



100
NATIONALITIES
REPRESENTED
SINCE 2010

900
OF THE STUDENTS
GRADUATE
SINCE 2010

99%
PROFESSIONAL
INTEGRATION

SKILLS TAUGHT

- Developing innovative research projects in bio-engineering field
- Planning and conducting scientific/technological projects (analysis, diagnosis, modeling, experimental protocols, result interpretation)
- Scientific and medical ethics
- Elaborating oral and written scientific communications for international conferences and peer-reviewed journals
- Capacity of adapting to professional environments (teamwork, adjusting to different contexts and cultures)

ENTRANCE REQUIREMENTS

This BME Paris Master program is open to:

- highly motivated students
- all nationalities
- with a scientific, biomedical or engineering curriculum

Admission can be considered at either M1 or M2 level.

APPLICATION DATES

- Open: 1 February
- Close: 30 June

LOCATION Paris, France

FULL TIME 2 years

PROGRAM TAUGHT IN English

M1 ENTRY REQUIREMENTS

Any Bachelor's degree in Science

CONTACT & INFORMATION

PROGRAM CHAIRS

Pr. Sophie Bernard
Université de Paris

Pr. André Klarsfeld
ESPCI Paris, Université PSL

Pr. Sébastien Laporte
Arts & Métiers

MASTER'S PROGRAM COORDINATOR

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BME PARIS

BioMedical Engineering

MASTER'S PROGRAM



MASTER IN BIOMEDICAL ENGINEERING

An interdisciplinary program bridging engineering concepts and tools and health and life sciences

- An exceptional scientific environment within Université Paris Descartes, Arts et Métiers and Université PSL
- A very broad offer of highly interdisciplinary teaching units where scientists, engineers and clinicians address challenges at the forefront of bioengineering research
- An international experience, with 30-40% of the students coming from abroad, almost all courses taught in English (except French for foreigners), and links with foreign laboratories for internships, especially at M1 level
- Strong links to the socio-economic and medical worlds : industry lecturers (e.g. from Thalès, Renault, Sanofi), visits of hospital departments, attendance of medical congresses, a Business Plan workshop
- A localization at the very lively and cultural heart of Paris

AN INTERNATIONAL MASTER'S PROGRAM

The BME Paris Master's Degree Program offers two years of academic and professional training in bioengineering, a burgeoning field at the crossroads of the biomedical and engineering sciences. This program results from a partnership established between Paris University and the Paris Institute of Technology (ParisTech).

This jointly sponsored program offers a high-quality curriculum to students arriving from a broad range of academic backgrounds :

biology and biochemistry, medicine, chemistry, physics, engineering, mathematics and computer science, etc. The aim of the BME Paris Master is to provide students with the tools and capacities that will enable them to function in a broad range of biomedical engineering applications that today rank among the most scientifically innovative and rapidly developing areas of academic or clinical research as well as industrial R&D.

The first year of the BME Paris Master's program (M1) is intended to strengthen and broaden students' capacities in specific engineering and biomedical subjects.

Considering the wide variety of academic origins and backgrounds of the students, all the M1 courses are proposed at two levels : basic or advanced.

Students are advised in their individual choices of teaching units, to bring them up to date on the fundamental science subjects they may not have acquired through their previous studies or to go deeper into subjects they would like to pursue in their M2 specialization track.

1st SEMESTER

Integration week

Scientific Thinking Module

- BioMedical Modeling
- Computer Programming
- Applied Mathematics for biological systems
- Molecular & cellular biology for engineers
- Physics for BioImaging
- Chemistry for engineers
- Biomechanics
- Medicine & Science
- Anatomy & physiology for engineers

2nd SEMESTER

- Ethics and Patents
- Internship(s), for a total of 4 months
- Scientific Writing
- BioTech FabLab project

The second year of the BME Paris Master (M2) is intended to specialize students' capacities in dedicated engineering and biomedical tracks.

Applicants to the M2 must choose between five tracks, as described below.

3rd SEMESTER

INTERDISCIPLINARY SEMINAR including ALL M2 students

BIN BIOENGINEERING AND INNOVATION IN NEUROSCIENCE

BIM BIOIMAGING

Bio MAT BIOMATERIALS AND BIODEVICES

Bio MECH BIOMECHANICS
• engineering science subtrack
• health science subtrack

MCB MOLECULAR AND CELLULAR BIOTHERAPIES

4th SEMESTER

5- TO 6-MONTH INTERNSHIP