

Curriculum

IT-Medical Engineering

Bachelor | Fulltime | english

Semester 1	ECTS
Applied Mathematics 1	5
Coding Essentials	5
Web Technologies	5
Electrical and Physical Fundamentals	5
Introduction to Computing	5
Team & Project Management	5
Sum	30

Semester 2	ECTS
Applied Mathematics 2	5
Coding Lab	5
Data Management	5
Introduction to Medical Devices	15
Biosensors and Applications	
Anatomical and Physiological Basics	
Sum	30

Semester 3	ECTS
Statistics & Probability Theory	5
Software Design	5
Cloud und Web Application	5
Medical Information Systems	15
Medical Image Processing	
Introduction to Signal Analysis	
Sum	30

Semester 4	ECTS
Software Engineering	5
Project 1	5
Secure Medical Interfaces	15
Medical Imaging	
Signal Analysis in Medical Applications	
Elective Course (1 to choose from)	
Mobile App Development 1	5
Artificial Intelligence 1	5
IoT Basics	5
Sum	30

Semester 5	ECTS
User Experience & Usability	5
Project 2	5
Telehealth Applications and Innovations	15
Visualization in Medicine	
Embedded Systems in Medicine	
Elective Course (1 to choose from)	
Mobile App Development 2	5
Artificial Intelligence 2	5
IoT Applications	5
Sum	30

Semester 6	ECTS
Internship	10
Bachelor Project	10
Academic Writing and Bachelor Exam	5
3D Printing in Medical Applications	5
Summe	30
Total	180

ECTS = European Credit Transfer System