

# Master in Earth, planetary and environmental sciences

## The programme offers the following course(s) :

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- › Research Intensive Track in Geosciences 1st year
- › Earth System Sciences 1st and 2nd year
- › Geophysics and Earth Imaging 1st and 2nd year
- › Georessources 1st and 2nd year
- › Hydroressources et Qualité des Milieux 1st and 2nd year
- › Natural Geological Hazards and Risks 1st and 2nd year
- › Système Climatique : Atmosphère, Hydrosphère, Cryosphère 1st and 2nd year

## Presentation

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The master in Earth, planetary and environmental sciences is a two-year course (for students having completed 3 years of higher education) that teaches high-level skills in the study of processes operating at all scales in the Earth-Environment system.

This master is co-accredited by the Université Grenoble Alpes and the National Polytechnic Institute of Grenoble. The master is organised around different programmes (two of which are formally identified as international programs). All the programs are defined over the two years of the master, and students choose a program when registering for the 1st year. Nevertheless, progressive specialisation is planned, with a foundation program for the specialisation, foundation modules for each major of the master 1st year (Solid earth ; Water-climate-environment) and most of the modules (UEs) common to several programs. It is therefore possible to change program right up to the end of the 1st year's master ; the final choice of program is made when entering the 2nd year.

The master in Earth, planetary and environmental sciences aims to train students in the modern tools of mechanical physics, chemistry and geology that enable a quantitative approach to be applied to Earth and environmental studies, whether regarding geodynamics, climate, natural hazards, soil and water pollution, geological and geophysical exploration, etc., and to draw on a very solid field knowledge when using these tools. A major challenge is to apply science and new technologies, in particular through the use of modelling, to society's current problems.

None of the programs specifically has a vocational or research goal ; the principle is rather to stress their objectives in terms of skills acquired. Nevertheless, the Geodynamics and Atmosphere-climate-continental landmass programs mainly prepare students for doctoral studies. The others are mixed programs (research, development and innovation) that help prepare students for the labour market after either five or eight years of higher education. The opportunities are:

- After five years (bac + 5) - engineering jobs in large energy and mining companies ; consultants in geology, geophysics, environment ; local and regional authorities ; non-governmental organisations
- After eight years (bac + 8) - teaching / research in state-owned scientific, technological, industrial or commercial establishments (EPST, EPIC) ; R&D in large energy and mining companies, environmental research centres, international and national organisations

## Registration and scholarships

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### Access conditions

- The 1st year is open to students who have obtained a national diploma equivalent to a bachelor degree (licence) in a field compatible with that of the master, or via a validation of their studies or experience
- Entry to the 2nd year may be selective. It is open to candidates who have completed the first year of a master in the field, subject to a review of their application

Public continuing education : You are in charge of continuing education :

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

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

### [skin.odf-uga:SKIN\\_ODF\\_CONTENT\\_PROGRAM\\_CANDIDATURE\\_LABEL](#)

You want to apply and sign up for a master ? Please be aware that the procedure differs depending on the diploma you want to take, the diploma you have already obtained and, for foreign students, your place of residence. Let us be your guide – simply follow this [link](#)

### Prerequisites

The master focuses on the tools to quantitatively address the Earth and environmental sciences (whatever the course), a good level in mathematics and physics is required. This is particularly true for the Geophysics course, which is primarily aimed at students with a degree in physics or mechanics.

### Recommended prerequisites

- For the Geodynamic and Georessources programs, a good level in Geology (including with field experiments) is highly recommended
- The teaching is given partly in English, a good level of English is required at the entrance of the master (preferably level B2). The B2 level in English is compulsory at the end of the master's degree to obtain the diploma. There is no integrated English course in the master, but English lessons. It is the responsibility of the students to reach the B2 level at least at the end of the master

### Target group

- Students in initial training with a bachelor's degree in Earth sciences, Physics, or Mechanics
- Foreign students wishing to pursue their studies in Earth sciences and the Environment in France
- Students in continuing education wishing to improve in the field of Earth sciences and the environment

### Expenses

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

### Knowledge check

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In each case : written report + oral defence (public except in cases of confidentiality)

## Practicals informations :

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- > Component : UFR PhITEM (physique, ingénierie, terre, environnement, mécanique)
- > level : Bacalauréat +5
- > Duration : 2 years
- > Course type : Initial and Continuing Education
- > Location(s) : Grenoble - University campus

## Contacts

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### Continuing education manager

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## Program

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