

SCIENCES, TECHNOLOGIES, SANTÉ, INGÉNIERIE

# Parcours Nanomedicine and structural biology 2e année

Master Nanosciences et nanotechnologies



Niveau d'étude  
visé  
Bac +5



ECTS  
60 crédits



Durée  
1 an



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



Langue(s)  
d'enseignement  
Anglais

## Présentation

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-particles. 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.

**Formation internationale** : Formation tournée vers l'international

## Dimension internationale

- 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-particles. 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

### Conditions d'admission

- 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

Do you want to apply and register ? Note that the procedure differs according to the diploma envisaged, the diploma obtained, or the place of residence for foreign students. Let yourself be guided simply by following this [link](#)

## Infos pratiques

---

### Contacts

#### Responsable pédagogique

Franz Bruckert

✉ [Franz.Bruckert@grenoble-inp.fr](mailto:Franz.Bruckert@grenoble-inp.fr)

#### Gestionnaire de scolarité

Laurence Printant

✉ [Laurence.Printant@grenoble-inp.fr](mailto:Laurence.Printant@grenoble-inp.fr)

---

### Lieu(x) ville

📍 Grenoble

---

### Campus

🏠 Grenoble - Domaine universitaire

# Programme

---

## Spécificités du programme

Program under construction - depending CFVU vote