Bachelor's Degree Programme in Biomedical Engineering
Study Plan
Students enrolled in 2022/2023

Bachelor's Degree Programme in Biomedical Engineering – 1° year				
Subject	**ECTS**	**SSD**	**Term**	**Propedeutics**
Fundamentals of Computer Science	10	ING-INF/05	II	*none*
Mathematics	10	MAT/08	I	*none*
Chemistry	7	CHIM/07	I	*none*
General Physics - *Physics Part 1*	7	FIS/07	I	*none*
General Physics - *Physics Part 2*	5	FIS/03	II	*none*
Economics and Management	6	ING-IND/35	II	*none*
General English/Italian	1	L-LIN/12	I	*none*
Humanities for Bioengineering - *The History of Biomedical Engineering in Twelve Machines*	1	MED/02	I	*none*
Physiology and Anatomy - *Physiology*	6	BIO/09	I	*none*
Physiology and Anatomy - *Anatomy*	4	BIO/16	I-II	*none*

Bachelor's Degree Programme in Biomedical Engineering – 2° year				
Subject	**ECTS**	**SSD**	**Term**	**Propedeutics**
Advanced Physics	6	FIS/03	I	Physics
Mathematics II	13	MAT/05	I-II	Mathematics
Probability and Statistics	6	SECS-S/02	I	*none*
Healthcare Information Systems and Telemedicine	6	ING-INF/05	I	*none*
Electronics and Electrotechnics - *Electrotechnics*	5	ING-IND/31	II	*none*
Electronics and Electrotechnics - *Fundamentals of Electronics*	6	ING-INF/01	II	*none*
Mechanics of Solids	6	ICAR/08	II	*none*
Transport Phenomena and Termodynamics	6	ING-IND/24	II	*none*
Technical English/Italian	2	L-LIN/12	I	*none*
Humanities for Bioengineering - *Fundamentals of Anthropology and Ethics*	3	M-FIL/03	I-II	*none*

Bachelor's Degree Programme in Biomedical Engineering – 3° year				
Subject	**ECTS**	**SSD**	**Term**	**Propedeutics**
Biomedical Signal Processing	10	ING-INF/06	I-II	*none*
Automatic Control	9	ING-INF/04	I	*none*
Biomechanics - *Modeling and Technologies*	6	ING-IND/34	I	*none*
Biomechanics - *Physiology and Anatomy - Musculoskeletal System*	3	MED/34	I	*none*
Fundamentals of Bioengineering	12	ING-IND/34	II	*none*
Measurements and Instrumentation in Biomedical Engineering and Standards for Medical Devices	7	ING-IND/12	I	*none*
Humanities for Bioengineering - *Philosophy of Science, Human Development, and Technology*	2	M-FIL/02	I-II	*none*
To be chosen by the student ***	Total ECTS: 12			*none*
Thesis	3			*none*

*** **EXAMS TO BE CHOSEN BY THE STUDENT FOR A TOTAL OF 12 ECTS**					
YEAR	**Subject**	**ECTS**	**SSD**	**Term**	**Propedeutics**
3rd	Biomechatronics and Biomaterials	6	ING-IND/34	II	*none*
3rd	Healthcare Robotics	6	ING-IND/34	II	*none*
3rd	AI and Data Mining	6	ING-INF/05	II	*none*
3rd	Biomedical Research and Innovation Management and Assessment	6	ING-IND/34	II	*none*
3rd	Laboratory fo Measurements	6	ING-IND/12	II	*none*