



UNIVERSITY OF LILLE

Created on January 1, 2018 via the fusion of three existing public universities, the University of Lille is one of France's largest research and higher education institutions. ULille has a strong connection with our surrounding area, both at the level of the Lille European Metropolis (MEL) and of the Hauts-de-France region, which is reflected in our policies on social responsibility. At the same time, we implement an ambitious strategy aimed at visibility and impact on the international level.

On January 1, 2022, four additional schools joined the 11 faculties, schools and institutes of the University of Lille - École Nationale Supérieure des Arts et Industries Textiles (ENSAIT), École Nationale Supérieure d'Architecture de Lille (ENSAPL), École Supérieure de Journalisme de Lille (ESJ), Sciences Po Lille. This decision was the culmination of a shared vision of scientific excellence, technological innovation, socio-economic development and the satisfaction of those who work and study here.

The University of Lille aims to serve as a model institution for issues of global transition. The Hauts-de-France Region is characterized by multiple, closely intertwined transitions. The University of Lille and its partners play a key role in responding to these challenges (whether ecological, social, economic, cultural or educational), in particular by focusing their efforts on academic training in these areas. (We are) inspiring tomorrow!

FACULTY

The Faculty of Science and Technology belongs to the University of Lille. It includes 9 departments and 27 research structures in the following fields: Biology, Chemistry, Electronics, Electrical Energy Automation, Computer Science, Mathematics, Mechanics, Physics, Earth Sciences and a Marine Station.

The Faculty of Science and Technology of the University of Lille offers a high quality multidisciplinary programme, from bachelor's degree to doctorate, including professional bachelor's degrees and master's programs. Each year, the University welcomes more than 8,000 students in initial training and 350 students in apprenticeship contracts on the Cité Scientifique campus.

Campus Cité scientifique - 59655 Villeneuve d'Ascq Cedex sciences-technologies.univ-lille.fr

ADMINISTRATIVE STAFF

Faculty of Sciences and technology
Earth Science Department

- University of Lille - Campus cité scientifique
- Pedagogical Secretariat : secreteriat-pedagogique-st@univ-lille.fr
03 20 33 72 17

COORDINATION OF THE PROGRAMME

Direction of the Master in Earth Sciences, Planets, Environment:
Catherine CRONIER
catherine.cronier@univ-lille.fr

Head of programme in "Paleontology-
Paleoclimatology-Paleoenvironments"
Sébastien CLAUSEN
sebastien.clausen@univ-lille.fr

ADMISSION AND SELECTION PROCEDURE

The 2-years Master programme (120 European Credits, ECTS), taught in English, is available to students with a Licence, BSc degree (or equivalent) in Earth, life or environmental sciences.

Students willing to apply to the second year of master should have completed a first year of Master or equivalent.

Application procedure and deadlines:

- National recruitment procedure and timetable: www.monmaster.gouv.fr
- Application deadline: from 22/03 to 18/04 inclusive
- Examination of applications: from 24/04 to 16/06
- Transmission of admission proposals to candidates and candidates' replies: from 23/06 to 21/07

Size of the cohorts: 8 (16 students enrolled in total, master 1+2)

Selection procedure: Evaluation and ranking of all valid applications are based on academic merit and excellence, and done according to following criteria:

- Illegibility, appropriateness of previous studies
- Academic records of previous studies
- Professional experience, internships
- Motivation letter
- Recommendation letters

Mastering of English Language. All courses of the programme are taught in English. All applicants, who are not native-speakers, must attest a B2 English level or equivalent. This can be done in a number of ways, including through an internationally recognised test such as TOEFL or IELTS, or through previous upper secondary (high school) or university studies (e.g. a letter attesting English is the medium of instruction of your higher education; a diploma in English Language).

SCHOLARSHIPS

Scholarships awarded by the Graduate Programme « Science for a Changing Planet » are available to M1 and M2 students to support their studies, to facilitate their settling in Lille and to make an internship in a foreign country.

Eligibility, criteria and application can be found here :

<http://www.isite-ulne.fr/index.php/en/graduate-programme-science-for-a-changing-planet-student/>



Science for a
changing planet

Master

MASTER 1 / MASTER 2

Mention

Earth Sciences, Planets,
Environment

Parcours

**PALEONTOLOGY
PALEOCLIMATOLOGY
PALEOENVIRONMENT**



OBJECTIVES

The objective of the programme is to train students to answer questions of interest to both academia (paleobiology, macroevolution, climate change and impact on the biodiversity...), industry (resource exploration in sedimentary basins, paleoenvironmental reconstructions), and geoconservation (development of geotourism and related economic and societal impacts, geoheritage management and conservation, cultural and scientific values).

TARGETED SKILLS

The Master programme provides students with discipline specific knowledge, concepts, skills, habits of mind (data use and reasoning), and professional, transferable skills (communication, project management, transfer of knowledge, interpersonal collaboration...) to make them able to deal with all aspects of fundamental and applied paleontology:

- Methods of analysis, treatment, and intervention in Sedimentary Geology (sequence stratigraphy; facies analysis, characterization of geological material)
- Application of principles and technical skills for paleontological and paleoenvironmental analyses (statistics in macroevolution and paleoecology, scientific communication, geobiological processes, paleoclimatology)
- Technical skills in applied paleontology (micropaleontological and biostratigraphic analyses, industrial and environmental applications)
- Skills and methods in geoconservation (case studies in management of geological collections and geosites, regulatory protection in France and abroad, scientific dissemination, ...)



