

Student life

Situated in a unique natural environment in the heart of the French Alps, Grenoble is a city with an enjoyable way of life, where anyone interested in sport can live out his/her passion. The French press consistently ranks Grenoble at the top of the list of French cities where it is good to be a student. There are more than 30 student clubs and societies offering all sorts of varied activities and events. Whatever you are into - sport, culture, humanitarian action, leisure or careeroriented activities - there is something for you. This is an integral part of your student life and your training as an engineer.

Facilities

Accommodation, health, food, transport, clubs, sport... It is all laid on for you! More information: https://international.univ-grenoble-alpes.fr/english/

TESTIMONIES

Hélène A., an engineering student at Phelma, discusses student life in Grenoble Do you like the town and the region: its atmosphere, sports, culture, housing, etc.?

What I like about Grenoble is that it is very easy to get about by bike, and the fact that you can get wherever you want quickly is really great! And then there are all sorts of activities: walking, cycling, skiing, museums, the theatre, etc.

When research meets education: Interview with Marianne WEIDENHAUPT (PhD. Lecturer) What are the advantages for a student to be taught by a researcher?

Combining teaching with research gives you the unique possibility to go beyond theories and models and propose projects and internships to the students so that they can be directly involved with ongoing science. It is also a source of motivation to encourage students to develop their own research projects and participate in international competitions, like iGEM, in the field of synthetic biology. Not to the least, the scientific network of the researcher is often a source of inspiration for the orientation and future professional carrier of the students.



HONORS

Jean KUNTZMAN - First computing lab (1951) Louis NÉEL - Physics Nobel Prize (1970) Joseph SIFAKIS - Turing Prize (2007) Rachid YAZAMI - Draper Prize (2014) Renaud BOUCHET - EDF Pulse Award in the Science category (2014) Alim Louis BENABID - Lasker-DeBakey Clinical Research prize (2014) & Breakthrough prize in Life Science (2015) Catherine Picart - CNRS Silver medal (2016)

PRESS RANKINGS

- ➡ Grenoble: 5th most innovative city in the world (FORBES)
- Shanghai Global 2023: Université Grenoble Alpes still in the top 150 of the world's best universities and in the top 5 of French universities.
- QS 2023 ranking by theme: Grenoble INP UGA makes good progress in the field of engineering and technology
- Grenoble INP UGA has made good progress in the overall field of "engineering and technology", moving up 74 places to 93rd position worldwide and 5th position in France, making it the leading institution outside the Paris region. The institute has made a total of 8 appearances in this ranking.
- Reuters 2019 ranking of the 100 most innovative universities in Europe. Grenoble INP is ranked 2nd among French engineering schools and 13th among French higher education establishments.

CONTACT US

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Grenoble

19 RÉPUBLIQUE FRANÇAISE



INP Phelma UGA

Graduate School of Engineering in **Physics, Electronics, Materials Sciences**

https://phelma.grenoble-inp.fr/en

Micro and nano-technologies, Nuclear and renewable energy, Information technology, Innovative materials, **Biomedical engineering**, Sustainable development

> GRENOBLE INP - UGA INGÉNIERIE & MANAGEMENT

MEMBRE DU GROUPE INP

Grenoble INP - Phelma, UGA School of engineering in Physics, Applied Physics, Electronics and Materials Science within the Grenoble Institute of Technology and "Université Grenoble Alpes"

Phelma is part of an extensive academic and research structure in Grenoble. This network comprises the Grenoble Institute of Technology, which as a merger of 6 "Grandes Écoles" devoted to Engineering Sciences, is the largest group to train engineers in France. It also regroups the "Université Grenoble Alpes", with Human and Social Sciences, Sciences and Medicine, and Humanity topics.

