



THEMATIC PROGRAM GRADUATE SCHOOL@UGA

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

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# TERRA

Energy Transition, Socio-ecological transition,  
Socio-ecosystems, Global Change, Human and  
Social Sciences, Environmental Sciences,  
Environmental humanities

**UGA**  
Université  
Grenoble Alpes

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## 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 1<sup>st</sup> and 2<sup>nd</sup> 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.
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## Presentation of **TERRA** thematic program

### What is TERRA?

TERRA train the next generation of natural resources managers, whether they are geologists, hydrologists, climatologists, ecologists, sociologists or economists, to risks and opportunities in the energy transition in Europe.

We will particularly focus on the social and environmental challenges associated with the ecological and energy transitions, and will develop new tools and practices to gain the Social Licence to Operate, for ethical sourcing and the traceability of raw materials, develop Nature Based Solutions, establish industry alliances as a key mechanism towards sustainable and secure supply of raw materials.

### A first professional experience in research

The thematic program TERRA provides opportunities to be immersed in a highly competitive scientific environment.

It also gives students a first professional experience. From the beginning of their master's, students become members of a laboratory or research institute, take full part in the life of the lab according to their time of presence, and have access to high-tech facilities after having received appropriate training.

### International positioning

- International recruitment forum at the Bachelor's level,
- Students participate in field trips with other international students

### Training through and for research

Students develop their research project during the next three semesters either full-time or in addition to their course work. At the end of the 2<sup>nd</sup> year, they are evaluated through the submission and defense of a Master's Thesis.

## TERRA's detailed program

In parallel to the compulsory courses of their Respective master, students undertake their research project related to Environment, Raw Materials, Energy, and society nexus.

### SPECIFIC COURSES

#### M1: Field trip (3 ECTS)

3 days along the Rhone river and the Massif Central Mountains to discover the environmental footprint of human activities (energy production, raw material extraction, urbanism).

#### M1: Growth and Planetary Limits (3 ECTS)

The goal of this module is to introduce students to the energy and environmental issues raised by the modern quest for economic growth and to map out the potential

of the ecological transition. This series of courses is structured along three main axes: an introduction to environmental discourses on growth and limits; a zoom on the climate-energy-raw material nexus; a "map" of the possibilities for low-carbon economies.

#### M2: Environmental observatory (3 ECTS)

A 2 years long learning by doing research program, where student will be enrolled into environmental monitoring research activities.

#### M2: Summer School: Mountains in a changing world (3 ECTS)

This innovative program brings an interdisciplinary approach to the complex question of how climate change in mountainous regions affects both humans and nature

# Master programs that offer **TERRA**

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

<b>Master's degree / Engineering Course</b>	<b>University department or School</b>	<b>Language</b>
Parcours Géo ressources 1 <sup>re</sup> et 2 <sup>e</sup> années	UFR Phitem - UGA	French
Parcours Hydro ressources et Qualité des Milieux 1 <sup>re</sup> et 2 <sup>e</sup> années	UFR Phitem - UGA	French
Parcours Earth Science System 1 <sup>re</sup> et 2 <sup>e</sup> années	UFR Phitem - UGA	French
Parcours Système Climatique : Atmosphère, Hydrosphère, Cryosphère 1 <sup>re</sup> et 2 <sup>e</sup> années	UFR Phitem - UGA	French
International Master in Electrical engineering for smart grids and buildings (SGB)	UFR Phitem - UGA	English
Master in Hydraulic and civil engineering	Grenoble INP ENSE3 - UGA	English
Ingénierie du Développement et de l'Aménagement des Territoires en Transition (IDATT)	IUGA	French
Transitions écologiques : solidarités, innovations économiques et développement territorial	Sciences Po Grenoble - UGA	French
Cursus Ingénieur : Automatique et systèmes intelligents	Grenoble INP ENSE3 - UGA	French
Cursus Ingénieur : Hydraulique, ouvrage et environnement	Grenoble INP ENSE3 - UGA	French
Cursus Ingénieur : Ingénierie de l'Energie électrique	Grenoble INP ENSE3 - UGA	French
Cursus Ingénieur : Ingénierie de l'énergie nucléaire	Grenoble INP ENSE3 - UGA	French
Cursus Ingénieur : Systèmes énergétiques et marchés	Grenoble INP ENSE3 - UGA	French
Cursus Ingénieur : Mécanique et énergétique	Grenoble INP ENSE3 - UGA	French
Biodiversité, écologie, évolution	UFR Chimie- Biologie - UGA	French
Parcours Ressources, environnement et sociétés en transition (RESET)	UFR SOCLE - UGA	French
Parcours Système Climatique : Atmosphère, Hydrosphère, Cryosphère 1 <sup>re</sup> et 2 <sup>e</sup> années	UFR Phitem - UGA	French
Parcours Atmosphère-climat-surfaces continentales 1 <sup>re</sup> et 2 <sup>e</sup> années	UFR Phitem - UGA	French
Parcours Geophysics & Earth Imaging	UFR Phitem - UGA	French / English
Parcours Research Intensive Track in Geosciences 1 <sup>re</sup> année	UFR Phitem - UGA	French / English
Parcours Histoire appliquée : société, environnement, territoire	UFR ARSH	French

# 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 TERRA 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/](http://www.univ-grenoble-alpes.fr/research/graduate-school/)  
Then, contact the TERRA 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 1<sup>st</sup> 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/terra-thematic-program](http://www.univ-grenoble-alpes.fr/terra-thematic-program)



## Partner research structures and laboratories

