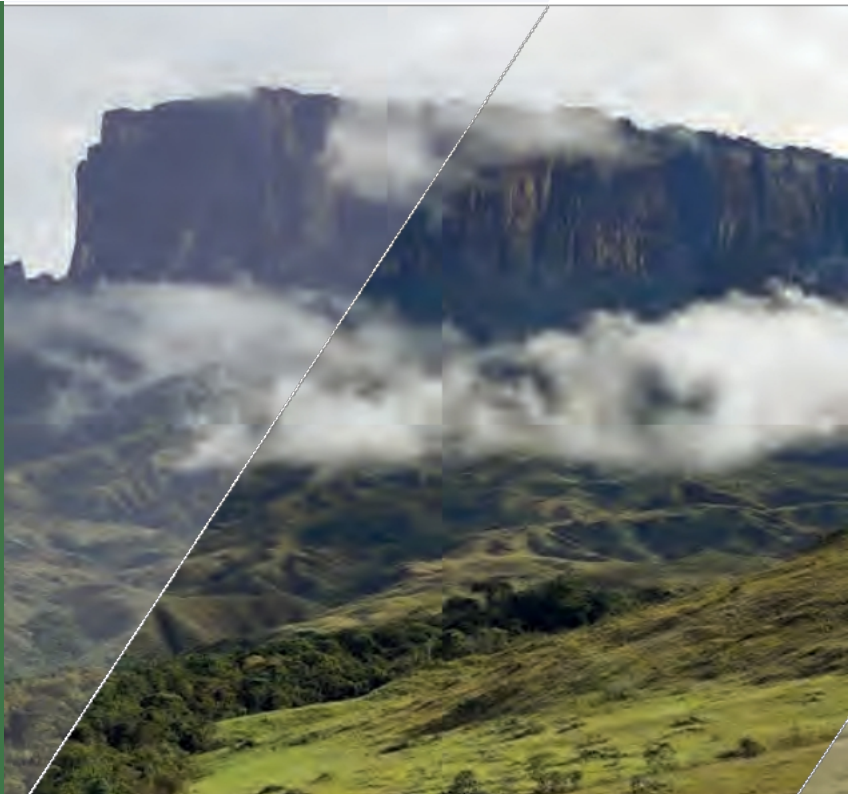


GEOSCIENCES



Earth Sciences

# Bachelor's degree in Earth Sciences

Geosciences



Le Mans  
Université



## Understanding our planet

Understanding our planet is at the interface of many scientific, environmental, societal and economic issues. In times of climate change, it is increasingly important to find and sustainably manage the resources needed for the energy transition. People are also part of a geological environment that needs to be studied to limit the impact of increasing natural hazards (flooding, landslides, block falls, cave-ins) on infrastructures. Earth sciences are essential to help us meet tomorrow's challenges and preserve our environment.

## What is the Geosciences degree?

The Geosciences degree takes 3 years to complete, and aims to train general geologists with a naturalist approach, able to work in the field and in the laboratory, and able to apply a multidisciplinary scientific approach to geosciences. The broad disciplinary base should enable students to tackle the major issues linked to our physical environment (Earth), from understanding the global functioning of our planet and its past and future evolution, to more applied questions concerning resource prospecting and management, natural risk management or ecosystem pollution. This foundation provides students with a certain number of operational technical skills (measuring equipment, software, sampling, etc.) designed for immediate integration at senior technician level in companies in the sector (geotechnics, environmental consultancies, etc.) or for further study at Master's level.



**1 month in the field**

# LICENCE COURSE in Earth and Environmental Sciences

L1

**1st common year (L1)  
Life Sciences - Earth Sciences**

**+** beginning of the year:  
selection  
of 5 students in  
the GET reinforced  
course

L2

Geosciences  
course

L2 Geosciences

**+** selection of  
5 other students in the  
GET reinforced course

L2 G.E.T.

Biology- Geology course

L2 B.G.

L3

LP Travaux Publics  
Geomesures et  
Aménagements

L3 Geosciences

L3 G.E.T.

L3 B.G.

