

THEMATIC PROGRAM GRADUATE SCHOOL@UGA

Training the next generation of international scientists open to the world and its challenges

SOFT NANO

Soft matter, interfaces with the living world, nanomaterials and nano-objects



WHAT IS A THEMATIC PROGRAM?

A thematic program is an interdisciplinary module that aims to create a new generation of professionals capable of responding to major scientific and/or socio-economic challenges.

These modules are related to Master courses and give the students transversal skills thanks to solid training and rich international openness.

Students who participate in a thematic program can benefit from:

- A training of excellence through and for research in the 1st and 2nd years of Master;
- A 2-year-scholarship (equivalent to €16,000) for students with a non-French high school diploma;
- Mobility grants for an internship abroad;
- French language courses.

Presentation of **SOFT NANO** thematic program

What is SOFT NANO?

The Graduate School thematic program Soft-Nanosciences gathers 15 research labs and 6 master programs in the fields of soft matter, biophysics, chemistry and applied mechanics, to set up an innovative research-driven curriculum. Nanoscience has become a multidisciplinary field where soft materials are of immense interest. The self-driven organization of materials from the molecular scale into complex assemblies ensuring smart functionalities, opens a promising route toward new applications in the field of biotechnology, environment and energy. The capture of CO2 by nanoporous materials, new devices based on the physics of membranes for harvesting blue energy, are future applications that already pose fascinating interdisciplinary questions at the cross-roads of fundamental physics, chemistry and fluid mechanics, to scientists today.

A first professional experience in research

Every master student belongs to a laboratory and performs a 2-year long research work under the guidance of a research director.

International positioning

- International recruitment forum at the Bachelor's level,
- All SOFT NANO specific courses taught in English,

- Participation to the European school ESONN1 included in the master curriculum.
- PhD students benefit of an additional teaching mission;
 they contribute to the networking of the program.

Training through and for research

The Graduate School program Soft Nanoscience provides students with the opportunity to be immersed in a highly demanding scientific environment where the innovatioof the future is in gestation. It also gives students a first professional experience. From the beginning of their master, students become a member of a laboratory or research institute, take a full part to the life of the lab according to their time of presence, have access to high-tech facilities after having received appropriate training.

The training through research covers all aspects of leadinga project. In the fall semester of the 1st year students are trained to write and to defend a research proposal. They devote to this activity up to 2 days a week, confronting their progress with other students in regular meeting of the whole group (Research Methodology). Students develop their research project during the three subsequent semesters, in parallel to course work, or full time. At the end of the 2nd year, they are evaluated through the submission and defense of a Master Thesis.

SOFT NANO's detailed program

In parallel to the compulsory courses of their respective master, students undertake their research project related to soft and complex matter at the nanoscale. They validate the Soft Nanoscience Thematic Program modules:

- Research Methodology 6 ECTS, 1st year 1st semester;
- Graduate School Soft Nano internship 12 ECTS, 1st year 2nd semester;
- European School on Nanosciences and Nanotechnologies (ESONN part B) 6 ECTS, 2nd year 1st semester;
- Master thesis 30 ECTS, 2nd year 2nd semester.

A significant amount of time is devoted to these research credits (from 2 days a week to full time). As a consequence students in the Soft Nanosciences program take less elective courses than in the standard master curriculum. As intern in a research team they receive an internship stipend.

Master programs that offer **SOFT NANO**

Students should first be enrolled in one of the Master's degree or Engineering School programs listed below:

Master's degree / Engineering Course	University department or School	Language
M1 Applied Mechanics	UFR Phitem - UGA	English
M1 Soft matter and biophysics		
M1 & M2 Nanochemistry		
M2 Geomechanic, civil engineering and risks		
M2 Soft Nano		
M2 Polymers for advanced technologies		
M2 Nano biotechnologies		
M2 Environmental fluid mechanics		
M2 Nanomedecine	Grenoble INP UGA - PHELMA	English
2A & 3A Biomedical Engineering/ Biomedical devices		
M2 Fluid mechanics and energetics	Grenoble INP UGA - Ense3	English

How to apply?

Step 1 – Admission to a Master's degree or Engineering School that participate in the Graduate School

Apply for the master of your choice among those participating in the SOFT NANO thematic program – see the list on page 3

When: you must check the Master's deadlines https://www.univ-grenoble-alpes.fr/formation/admissions-et-inscriptions/

Step 2 – Admission to the thematic program

Once admitted to the master's degree, apply for the thematic program by connecting

www.univ-grenoble-alpes.fr/research/graduate-school/

Then, contact the SOFT NANO thematic program coordinator by email (see contact section).

When: As soon as you have received your master's admission letter.

You will receive a notification by email in case of acceptance or refusal of your candidature to the thematic program.

Scholarships

Graduate School@UGA provides scholarships based on the academic excellence of students enrolled in one of the 15 thematic programs.

The scholarship amount is 13,000 €(8,000 €for the 1st year of the Master's degree and 5,000 €for the second year), plus an internship grant of up to 3,000 €(depending on the internship period).

Graduate School@UGA scholarships are granted for two years (no scholarship is possible if the student registers only in the second year).

You must show interest in the scholarship through your motivation letter when applying for the thematic program.

You will be notified before the start of the academic year (between March and June).

CONTACT

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FOR MORE INFORMATION

www.univ-grenoble-alpes.fr/softnano-thematic-program



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Partner research structures and laboratories





