Our offer

The Ginsen programme

A **Bachelor-level** summer programme **fully taught in English**, organised by Grenoble INP Graduate schools of Engineering and Management, Université Grenoble Alpes.

You wish to **deepen your knowledge** in Smart energy or Micro / Nanotechnology, while **traveling the world** and meet new, exciting people from different cultural backgrounds?

Come and try our Ginsen Summer School! **At the heart of the French Alps**, you will study within **one of the highest ranking French engineering institutes** and have the chance to work in cutting-edge research facilities, while enjoying summer surrounded by gorgeous mountains and with **Europe at your doorstep.**

Two options in one

Ginsen offers **2 options**, allowing you to explore and deepen your knowledge in the engineering field of your choice: **Micro / Nanotechnology** or **Smart Energy**.

The 4-week programme combines:

- **Academic scientific classes** (some are common to both options, other specific to a field).
- **Practical work sessions** in labs and clean rooms
- **A full social and cultural programme** including visits to world-class research facilities, guided visits of Grenoble city and its surroundings, parties, hikings, etc.

Contact us

Application & information

Join the Ginsen Community

Social media: @ginsensummerschool
Mail: summerschool@grenoble-inp.fr

Grenoble INP - UGA
46 avenue Félix Viallet
38031 Grenoble
FRANCE

GRENOBLE INP UGA

GINSEN summer school

Smart Energy & Micro / Nanotechnology

From June 16th, 2025 to July 15th, 2025

A bachelor-level
Summer programme
fully taught in English

Why choose Ginsen?

Validation of credits

Ginsen summer school, should you succeed, will earn you 3 ECTS credits (European Credit Transfer and Accumulation System)

Fees

Ginsen full programme : 3 500 € (4 weeks)

Possible discounts from 10 to 30%*
*Unite! partners and early bird registrations

The price includes : All lectures and practical sessions, accommodation, visits to high-tech facilities, planned extracurricular activities, medical insurance, civil liability.

Application process

Applications for the 2025 edition will be open from **November 1st, 2024 to March 31st, 2025**.

Requirements :
Ginsen Summer School is tailored for students at bachelor-level.

To enroll in Ginsen Summer School, you must :

- Be at least 18
- Live in a country that allows you to come study in France
- Have an “Independent speaker - upper intermediate" level in English, or the equivalent of a B2 level according to the CEFR standard (Common European Framework of Reference for Languages)
- A basic French level is better but not necessary as the whole programme will be taught in English

Smart Energy

Owing to its **outstanding scientific environment and its pioneering activities linked with hydroelectricity**, Grenoble has always been in the forefront of the **development of new technologies in the field of energy and water management**.

Smart Energy option will cover several fundamental aspects of the field, **from smart-energy to emerging energy society**, and applications, **from physical modeling and optimization to machine learning and internet of things** (IOT).

This option is open to students in IT or Energy (Bachelor and first year of Masters degree level).

Lectures :

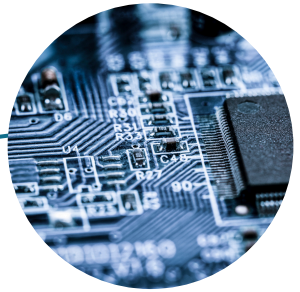
- Smart-buildings? What are the upcoming new end-user services?
- Urban modelling and analytics
- Demand response programs
- Empowering consumers
- Towards a new paradigm: the smart-grid
- Introduction to Artificial Intelligence and Machine Learning
- Technology for smart energy: Smart objects and Internet Of Things
- Data analytics for a low consumption building : GreEn-ER (labs)
- Artificial intelligence and new services for GreEn-ER occupants (labs)
- Intercultural communication
- Project Management
- FLE (French basic classes)

Micro / Nanotechnology

Grenoble being **one of the most dynamic centres in Europe** in this area, discover Micro/ Nanotechnology within the prism of leading research.

Micro/Nanotechnology option will cover several fundamental aspects of this field, **from physics to nano-bio-sciences**, and applications, **from electronics to materials sciences**.

This option is open to students in Physics, Biology, Chemistry, Applied Physics, Telecommunication, Material Science, Electrical Engineering (Bachelor and first year of Masters degree level).



Lectures :

- Introduction to nanophysics
- Practical work session in clean room
- Electrical Characterization
- Nanofunctional materials
- Introduction to microsystems
- From Microelectronics to Nanoelectronics: Devices, Architectures and Processes
- Intercultural communication
- Project Management
- FLE (French basic classes)