

STUDY MANIFESTO C.Y. 2023-2024 - CURRICULUM

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

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

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

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