

Career Opportunities

Whether you have a Master's degree or a PhD from the EPS Graduate Programme, your profile will be very interesting to various sectors related to geosciences and space exploration:

- Geology/Geophysics
- Instrumentation
- Remote sensing/Geomatics
- Earth and Planetary data

Examples of employment

- Engineer/manager in research and development
- Engineer/manager in a design office
- Researcher or research professor (PhD level)
- Scientific manager (PhD level)
- Chief project officer (PhD level)

Accreditations and partnerships

- Laboratory of Planetology and Geosciences (Nantes University, CNRS, University of Angers, Le Mans University)
- Department of Earth and Universe Sciences – Faculty of Sciences and Techniques
- Observatory of the Sciences of the Universe of Nantes Atlantic (OSUNA)
- GeoPlaNet
- Europlanet Society

Mars : Hope/Emirates Mars Mission/EX/AndreasLuck, Department STU / Nantes University.
NASA/JPL-Caltech/MSSS. NASA / JAXA / ISAS / DARTS / Damia Bouic / VR2Planets.



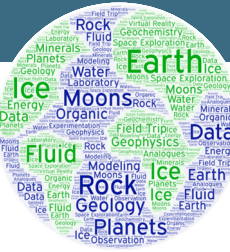
Earth and Planetary Sciences

(EPS)

Graduate Programme

MASTER'S AND DOCTORAL DEGREES

Designed by: Studio Carré Vert: 06 88 50 81 33. Photos: Europe: NASA/JPL-Caltech/SETI Institute;



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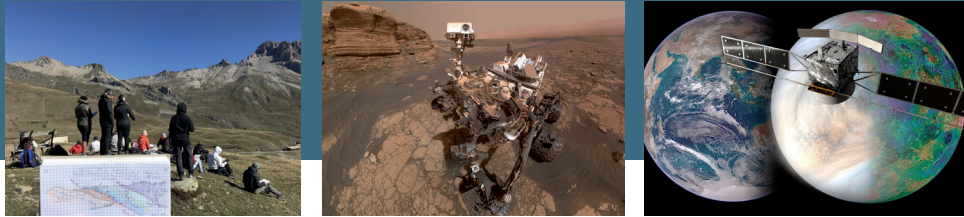


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The Graduate Programme Earth and Planetary Sciences (EPS) is integrated into the Faculty of Science and Technology and the Graduate School of Matter, Molecules, Materials and Geosciences (3MG). This training research programme, which goes from Master's to Doctorate, aims to prepare the next generation of geologists, planetary scientists and experts in space exploration missions. Through research training at the leading edge of geosciences and planetary exploration, the programme offers a unique learning experience that benefits from the Laboratory of Planetology and Geosciences (LPG) expertise. It is deeply involved in space exploration programmes, and is a part of the collaborations within the international research and training consortium GeoPlaNet, comprising more than 20 institutional research partners worldwide.



Why us ?

- Fully taught in English by the professors and researchers of CNRS
- An academic team composed of geologists and planetologists who actively participate in international space exploration programmes
- A training programme by and through research with individual research projects and participation in international collaboration
- Internship and research mobility opportunities at GeoPlaNet consortium partner institutions around the world
- Personal coaching and mentoring to optimize career plans in various fields of Earth and Planetary Sciences

Admission

Academic requirement

Students must have completed a degree preferentially in Earth and Planetary Sciences, and possibly Physics, Chemistry, Material Sciences, or Mathematics.

- **At master's level:** Bac +3, Bac +4 (180 ECTS validated).

- **At PhD level:** Master's degree is required (bachelor + 120 ECTS validated).

Language requirement

For Master Level:

Students must achieve ONE of the English conditions below:

- Minimum overall TOEIC score of 800 or equivalent.
- Graduated from a university in an English – speaking country.
- Direct English interview.

For PhD level:

Fluency in speaking, listening, reading and writing English.

