Dept. of Biomedical Engineering – List of elective courses (Spring Semester)

Department of Biomedical Engineering

List of elective courses

Spring Semester

Due to timetable constraints, students can only choose courses within the same track

COURSE	HOURS	ECTS
TRACK 1: ENGINEERING WITH LIFE AND PHYSICAL SCIENC	ES	
Clinical Translation	10	1
Medical and surgical procedures	18	2
Biomechanics and Health	60	6
Image Processing	26	3
Medical Imaging and Processing	12	1
Computer Vision	16	2
TRACK 2: DIAGNOSIS AND INNOVATIVE MEDICAL TREATME	INT	
Clinical Translation	10	1
Medical and surgical procedures	18	2
Image Processing	28	3
Analysis of biological images	20	2
Machine Learning	21	2
Medical Imaging and Processing	12	1
Computer Vision	16	2
Software tools for robotics	16	2
Mechatronics and haptics	41	5
TRACK 3: INNOVATIVE THERAPIES		
Clinical Translation	10	1
Medical and surgical procedures	18	2
Image Processing	28	3
Analysis of biological images	20	2
Intro. to Computational Biology	12	1
Communication protocols	12	1
Circuits and systems	18	2
Project of design of an embedded system	20	2
Physics of lasers and optical fibers	13	1
Nanosciences	7	1
Physics of sensors	13	1