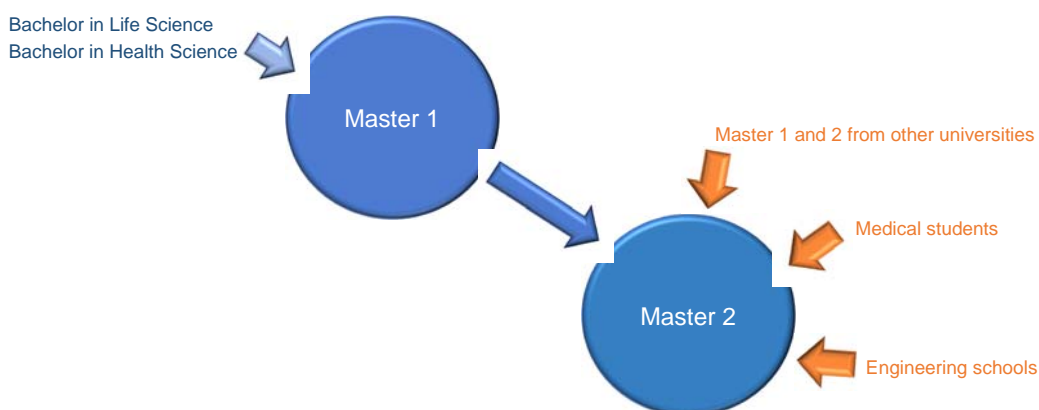


MASTER STUDIES IN NEUROSCIENCE AT SORBONNE UNIVERSITE

The Master BIP-Neuroscience program trains students in all fields of neuroscience:

- *cellular and molecular neuroscience*
- *integrated neuroscience*
- *cognitive neuroscience*
- *systems and computational neuroscience*
- *behavior*
- *development*
- *vision*
- *neurodegenerative diseases*
- *psychiatric diseases*
- ...

The program extends over **2 years**, with the possibility of joining **directly in the 2nd year** (depending on previous training).



Our training program is based on:

- more than **38 teaching modules in neuroscience** supported by recognized specialists (researchers, teachers/researchers, clinicians, ...)
- more than **200 research teams**, in France and abroad, regularly involved in our training.
- close collaboration, for teaching and research training, with the **4 Sorbonne Université neuroscience institutes** (**Neuroscience Paris Seine**, **Institut du Cerveau et de la Moelle épinière**, **Institut de la Vision**, **Institut du Fer à Moulin**), and with the **Institut Pasteur** and the **Ecole Normale Supérieure (ENS)**
- **3 international training programs** in partnership with **University College London**, **University of Vienna**, **Technical University of Munich**, **KU Leuven**, **National Autonomous University of Mexico**, and **Trinity College Dublin**
- **10 months of internship** in internationally-recognized laboratories in France or abroad

The neurosciences are fundamentally interdisciplinary, and our program is aimed at students from many different backgrounds -- **life sciences, medical training, engineering, mathematicians, computer sciences** -- aiming to pursue a career in neuroscience in the public or private sector.

