

Curriculum Bachelor of Biomedical Engineering
effective from study beginning in winter semester 2022/23

1. Semester	2. Semester	3. Semester	4. Semester	5. Semester	6. Semester	7. Semester	
Mathematics for Engineers 1 (MA1) (6/6)	Mathematics for Engineers 2 (MA2) (6/6)	Fundamentals of Fluid Mechanics (GSM) (4/5)	Measurement Techniques with Laboratory Exercises (MT) (4/5)	Industrial Placement (BP) (0/22)	Control engineering with Laboratory Exercises (RT) (4/5)	Business Administration (BWL) (4/5)	
Fundamentals of Programming (GPR) (4/6)	Engineering Mechanics 2 (TM2) (4/5)	Biomechanics (BM) (4/5)	Biofluids (BFM) (4/5)		Mandatory Elective Module 1 (FW1) (4/5)	Mandatory Elective Module 3 (FW3) (4/5)	
Anatomy (AN) (4/6)	Fundamentals of Electrical Engineering and Electronics (GEE) (4/5)	Engineering Mechanics3 (TM3) (4/5)	Medical Engineering Practical Course (MPR) (4/6)		Mandatory Elective Module 2 (FW2) (4/5)	Mandatory Elective Module 4 (FW4) (4/4)	
Introduction into Engineering Design (EKO) (4/5)	Machine Elements of Medical Engineering (MEB) (4/5)	Engineering Design (KON1) (4/5)	Regulatory Affairs (RA) (4/5)		Biological Safety (BSI) (4/5)	General Scientific Elective Module 2 (AW2) (2/2)	
Engineering Mechanics 1 (TM1) (4/5)	Physiology (PHY) (4/5)	Numerical Methods (NV) (4/5)	Material Sciences (MWS) (4/5)				Diagnostic and Therapeutic Systems (DTS) (4/5)
Material Engineering (WTK) (2/2)		Quality Management in Medical Engineering (QMM) (4/5)	Constructive Design Project (KON2) (3/4)		General Scientific Elective Module 1 (AW1) (2/2)	Student Project (4/6)	
					Foreign language (FRS) (2/3)		
24 SWS 30 Credits	26 SWS 30 Credits	24 SWS 30 Credits	23 SWS 30 Credits	6 SWS 29 Credits	24 SWS 31 Credits	14 SWS 30 Credits	

Explanation: (3/4) means : 3 SWS und 4 ECTS-Credits

Sum Study Programme: 210 Credits / 141 SWS

Mandatory elective modules 1-3: freely selectable from the Elective Module Catalogue Bachelor's degree course in Biomedical Engineering of the Faculty of Mechanical Engineering.

Mandatory elective module 4: freely selectable from the Elective Modules Catalogue Bachelor's degree course in Biomedical Engineering of the Faculty of Mechanical Engineering or from the catalogue of the Virtual University of Applied Sciences Bavaria (subject areas medicine or healthcare)

Mandatory Electives A-D: free choice from the modules				Mandatory Elective D: it can be a module from the catalogue of the Virtual University of Bavaria
Additive manufacturing in medical engineering	Ceramic materials		Physico-chemical and biochemical laboratory practice	
Digitalisation and ethics	Musculoskeletal simulation		Product development in medical technology	
Fundamentals of FEM	Surface engineering		Project management and quality assurance	Subject area medicine or healthcare