SCIENCES, TECHNOLOGIES AND HEALTH

Nanomedicine and structural biology

Master in Nanosciences and nanotechnologies

Duration
2 years

Component
Grenoble INP, Institut d'ingénierie et de management - UGA

Language(s) of instruction
English

Presentation

This program is available in the form of work-linked training in the second year of the master. Students can enter the master 2nd year from the master Nanochemistry or Nanophysics programmes of the Nanosciences and nanotechnologies specialisation 1st year. It is also accessible via various 1st year programs offered by the chemistry and physics training & research units (UFRs).

The program is structured as follows :

- A foundation program of 12 ECTS, including 3 ECTS in a modern language
- Specific modules (24 ECTS)
- Work-linked training (24 ECTS)

The main aim of this program is to train managers with solid scientific and technical skills in the field of engineering and characterisation of micro- and nanostructures, as well as surfaces.

This track aims to prepare students for the challenges and innovations that are emerging at the border medicine nanoscience, including exploiting nanotechnology and nanomaterials for medical imaging and therapeutics. It also aims to train students to research in structural biology, a strong pole in Grenoble environment with the presence of large instruments and the European Molecular Biology Laboratory EMBL.

International education : Internationally-oriented programmes

International dimension

This master is entirely taught in English. This track is devoted to the new technologies in medical imaging involving nano- or molecular markers, as well as the therapeutic use of nano-particules. Taught courses include general biology courses mainly directed at students joining the program in the second year. It also includes a number of courses dealing with the various methods of medical imaging from magnetic resonance to X-rays, image processing issues, nano- and molecular markers, and courses in structural biology.

Admission

Access conditions

- Master 2nd year Basics in molecular and cellular biology, in physics of semi-conductors, in NMR, in optics and electromagnetism are required. Also, the candidate should prove sufficient english level (CEFR (B2), TOEFL (IBT 87-109), IELTS (5.5-6.5), TOEIC (785-945) or equivalent)

- Engineer / Master dual degree accessible to Phelma engineering degree students who have validated the 2nd year of Biomedical engineering field of study

Candidature / Application

Direct procedure : the student should subscripe on line

Fees

Tuition fees 2019-2020 : 243 €

And after

Further studies

This program offers career opportunities such as research & development engineer in public or private research organisations, as well as in various companies involved in activities ranging from materials preparation through to micro-electronics and renewable energies.

Professional integration statistics

According to the 2014-15 survey, two graduate respondents were on the labour market (employment+research). Of these, 100% were in employment 30 months after graduation.

Useful info

Contacts

Program director

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Program administration

Registrar's Office for the Master in Nanosciences and nanotechnologies

phitem.master.nano@univ-grenoble-alpes.fr

Program administration

Application

phitem.candidature.etudiant@univ-grenoble-alpes.fr

Course location(s) - City

Grenoble

Campus

Grenoble - University campus

Know more

Master website

https://master-nanosciences.univ-grenoble-alpes.fr