

SCIENCES, TECHNOLOGIES AND HEALTH

Nanomedicine and structural biology 2nd year

Master in Nanosciences and nanotechnologies



Target level
Baccalaureate
+5



ECTS
60 credits



Duration
1 year



Component
Grenoble
INP - Phelma
(Physique,
électronique
et matériaux),
UGA



Language(s) of
instruction
English

Presentation

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.

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.

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.

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International education : Internationally-oriented programmes

International dimension

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Admission

Access conditions

- Entry in 1st year : National diploma conferring the degree of license in a field compatible with that of the master ; title or acquired recognized equivalent by the admissions committee of the University of Grenoble Alpes
- Access to 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 subscribe on line

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.

Useful info

Contacts

Program director

Franz Bruckert

✉ Franz.Bruckert@grenoble-inp.fr

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>

Program

Master 2nd year

Semester 9

Semester 10