Our programme

First year of Master (M1)

First semester

- Structure and dynamics of Earth and Planetary Interiors (6 ECTS)
- Aqueous alteration through the solar system (3 ECTS)
- Introduction to scientific research and professional integration (2 ECTS)
- Introduction to Earth and Planetary Processes - Field trip (5 ECTS)
- Geographic Information Systems 1 (3 ECTS)
- Data Analysis and numerical modeling (6 ECTS)
- Surface processes : Exploring different regimes of erosion, landform development, and sediment deposition (5 ECTS)
- Deformation of Planetary Lithospheres (4 ECTS)
- Magmatic processes through the solar system (3 ECTS)
- Subsurface Geophysical Exploration (3 ECTS)
- Principles of Remote Sensing (6 ECTS)
- Internship (6 ECTS)

Second year of Master (M2)

- Earth and Planetary surface processes (5 ECTS)
- Earth and Planetary Interiors (5 ECTS)
- Space Exploration Programmes (3 ECTS)
- Planetary Analogues or Fluid dynamics (5 ECTS)
- Earth and Planetary remote sensing (3 ECTS)
- Data analysis (2 ECTS)
- Geographic information systems (2 ECTS)
- Lab analyses and field geophysics (4 ECTS)
- Research and scientific communication (1 ECTS)
- Internship (30 ECTS)

Second semester

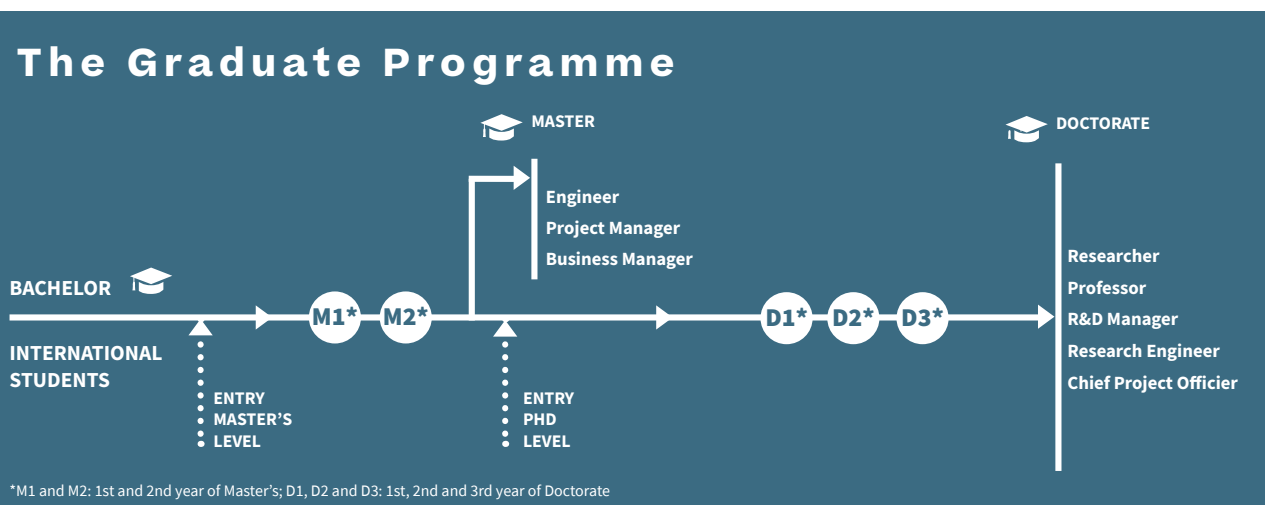
- Field Remote-sensing and mapping - Groix island (5 ECTS)
- Experimental petrology (3 ECTS)

Doctorate

| | | |
|------------------------|---|---|
| Research project | Transversal training (Communication, innovation, ethical) | Specialized training (advanced tools for data processing and visualization, data life cycle in geosciences and planetology) |
| International mobility | Workshops | Supervising Master students |

Financial support is available for international mobility, particularly within the framework of the international GeoPlaNet consortium led by the LPG. Other financial support from Nantes

University, CNES, ANR, ERC, CNRS and the *Pays de la Loire* Region will be also available for internship and doctoral funding



Skills

Master

- Develop high-level research skills in an international collaborative environment.
- Analyze and interpret multi-disciplinary data using advanced techniques and numerical tools.
- Communicate in a synthetic and academic approach on the latest advances in the field.

Doctorate

- Develop a project within a research team.
- Deepen the specialized knowledge.
- Acquire proficiency in the use of point analysis techniques and tools.
- Develop teaching and project management skills.