Neuroscience (Neurasmus)

Program Outline

The Neurasmus program is a fulltime Neuroscience study program offering a unique interdisciplinary and integrated approach of normal brain functions and diseases. It strongly emphasizes training in cutting-edge techniques in all major topics of brain research, from molecules to cognition. The Neurasmus curricula are completely embedded in international-oriented local Master programs of the partner universities. Each program features among the best and most renowned national programs in Neuroscience.

The Neurasmus program is an Erasmus Mundus Joint Master Degree developed under the Erasmus+ program. It fosters cooperation between higher education institutions and academic staff in Europe and Third Countries with the aim to create clusters of excellence and providing highly trained human resources.

Joint programs of outstanding academic quality are designed and implemented by a consortium of European universities from at least three different countries.

The program has mandatory research internships and requires to study in two universities in the course of the 2 years that the Master lasts. This leads to a recognised double Master degree.

Admission Requirements

Candidates must fulfill the following requirements:

> Hold a Bachelor's degree (180

ECTS) or a qualification in natural sciences.

- A solid basic knowledge in general cell biology, as well as the basics of chemistry and biochemistry, physics and math is required.
- > Excellent proficiency in English (IELTS, TOEFL, Cambridge).

Academic Cooperation

Collaboration between six partner universities:

- > Canada: Université Laval
- > France: University of Bordeaux
- › Germany: UMG Universitätsmediz in Göttingen, Charité
- > Universitätsmedizin in Berlin
- Portugal: Universidade de Coimbra
- Netherlands: Vrije Universiteit Amsterdam

Associated members:

 SPARK Foundation, University of Copenhagen, University of Ottawa.

Program duration

2 years (120 ECTS).

Language Requirements

- Candidates who completed their education in Canada, USA, UK, Ireland, New Zealand, South Africa, or Australia, do not need to provide an English certificates.
- All other applicants (incl. candidates who hold a Bachelor or Master degree taught in English) need to provide evidence of their English language skills

with any one of the following test scores:

> IELTS: 6.5 (no score below 6), Paper based TOEFL: 580, Computer-based TOEFL: 237, Internet-based TOEFL: 92, Certificate of Advanced English: B/C, Certificate of Proficiency in English: B/C.

Fees and scholarships

- Available scholarships: Erasmus Mundus student scholarships
- > Self-funded program country students*: 2,250€ per semester (9,000€ for the 2 year-program)
- > Self-funded partner country students: 4,500€ per semester (18,000€ for the 2 year-program)

Strengths

- Scientific education and training with innovative and interdisciplinary brain research methodology.
- Research projects laboratory rotations involving experimental work and data analysis.
- Common workshops bringing together students and university representatives.
- Small classes and close contact with faculty staff.
- International learning environment with high-level mobility opportunities.
- > Attractive scholarships.

Program structure

At the application stage, students choose the main track they wish to follow. This defines their first year mobility.

- > Amsterdam = Track Neurogenomics
- > Bordeaux = Track Neuropharmacology
- > Berlin = track Neuroimaging and translational research
- > Göttingen = Neurophysiology and imaging
- > Coimbra = Advanced molecular Neurobiology
- > Laval = Neurophotonics

Depending on their chosen track, students go to a specific university for their first year and then choose a different university to attend for their second year.

The Board of Education of the program reviews the applications and manages the selection for each university based on rank of the candidate and the hosting university capacity.

At the end of the first semester, students choose a subspecialty which defines the partner university(ies) for the 2nd year. It is part of the student's Personal Training Plan (PTP). Students have up to the end of first year / start of third semester to choose the subject of their Master Thesis. Students then spend their third and fourth semesters in one or two locations: Amsterdam / Göttingen / Berlin / Coimbra / Bordeaux / Laval.

Year 1

Semester 1 & 2

> Core curriculum

Students are introduced to the different domains of Neuroscience and taught the basic knowledge that they need to understand modern Neuroscience topics through the core courses common to all universities of the Neurasmus consortium. In addition, every student conducts research projects (laboratory rotations) in different participating departments.

Research projects involve experimental work, data analysis and a written laboratory report.

Year 2

Semester 1

> Advanced courses

The choice of the advanced courses, in association with the initial track, will define the subspeciality training obtained by the student and its host university for the 2nd year of its Master studies.

Semester 2

Master Thesis

Students complete a six month research project or industrial placement leading to a Master Thesis (30 ECTS).

How to apply?

Students may apply online.

And after?

On completion of the Master program, students are qualified candidates for different exchange and training PhD programs currently available among the consortium members.

- Graduates will have also the possibility to pursue their studies at PhD level at any of the consortium graduate schools (www.enc-network.eu) or at any other research institution worldwide.
- Graduates interested in starting a career within the business sector benefit from the industrial network of the consortium.



Contact neurasmus@u-bordeaux.fr





