

Curriculum Medical Engineering (M.Sc.)
effective from study beginning in winter semester 2021/22

1. Semester (SoSe)	Focus on "Development" 2. Semester (WiSe)	3. Semester
Guidance and Standards for Medical Devices (4/5)	Biomaterials (4/5)	Master Thesis with Presentation (0/30)
Biomedical Modeling, Testing and Simulation with Laboratory Exercises (4/5)	Experimental Techniques and Data Processing with Laboratory Exercises (4/5)	
Mandatory Elective Module 1 (4/5)	Mandatory Elective Module 5 (4/5)	
Mandatory Elective Module 2 (4/5)	Mandatory Elective Module 6 (4/5)	
Mandatory Elective Module 3 (4/5)	Mandatory Elective Module 7 (4/5)	
Mandatory Elective Module 4 (4/5)	Mandatory Elective Module 8 (4/5)	
24 SWS 30 Credits	24 SWS 30 Credits	0 SWS 30 Credits

Sum Study Program: 90 Credits / 48 SWS

Explanation: (4/5) means 4 SWS und 5 ECTS-Credits

1. Semester (SoSe)	Focus on "Research" 2. Semester (WiSe)	3. Semester
Guidance and Standards for Medical Devices (4/5)	Biomaterials (4/5)	Master Thesis with Presentation (0/30)
Biomedical Modeling, Testing and Simulation with Laboratory Exercises (4/5)	Experimental Techniques and Data Processing with Laboratory Exercises (4/5)	
Mandatory Elective Module 1 (4/5)	Mandatory Elective Module 2 (4/5)	
Research Thesis 1 (4/15)	Research Thesis 2 (4/15)	
16 SWS 30 Credits	16 SWS 30 Credits	0 SWS 30 Credits

Sum Study Program: 90 Credits / 32 SWS

Mandatory Elective Module (WPM) (4/5)**Summer Semester**

Corrosion and Degradation of Biomaterials

Optimization Methods

Polymers in Medical Technology

Specialisation in Quality Management

Winter Semester

Dental Biomaterials

Digital Product Development of Additively Manufactured Medical Devices

Innovation Management

Cognitive Systems

Computational Fluid Dynamics

Modules from existing Master's degree programmes at OTH Regensburg can be recognised for WPM (prior approval by the examination board). However, at least six WPM must be taken in the 'Development' specialisation and at least one of the WPM offered specifically for the Master's in Medical Engineering in the 'Research' specialisation.