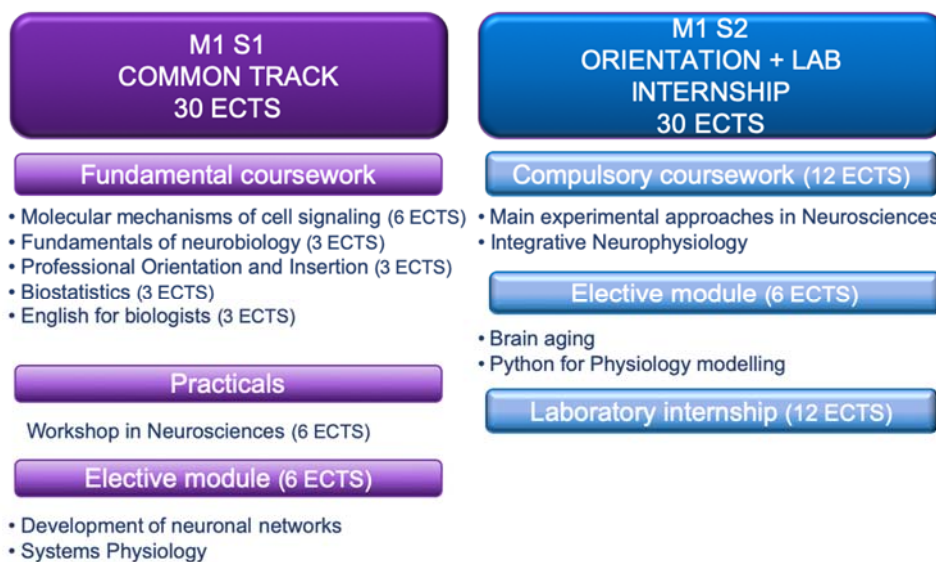
MASTER STUDIES IN NEUROSCIENCE AT SORBONNE UNIVERSITE

Training in the Master BIP – Neuroscience program helps students develop skills that transfer to other professions outside of the neuroscience field:

- *Project management*
- *Data management and analysis*
- *Scientific writing*
- *Presentation skills*
- *Entrepreneurship*
- *Developing scientific expertise*
- *Critical reading of the scientific literature*
- *Creativity...*

GENERAL ORGANIZATION

The **first-year program (M1)** provides fundamental coursework with a progressive focusing on neuroscience:



The **second-year program (M2)** is designed to provide a unique opportunity for each student to acquire in depth theoretical and practical knowledge in their field of interest.



MASTER STUDIES IN NEUROSCIENCE AT SORBONNE UNIVERSITE

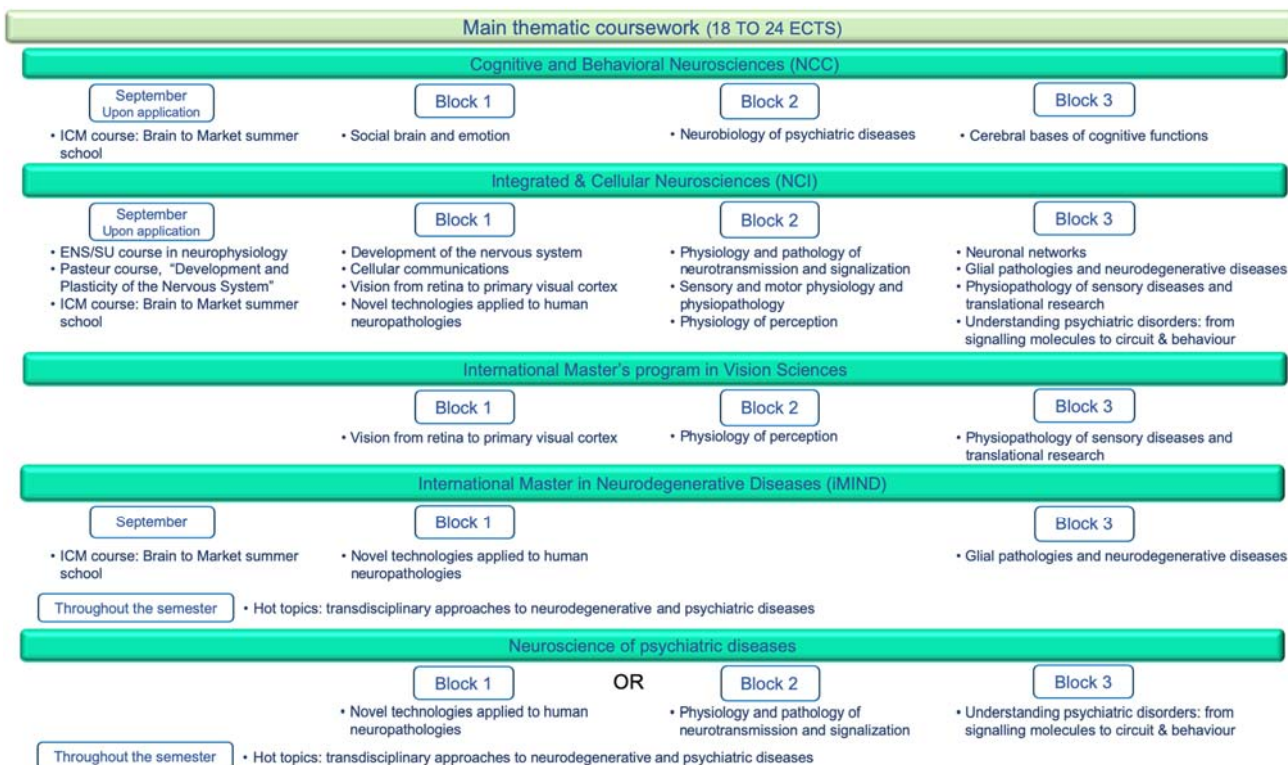
To help students organizing their formation, **5 thematic tracks** are proposed but courses from different tracks can be selected by each student to build a personalized curriculum:

