

General presentation

The "International Track in France" is a 2-year program leading to the degree of Master in Life Sciences and Health from the <u>Université Paris-Saclay</u>. The application process will start mid-January 2022.

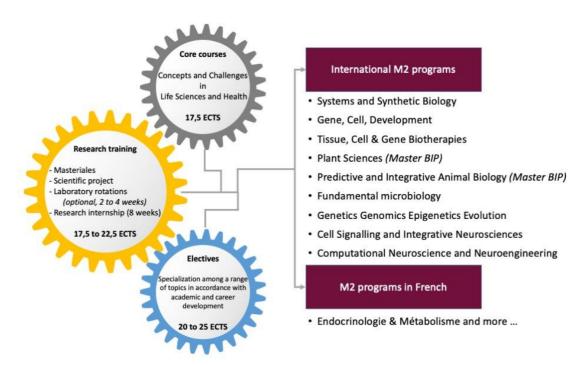
The "International Track in France" combines a Master 1 program for English-speaking students with any of the International Master 2 programs listed below:

- M2 Gene, Cell, Development
- M2 Systems and Synthetic Biology
- M2 Biotherapies: Tissue, Cell, Gene
- M2 Fundamental Microbiology
- M2 Genetics, Genomics, Epigenetics and Evolution
- M2 Plant Sciences (Master BIP)
- M2 Predictive and Integrative Animal Biology (Master BIP)
- M2 Cell Signalling and Integrative Neurosciences
- M2 Computational Neurosciences and Neuroengineering

International students with a sufficient level in French can also apply to other French-taught Master 2 programs offered by the Université Paris-Saclay.

A full-time student will need to validate **60 ECTS** (European Credit Transfer System) during each of the two academic years to complete the Master program.

General architecture





Program Content

The pluridisciplinary Master 1 program is composed of two semesters of study for a total of 60 ECTS. It is divided into three parts.

Part 1: Core Courses – compulsory for all students (17,5 ECTS)

During the first part of the program, students will take the following courses that address key concepts and challenges in the following basic fields of Life Sciences and Health:

- Genetics and Genomics
- Cellular Biology
- Biochemistry and Cell Signaling
- Systems biology

This part of the program will be mostly based on active learning which includes reverse approaches and problem-based activities.

Part 2: Electives (20 to 25 ECTS)

During the second part of the program, students will choose among a wide range of elective courses in accordance with their academic and career development goals. Some of the areas of study include:

- Epigenetics
- Microbiology
- Neuroscience
- Biotherapies
- Development
- Evolution
- Applied genomics and precision medicine
- Synthetic biology
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Elective courses only open if there is a **minimum** of 10 registered students. Some elective courses cannot be chosen together because of schedule conflicts.

Part 3: Research training (17,5 to 22,5 ECTS)

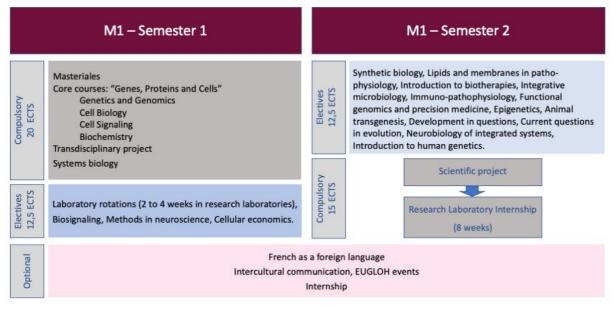
We are offering a research-driven Master program through which students can focus on their own research interests and can develop individual research trajectories.

The concept of "Masteriales" requires students to organize themselves in small groups and to design an innovative thematic and/or technological research project in a limited time (48 hours). At the end, they must present their project in a reasoned way before a jury of scientists. Students will also be asked to write a virtual research grant application. Taking place from the first days of the academic year, the annual edition of the "Masteriales" allows for better group cohesion, a possible disinhibition and building of self-confidence among the students. They also discover some of the difficulties inherent in designing research projects.

During the first semester, students have the possibility of performing laboratory rotations for a period of 2 to 4 weeks in partner establishments of the Université Paris-Saclay in the field of Life Sciences. The rotations cover a wide range of research topics and will address questions about how model organisms advance science.

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During the second semester, students will be tutored in a teaching unit leading to the conception of a research project that will be undertaken during an 8-week internship in a host scientific laboratory. This training provides students with an ideal opportunity to prepare for a career in research (in both academic and private settings).



Optional:

We encourage our students to participate to supplementary training courses to enhance their career skills (foreign languages, intercultural communication, thematic summer schools, internship,...). Supplementary teaching units are assessed. Some may qualify for ECTS credits but are not considered when calculating the average mean of the M1 year. In addition, the optional activities taken by the students and the acquired competencies will be notified on the diploma supplement.

Discover the training opportunities and events organized by EUGLOH - the European University Alliance for Global Health – in which our university participates: click <u>here</u>.



Program Goals

The aim of this Master program is to provide a solid and broad-based foundation in prominent areas in Life Sciences and Health. In addition, given the elective courses offered and the intensive research training internship, students will obtain both theoretical and practical experience in their fields of interest.

Competences and skills to be acquired in the field of Life Sciences and Health are:

-ability to comprehend general scientific developments

-in-depth and critical analysis of scientific literature in specialized international journals

-formulation of new questions and hypotheses

-communication with professionals

-ability to design and implement scientific experiments

-ability to describe, analyze and report on research data

-development of practical skills

-autonomy



Scholarship program:

Candidates for the International track (2 years) and Mater 2 programs (1 year) with an outstanding academic record are encouraged to apply for scholarships offered by the University of Paris-Saclay (<u>Scholarship program</u>).

Why choose this Master?

You will experience a newly-created and innovative study environment located on a worldclass and highly-competitive campus and research site in Europe (more <u>here</u>). This international opportunity will expand your horizons and enhance your personal development. Demands for graduates with an international cursus are constantly increasing due to the transverse skills they have acquired such as cultural awareness, language skills, adaptability, resilience, just to name a few. In terms of career opportunities, your international experience will prove be an extremely valuable asset.

Prerequisites

A bachelor's degree corresponding to a "Licence" in France (L-M-D European system, 180 ECTS, 3-year program) or equivalent academic qualification in Science (with a Biology content) from an internationally-recognized University is required.

English language proficiency equivalent to the COE/ALTE (Council of Europe/Association of Language Testers in Europe) English course B2 level is required.

- IELTS (International English Language Testing System): 5.0-6.0

- TOEFL (Paper Based, Test of English as a Foreign Language): 567-633

- TOEFL (Internet, Test of English as a Foreign Language): 87-109

- TOEIC (Listening and Reading, Test of English for International Communication): 785-940

- CAMBRIDGE ENGLISH LANGUAGE ASSESSMENT: FCE (First Certificate in English)

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Site