Phelma, the excellence of a French "Grande École"

As a "Grande École" devoted to engineering, Phelma has a very competitive selection process. Only the top 10% of the French students in science can access to this higher education system. After an intensive 2-year curriculum called "classes préparatoires", they are selected through a national competition to enter a "Grande École". After a 3 year study period, they obtain a "diplôme d'ingénieur", equivalent to a Ms of Science in Engineering, enabling them to work as an engineer or to continue with a PhD. The Engineer diploma guarantees an optimal career path in France. The "Grandes Écoles" like Phelma are also accredited to deliver Master degrees. In that case, the recruitment is done by a specific committee.

| | UNIVERSITY LINE | ENGINEERING LINE |
|----|-----------------|-------------------------|
| +8 | _ | |
| | PhD | |
| | | |
| +5 | Master | |
| | Muster | "Grandes Écoles" |
| +3 | | |
| +2 | Bachelor | National competition |
| | | "Classes préparatoires" |

Phelma, a wide range of academic programs and research in engineering

Focused on tomorrow's challenges, Phelma offers a complete spectrum of engineering thematics. With high qualified facilities and technology platforms, Phelma is the ideal place to develop scientific competences. The well-recognized research environment in Grenoble favors this innovation potential.

KEY DOMAINS AND THEMATICS IN PHELMA

Training offers and research centers in the following subjects:

- Micro and Nano-technologies (micro / nano-electronics, nano-sciences, materials, health, building...)
- Energy (nuclear energy, renewable energies, accumulators...),
- Innovative Materials (for aeronautics, automobiles, sport & leisures, health, microelectronics, energy...),
- Information Technology (digital technologies, image and signal processing, telecommunications, computer science & networks, embedded softwares, connected devices, Internet of Things...),
- Biomedical Engineering (medical imagery, nanobiology and implementable devices...)
- Environment (eco-processes, energy management, natural signal analysis...)

ACADEMIC PROGRAMS AT PHELMA

After a 1-year common core, Phelma offers the following master level specialties:

- Electrochemistry and Processes for Energy and the Environment
- Materials Science and Engineering
- Reactor Physics and Nuclear Engineering Specialty
- Biomedical Engineering
- Physical engineering for photonics and microelectronics
- Micro and Nanotechnologies for Integrated Systems (Nanotech)
- Integrated Electronic Systems
- Signal and Image Processing, Communication Systems, Multimedia
- Embedded Systems and Software and Connected Devices
- Telecommunications

TRAINING LABS AT PHELMA

Lab sessions make up 30% of the training offered at Phelma. High technology platforms available for studies:

- CIME Nanotech is an inter-university center offering several platforms: clean room, electrical characterization, systems on chip, biotechnology, hyperfrequency...
- Nuclear physics training lab for radioactivity, cosmic rays or tomography study.
- Industrial Chemistry training lab which contains semi-industrial equipment for practical training in electrochemistry, process engineering and fluid mechanics.
- · Large international scientific instruments: the European Synchrotron (ESRF) and a neutron reactor (ILL) are located in Grenoble and Phelma's students access those instruments for mater exploration.



Grenoble's scientific environment: training, research and industries

According to Forbes magazine (2013), Grenoble is the 5th most inventive city in the world. This is due to strong links between:

- Higher education: 1 out 5 residents is a student and 42% are in scientific fields
- · Research: Grenoble is the second largest French scientific researcher cluster with well-known labs: CEA-LETI, ESRF, ILL, EMBL, IBS, IAB, GIN, CLINATEC, TIMA, LIG, IMEP-LAHC, SIMAP, GIPSA-lab, LMGP,...
- Innovative industries: ST Microelectronics, CEA, BD, Biomérieux, EDF, Capgemini, Soitec, Schneider Electric, HP, Motorola, Xerox, Caterpillar,...

All these professionals are involved in five major high-tech sectors: Electronics and Micro-nanotechnologies, IT and Software, MedTech and Health Care, Energy Technologies, Chemical and Cleantech.

Grenoble is also an international city with 4 out of 10 industrial jobs in foreign-owned companies and 45% of foreign PhD students.

KEY FIGURES

732,800 inhabitants



- 60,000 students with 42% enrolled in scientific programs
- 470 foreign-owned companies with multinational corporations (mainly american, german & english)
- **200** start-ups created over the past 10 years from public research 25,000 R&D jobs
- 10% of the students are international students
- 2nd largest english speaking community in France
- Number one area for research jobs
- A trade surplus of more than **€1 billion**
- Number two area for engineering jobs
- Young population, qualified with strong scientific focus