Bachelor's  
degree in Earth  
Sciences

Bachelo  
r's  
degree  
in Life  
Science  
s

Professional integration  
at technician level:  
Geotechnician / Surveyor

Masters  
Geosciences  
Geotechnics  
Environment

Masters  
Geosciences  
Geotechnics  
Environment  
Geography  
Sustainable  
development...  
Engineering schools

Masters in  
Environmental  
Education



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# 1st common year (L1)

## Life Sciences - Earth Sciences

Blocks of Teaching Units	Teaching units	Hourly volumes		
		CM	TD	TP
Biology	Animal evolution and diversity	16	3	12
	Plant evolution and diversity	16	-	12
	Structural biochemistry	10	12	6
	Plant cell biology	16	3	6
	Animal cell biology	16	3	6
Geosciences	Planet Earth	17	10	-
	Introduction to petrology	17	-	10
	Cartography	4	8	18
	History of the Earth	17	2	8
Mathematics, Physics and Chemistry for SV-ST	Structure and properties of atoms	8	12	3
	Chemical reactions	-	18	9
	Organic chemistry	8	12	6
	Applied math for SVT	11	14	-
Language skills and cross-disciplinary	Applied physics for science and technology	18	25	3
	Methodology and analysis for SVT English	2	4	6
Pre-professionalization	Communication - French	-	30	-
	Overview of SVT professions	2	30	-
Socio-ecological transition	Student Professional Project - PPE	-	30	-
	Overview of SVT professions	10	-	-
	Student Professional Project - PPE	5	10	-
	Socio-ecological transition policies	12	12	-

\* GET route only



1st year multidisciplinary ✓  
 Wide choice of career paths after 1st year Groups ✓  
 of 40 students in lectures, 20 in practical ✓  
 exercises ✓  
 Active guidance via PPE ✓  
 Support/tutoring for students in difficulty ✓

# 1st common year (L1) Life Sciences - Earth Sciences

2<sup>nd</sup> and 3<sup>rd</sup> years

## Bachelor's degree in Earth Sciences, Geosciences course

List of L2 and L3 blocks and courses

	L2 ST - Geosciences	L3 ST - Geosciences
Geosciences	Structural Geology Sedimentology 1 Geochemistry Planetology Geodynamics 1 Magmas and Volcanoes Stratigraphy	Endogenous petrology 1 Endogenous petrology 2 Sedimentology 2 Geophysics Geology of France Modeling in Geosciences Geodynamics 2
Environment	Alteration-Geomorphology Hydrology-Hydrogeology-Hydrochemistry Ecology	Climate change: causes and consequences Environmental professions
Pre-professionalization	Geomatics Cartography 2 Geotechnics 1 Geophysical Field Methods Case study in Applied Geosciences	CAD applied to Geosciences Geotechnics 2 Field Professional integration Business economics Mineral and energy resources End-of-study project
Cross-disciplinary teaching	English Communication PIX Mathematics for Geosciences Opening module	English

- Multidisciplinary career path ✓
- Half of the courses are practical ✓
- Numerous speakers from the professional world ✓
- A total of 1 month in the field during the course (Alps, Atlantic coast, Sarthe) ✓
- End-of-course internship or tutored project ✓
- Early training in digital tools and professional software ✓
- Small classes (20-30 students) ✓
- Close contact with the teaching team ✓



# How to get into the bachelor

## How do I register?

**January to March:** 10 applications entered on the "Parcoursup" website [www.parcoursup.fr](http://www.parcoursup.fr)

**End of May:** admission proposals are posted and candidates make their choices.

**July:** registration as soon as baccalauréat results are available, according to the procedures on the website

For more information, visit the "Parcoursup" website and/or the Le Mans Université

website: [www.univ-lemans.fr](http://www.univ-lemans.fr) under FORMATION > CANDIDATURES / INSCRIPTIONS



## Further studies and career opportunities

The Geosciences bachelor's degree leads to a wide choice of Master's degrees in Earth and Environmental Sciences.

**Here are a few examples of careers related to the skills acquired during training:**

Reservoir geologist, mining geologist, geotechnician, hydrologist, hydrogeologist, sedimentologist, structural geologist, geochemist, geophysicist, Geographic Information System (GIS) engineer, natural hazard expert, basic research professions (paleontologist, climatologist, glaciologist, volcanologist, etc.)...

## Contacts & information

Head of Licence ST :  
Head of L1 SV - ST:  
Geosciences website :

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School department :  
Referral service :

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[suio@univ-lemans.fr](mailto:suio@univ-lemans.fr) +33 2 44 02 20 64

Le Mans University :  
Faculty of Science :

[www.univ-lemans.fr](http://www.univ-lemans.fr)  
[www.sciences.univ-lemans.fr](http://www.sciences.univ-lemans.fr)

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