

# Neuroscience (NeuroBIM)

## Program Outline

High standards

- › The Bordeaux International Master of Neuroscience emphasises training in cutting-edge techniques in all major topics of brain research, from molecules to cognition. Its main objective is to foster Neuroscience education and train new brain scientists, by offering a unique interdisciplinary and integrated approach from normal brain function to brain disorders.

Excellent teaching

- › In Bordeaux, about 30 professors and lecturers in Neuroscience are involved in teaching as well as many neuroscientists and colleagues specialized in psychology, cognition, modeling, physiology, genetics, medicine, brain imaging and other neuroscience related topics.

Top research / traineeships

- › Neuroscience in Bordeaux has grown over the last 15 years to become one of the largest Neuroscience scientific communities in France and in Europe, with over 700 people working in the various Neuroscience laboratories of the University of Bordeaux. In order to meet the most important challenges facing Neuroscience research, all these laboratories are grouped within

a multidisciplinary consortium of 6 laboratories, called Bordeaux Neurocampus, with many world renowned scientists. Bordeaux Neurocampus offers, together with our international academic partners, excellent opportunities for traineeships.

Interaction with the professional sector

- › Students have access to Pharma multinationals for traineeships through internationally oriented consortia such as Pierre Fabre, Sanofi-Aventis, Glaxo-SmithKline etc.

## Admission Requirements

Candidates must fulfill the following requirements:

- › Hold a Bachelor's degree (180 ECTS) or equivalent degree in biology, biochemistry, biomedical sciences, medical studies, pharmacy, cognitive sciences or psychology with a strong interest in Neuroscience.

## Academic Cooperation

Collaboration with:

- › Neurasmus consortium (Erasmus+Master program of Neuroscience).
- › University of Tsukuba (Japan).
- › Other partner universities from the USA, Canada, Europe.

## Program duration

2 years (120 ECTS).

## Language Requirements

Proficiency in English is required. Candidates should have adequate knowledge of written and spoken English, equivalent to B2 according to the CEFR.

## Fees and scholarships

Master tuition fees applicable for the University of Bordeaux.

- › International mobility for traineeships is supported by Aquimob mobility scholarships and NeuroBIM (Bordeaux International Master of Neuroscience) IdEx grants.
- › Students completing their traineeship in a laboratory of the University of Bordeaux receive a monthly stipend (around 500€) during the traineeship.

## Strengths

- › An up-to-date core curriculum in Neuroscience
- › Advanced scientific education and training with innovative and interdisciplinary brain research methodology
- › Training through original research aimed at the translation from bench-to bedside and from bedside-to-bench
- › Friendly and intercultural learning environment
- › Small classes and close faculty contact

# Year 1

## Semester 1

September-January (30 ECTS)

Compulsory courses:

- › Scientific Communication (3 ECTS)
- › Statistics and Neural Modelling (3 ECTS)
- › Tutored Project (3 ECTS)
- › Functional Neuroanatomy (5 ECTS)
- › Neurophysiology (4 ECTS)
- › Molecular Neurobiology (4 ECTS)
- › Neuropharmacology (4 ECTS)
- › Higher Brain Functions (4 ECTS)

## Semester 2

January-June (30 ECTS)

- › Laboratory Internship

# Year 2

## Semester 1

September - January (30 ECTS)

Compulsory courses:

- › Research Project Literature Survey & Methodology (9 ECTS)
- › Drug Discovery & Pharmaceutical Industries (3 ECTS)

Optional courses:

- › Current Research in Cellular and Molecular Neurobiology (6 ECTS)
- › Cognitive Neuroscience (6 ECTS)
- › Pathophysiology of Neurological & Psychiatric Diseases (6 ECTS)
- › Neural Networks (6 ECTS)
- › Addiction (6 ECTS)
- › Behavioural Studies in Neuroscience (6 ECTS)
- › Pre-clinical and Clinical Neuropharmacology (6 ECTS)
- › Advanced Topics in Cellular Neuroscience Imaging (6 ECTS)

## Semester 2

January-June (30 ECTS)

- › Master Thesis Project

## How to apply?

Master / Year 1:

- › French & international students, consult the NeuroBIM website

Master / Year 2:

- › French students, through the Apoflux platform (University of Bordeaux)
- › International students, consult the University of Bordeaux exchange program website.

## And after?

After graduation, students have access to career opportunities in the industrial sector, in clinical research or may carry out further fundamental research as PhD students.

Website



Contact

[admissiontec@u-bordeaux.fr](mailto:admissiontec@u-bordeaux.fr)



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