- *cellular and integrative neuroscience*
- *cognitive and behavioral neuroscience*
- *vision science*
- *neurodegenerative diseases*
- *neurobiology of psychiatric diseases*

Each thematic track is based on suggested fundamental thematic coursework for a total of 18 ECTS.

DETAILS OF THEMATIC TRACK COURSEWORK

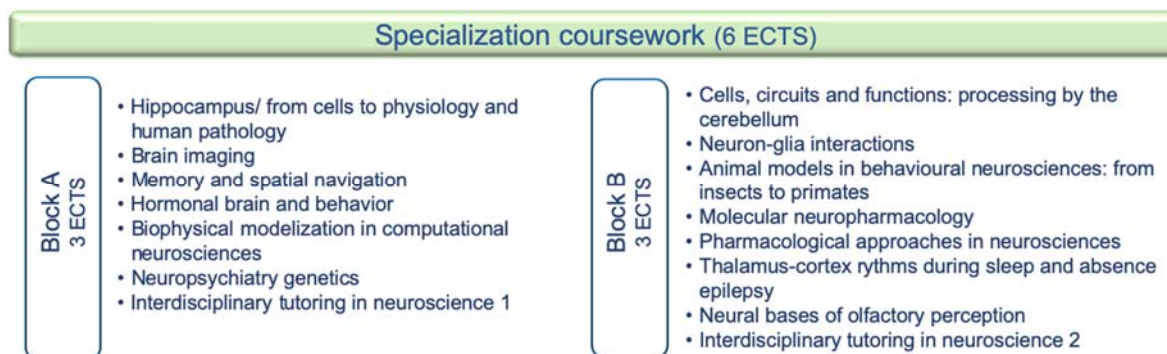
- *Most thematic coursework is taught in 2-week blocks in November and December (compatible with the schedule of medical interns)*
- *Some limited-enrollment courses (upon application), organized with the Ecole Normale Supérieure (ENS), Institut Pasteur and Institut du Cerveau et de la Moelle épinière (ICM, Brain and Spine Institute), are taught in September and October.*



MASTER STUDIES IN NEUROSCIENCE AT SORBONNE UNIVERSITE

DETAILS OF SPECIALIZATION COURSEWORK

2 series of one-week courses are taught in December and January. Each student chooses 1 course in each series.



DEVELOPING A RESEARCH PROJECT (6 ECTS)

This mandatory course is directly linked to the student's laboratory internship project. With the help of their internship supervisors, students describe, in a short written document and during an oral presentation, the design and feasibility of their experimental plan to answer the scientific question they will address during their lab internship. The developed research project will be undertaken, full-time, during the second semester.

