

Master in Nanosciences and nanotechnologies

Nanobiotechnologies 2nd year

Presentation

The course offers disciplinary training focused on development and characterization at the nanometric scale with a strong multidisciplinary dimension (physics, soft matter, biology). It relies on research units working in various fields, ranging from biology to physics. It equips students with skills in the development, manipulation, characterization, understanding and exploitation of nano-systems, nano-materials, nano-structures and unique molecules, as well as knowledge of their application potentials. It makes students aware of the environmental and societal challenges of nanotechnologies.

Registration and scholarships

Access conditions

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

Public continuing education: You fall under continuing education:

- if you resume your studies after 2 years of interruption of studies
- or if you followed training under the continuing education regime in one of the previous 2 years or if you are an employee, job seeker, self-employed person

If you do not have the required diploma to integrate the training, you can undertake a process of [validation of personal and professional achievements \(VAPP\)](#)

For more information, see the web page of the [Continuing Education and Learning Department](#)

skin.odf-uga:SKIN_ODF_CONTENT_PROGRAM_CANDIDATURE_LABEL

Would you like to apply and register? Be aware that the procedure differs depending on the diploma, the degree obtained, or the place of residence for foreign students. Let us guide you simply by following this [link](#)

Expenses

Tuition fees 2023-2024: 243 €+100€ CVEC

Practicals informations :

- > Component : UFR PhITEM (physique, ingénierie, terre, environnement, mécanique), Grenoble INP, Institut d'ingénierie et de management, Grenoble INP - Phelma (Physique, électronique et matériaux)
- > level : Baccalaureate +5
- > Duration : 1 year
- > Course type : Initial and Continuing Education
- > Location(s) : Grenoble - University campus

Contacts

Program director

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Administrative contact

Registrar's Office for the Master in Nanosciences and nanotechnologies
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Application
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Continuing education manager

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Program

Master 2nd year

Semester 9

UE Surface Functionalisation	3 ECTS
UE Biosensors & high through-put analysis	3 ECTS
UE Bio-molecular interactions : methods and applications	3 ECTS
UE Micro-nano fabrication techniques	3 ECTS
5 option(s) to choose from 6	
UE Nano-safety	3 ECTS
UE Research training	3 ECTS
UE Fundamentals of structural biology	3 ECTS
UE Optics for bio systems	3 ECTS
UE Metabolic and cardiovascular physiology	3 ECTS
UE Introduction to Neurosciences	3 ECTS
UE Cell signaling and cancer biology	3 ECTS
UE Biomaterials and Biocompatible Surface Engineering	3 ECTS
UE Molecular markers for medical Imaging and therapy	3 ECTS
UE Nano-pores and membranes technologies	3 ECTS
UE Introduction to Machine Learning and Deep Learning	3 ECTS
UE Active matter	3 ECTS
UE Physics of biological systems	3 ECTS

UE International School in Soft Nanoscience (ESONN)	6 ECTS
UE in another program	6 ECTS
UE Microfluidics	3 ECTS

Semester 10

UE Master thesis	30 ECTS
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