## MEDICINE AND SURGERY MedTech An MD Program enriched with Biomedical Engineering With Optional Bachelor's Degreein Biomedical Engineering additional 30 ECTS

CLASS: LM-41 DURATION: 6 YEARS ECTS Credits: 360





## OVERVIEW

Technology today is pervasive, especially in medicine. We have established a new and innovative 6-year program that, by integrating medicine and engineering, educates future physician-innovators to address challenges of today and tomorrow in clinical medicine and research.

The combination of medicine and engineering in a rigorous and current human-centred medical curriculum uniquely qualifies MedTech graduates to become proactive participants in the development of medical technologies.

Medicine and engineering cross-fertilization will be facilitated by shared classes with Engineering students.

The MedTech program, through its emphasis on international networking, global health, and English-language educational content prepares our graduates to work in Italy and abroad.

In addition to the MD degree, MedTech students can pursue a Bachelor's degree in Biomedical Engineering by choosing to earn 30 additional credits (ECTS).

## PROFESSIONAL SKILLS

This is a highly demanding program. The infusion of Engineering know-how enhances traditional medical skills, leading to better and continuously updated medical practice or healthcare management. Students will acquire skills and competencies in a variety of fields including artificial intelligence, biosignals, omics, big data, tissue engineering, biomaterials and bioprinting, nanotechnologies, electronics, biomedical

and surgical robotics, neurotechnologies, virtual and augmented reality.

## EMPLOYMENT OPPORTUNITIES

The MedTech MD degree provides the same credentials as a traditional MD program with full access to Residency programs, allowing graduates to work in all medical fields.

The engineering and basic life science background, coupled with the propensity to innovate will widen and reinforce career opportunities in research and development in public and private sectors (e.g. pharmaceutical, medical-device and many more).



We are committed to guiding our students from admissions to graduation day step by step.

## STUDY PLAN

## 3rd YEAR

INTEGRATED COURSE	ECTS
Electronics	3
Measurements, sensors and instrumentation	5
Medical Humanities III	2
Pathology Immunology and Microbiology	20
Signal and image processing	12
Cardiorespiratory Diseases	20

### 6th YEAR

INTEGRATED COURSE	ECTS
Child Medicine	8
Hygiene, Public Health, Business Administration	8
Surgery	14
Healthcare Management	6
Internal Medicine	23
Head and Neck	7
Anaesthesiology and Emergency	5
Forensic Medicine	2

### 1st YEAR

INTEGRATED COURSE	ECTS
Biology	9
General Physics I	7
Chemistry	7
General Physics li	5
Mathematics	10
Computer Science	5
Medical Humanities 1	4
Basic Life Sciences 1	11
Language	4

## 2nd YEAR

INTEGRATED COURSE	ECTS
Probability and Statistic	6
Basic Life Sciences 2	13
Biochemistry	12
Basic Life Sciences 3 + Physiological Models	12 5
Medical Humanities II	2
Pharmacology and Medical Genetics	6

### 4th YEAR

INTEGRATED COURSE	ECTS
Biomechatronics, Biomaterials, telemedicine	12
Fundamentals of Biomedical Instrumentation	8
Artificial Organs	3
Gastrointestinal Diseases	10
Genitourinary Diseases	13
Endocrinology and Metabolism	4
Dermatology, Clinical Immunology and Infectious Diseases	11

### 5th YEAR

INTEGRATED COURSE	ECTS
Locomotor System Diseases	19
AI and data mining	5
Cancer Medicine	21
Clinical Neuroscience	15

■ 30 additional ECTS credits to receive a Bachelor Degree in Biomedical Engineering

#### STUDENTS OFFICE

+39 06.22541.9044/9047/9043/9042 segreteriastudenti@unicampus.it

#### ADMISSION

+39 06.22541.9255/8121 admission@unicampus.it

#### INTERNATIONAL OFFICE

+39 06.22541.8124/8887 relazioni.internazionali@unicampus.it

#### STUDENT SERVICE

+39 06.22541.9056/8715 orientamento@unicampus.it

#### DEPARTMENT OFFICE

+39 06.22541.8760 c.zanetti@unicampus.it

TUTORING tutoratoMedTech@unicampus.it

#### CAREER SERVICE +39 06.22541.9057 careerservice@unicampus.it

#### ACCOMODATION

+39 06.22541.1630 diritto.studio@unicampus.it

CAMPUS LIFE +39 06.22541.1630 campuslife@unicampus.it

#### LIBRARY

+39 06.22541.9050/9051/9052/8060 biblioteca@unicampus.it

#### SPORTIVE ACTIVITIES

+39 06.22541.1630 campusport@unicampus.it



CAMPUS BIO-MEDICO UNIVERSITY OF ROME Via Álvaro del Portillo, 21 - 00128 Roma

www.unicampus.it

# f 💿 😏 💿 🗓 😳

