | |
|---|--|--|---|---|---|---|---|--|-----|--|--|--|
| Free Choice Uni any graded lecture / course at the university | | | 5 | 5 | 0 | 0 | 0 | | gCA | | <u>graded</u> modules of all Faculties | |

| M 9 Master's Thesis | | | 30 | 0 | 0 | 0 | 30 | | | | | |
|---------------------|----------------------------------|--|------|---|---|---|------|--|-----|--|--|--|
| M 9.1 | Master's Thesis | | 27,5 | 0 | 0 | 0 | 27,5 | | PfE | | | |
| M 9.2 | Advanced Seminar Master's Thesis | | 2,5 | 0 | 0 | 0 | 2,5 | | | | | |

For M3, you can use modules with a value of max. 5 ECTS credits from the module groups M2 and M5 of your own branch of study or from M2, M3 and M5 of the other branches of study.

For M5, you can use modules with a value of max. 5 ECTS credits from the module groups M2 and M3 of your own branch of study or from M2, M3 and M5 of the other branches of study.

All lectures can be complemented by additional exercises and practical courses.

It is possible that in rare cases the exam type is changed. This information must be communicated to the students no later than two weeks after the semester start and must be documented in the module description in Campo.

L Lecture

E Exercise

S Seminar

P Practical Exercise

WS Winter Term

SS Summer Term

PfE Portfolio Examination

gCA graded Course Achievement

uCA ungraded Course Achievement

SA Seminar Achievement (usually a presentation and written report)

w written

o oral

online online (Virtual University Bavaria, VHB, www.vhb.org)

BESCHLUSS Stuko – 01.02.2024