MASTER'S THESIS (30 ECTS)

- 5 to 6 month internship performed in an internationally recognized research laboratory in France or abroad (financial support is available from the Master and/or the University to assist student mobility).
- The M2 research project is a professional experience that allows students to acquire scientific and technical expertise in their specialities as well as general skills (ability to carry out a project, to research and analyse information, to work in a team, to display creativity and critical thinking, to present information in a written and/or oral form ...) which are also valuable in non-research contexts.
- A list of projects proposed by French and foreign laboratories regularly participating in our training program is available on our website, but students can also apply to other research teams that work in their field of interest.
- At the end of the internship a written dissertation and oral presentation is evaluated by a jury, in June or September.

MASTER STUDIES IN NEUROSCIENCE AT SORBONNE UNIVERSITE

INTERNATIONAL PROGRAMS

The Master BIP-Neuroscience has developed close collaborations with prestigious foreign partners (**University College London, University of Vienna, Trinity College Dublin, Technical University of Munich, KU Leuven, National Autonomous University of Mexico**) to construct **3 international programs**.



Students interested are encouraged to directly contact people in charge of the programs for further details (see Contacts)

DUAL MASTER IN BRAIN AND MIND SCIENCES

- The Dual Master in Brain and Mind sciences is an international 2-years program, offered by **University College London and Sorbonne Université**, in **collaboration with the Ecole Normale Supérieure**.
- Students choose from a large number of courses proposed by each of the three prestigious partners.
- The first year is spent in London and the second year in Paris, with a research project to be carried in each city. Students graduate with a **Masters degree from UCL** after completion of the first year, **and** with a **Masters diploma from Sorbonne Université** after completion of the second year.

MASTER STUDIES IN NEUROSCIENCE AT SORBONNE UNIVERSITE

INTERNATIONAL MASTER IN NEURODEGENERATIVE DISEASES (IMIND)

- iMIND, developed in **collaboration with the Institut du Cerveau et de la Moelle Epinière (ICM)**, is focused on **neurodegenerative diseases**.
- iMIND is partnering with the **University of Vienna, Trinity College Dublin, KU Leuven** and the **Technical University of Munich**.
- Master's internships of the first and/or second years can be performed in the institutes affiliated to the program (a list of participating laboratories is available in our website).
- Under development: one/ two full semesters of studies in one of our foreign partners can be implemented for students integrating the program in the first year.

INTERNATIONAL MASTER IN VISION SCIENCE

- This program, developed in **collaboration with the Institut de la Vision (IDV)**, is dedicated to the study of **visual function** in humans, animals or computational models.
- It gives opportunities to follow one/two full semesters of study and/or to perform internships in the **Universidad Nacional Autonoma de Mexico (UNAM)**.
- Students validating two semesters in our partner university graduate with a **Master degree from UNAM** and a **Master degree from Sorbonne University**.

Contacts :

sciences-master-bip-neurosciences@sorbonne-universite.fr
<http://master.bip.sorbonne-universite.fr>

Director of the Master BIP-Neuroscience : Régis Lambert - regis.lambert@sorbonne-universite.fr

Administrative manager : Camille Leroy - camille.leroy@sorbonne-universite.fr

Thematic:

- *Cellular and Integrative Neuroscience* Ann Lohof - ann.lohof@sorbonne-universite.fr
- *Cognitive and Behavioral Neuroscience* Philippe Fossati - philippe.fossati@aphp.fr
- *Vision Sciences* Gregory Gauvain - gregory.gauvain@inserm.fr
- *Neurodegenerative Diseases* Hélène Cheval - helene.cheval@sorbonne-universite.fr
- *Neurobiology of Psychiatric Diseases* Sandrine Betuing - sandrine.betuing@sorbonne-universite.fr
Peter Vanhoutte - peter.vanhoutte@sorbonne-universite.fr

MASTER STUDIES IN NEUROSCIENCE AT SORBONNE UNIVERSITE

International programs:

- *Dual Master in Brain and Mind Sciences* Ann Lohof - ann.lohof@sorbonne-universite.fr
- *International Master in Neurodegenerative Diseases* Hélène Cheval - helene.cheval@sorbonne-universite.fr
- *International Master in Vision Science* Gregory Gauvain - gregory.gauvain@inserm.fr