JOB OPPORTUNITIES & FURTHER STUDIES

Careers in paleontology offer a very wide spectrum of work environments and variety of employment. After completion of this programme, students can take up a professional career. They can also integrate PhD programmes.

Students holding a Master in Earth Sciences, Planets, Environment, specialization in 'Paleontology-Paleoclimatology-Paleoenvironments' are qualified to work as, for example:

- Exploration geologist,
- Environmental engineer,
- Biostratigrapher, Micropaleontologist,
- Curator of collections,
- Geopark or protected-area manager,
- Science communication and exhibition manager,
- Lecturer or researcher (through a sound preparation of a PhD).

In various areas like:

- Natural resource exploration and extraction (oil-, gas and mineral prospecting)
- Environmental impact assessment and environmental monitoring
- High Education Institutions (HEI's), Geological surveys, NGO's, international companies, public and private laboratories and/or local government
- Museums, National History Museums, Protected areas, Geoparks

THIS MASTER DEGREE PROGRAMME IS PART OF THE GRADUATE PROGRAMME "SCIENCE FOR A CHANGING PLANET"

GRADUATE PROGRAMMES of the University of Lille offer to master students and PhD's a training environment through research-driven approach in an international, stimulating, competitive and innovative context as well as professional networking for successful career planning.

The Graduate Programme 'Science for a Changing Planet' provides them with the core competencies to address societal challenges of our time including (1) understanding and monitoring planet changes; (2) seeking alternative solutions to the exploitation of fossil resources, and (3) evaluating the impact of global changes on people, the earth and societies.

Key figures : 9 Master Degree Programmes (150 students), 1 Graduate School (70 PhDs) with more than 60% international students

Scholarship : The Graduate Programmes offer fellowships (3500 euros) and relocation (3500 euros) grants to attract bright students in their master tracks, as well as outgoing mobility grants (max 3000 euros) to its registered students.

- Fellowship and relocation grant : 1st call (31/03, results 15/04), 2nd call (15/05, results 01/07)

More information: <https://international.univ-lille.fr/en/graduate-programmes/science-for-a-changing-planet/>

STRENGTH OF THE TRAINING

- A master degree in a stimulating scientific Environment within the Graduate Program 'Science for a changing planet' <http://www.isite-ulne.fr/index.php/fr/programme-gradue-science-pour-une-planete-en-mutation/>
- Scholarships from the Graduate Program potentially available for M1 and M2 courses.
- A programme integrated into the Erasmus Mundus Joint Master Degree Pangea "Applied Palaeontology, Palaeobiology, and Geoheritage" (<https://master-pangea.eu/>)
- Possibility to enroll in a two-year Double Diploma programme taught in English, established with our partner universities in Italy (Pisa), Sweden (Uppsala), and Russia (Novosibirsk)
- Strong networking with internationally acknowledged research-teams
- Immersion in a professionally-oriented and multicultural, international environment (about 15 nationalities have attended our master courses since 2015, guest-lecturers of 7 nationalities have also taken part of pedagogic staff)
- Up to 8 months of internship in industries, NGO's or research teams



TRAINING'S ORGANIZATION

- The master in Earth Sciences, Planets, Environment, specialization in Paleontology-Paleoclimatology-Paleoenvironment is a consecutive, 2-years Master programme (120 European Credits, ECTS), fully taught in English. It leads to a French MSc degree sponsored by the French Government.
- The programme is backed by the 'Evo-Eco-Paleo' research team (UMR 8198 CNRS; <http://eep.univ-lille.fr/en>) and teaching staff of the Earth Science Department of Lille University.
- The units of the programme include fundamental and practical courses. They are organized around six fields of skills, know-how and knowledge (called BCC):

BCC1 - Development of highly specialized knowledge

BCC2 - Advanced applications of digital tools

BCC3 - Specialized communication for the transfer of knowledge

BCC4 - Field-trip experience

BCC5 - Personal professional development

BCC6 - Integration of transferable skills, interdisciplinary and, or discipline-specific principles.

- The Master thesis can be written based either on an internship in a research laboratory of a partner university or in an associate partner organization or any other company offering oriented topic for the master thesis. The defense of the master thesis is public.

Term 1 (30 ECTS)

BCC1 (21 ECTS)

- Sequence stratigraphy
- Facies stratigraphy
- Methods of geol. material characterization
- Geoconservation 1 Outreach
- Introductory micropaleontology
- Biostratigraphy
- Applications of paleontology

BCC3 (3 ECTS)

- English course or French as a Foreign Language (for Anglophone students)

BCC6 (6 ECTS)

- Specialization (1 optional unit to be taken from 2 available):
 - Statistics initiation with R
 - Diagenesis petrography
- Personal project in Geosciences (1 optional unit to be taken from 2 available):
 - Geomatics & Geostatistics applied to Geosciences
 - Geobiosphere interactions in deep time

Term 3 (30 ECTS)

BCC1 (12 ECTS)

- Paleoenvironmental reconstructions 2
- Geobiology
- Paleoclimatology
- Carbonate facies analysis

BCC2 (6 ECTS)

- Quantitative palaeontology
- Phylogenetics

BCC5 (6 ECTS)

- Geoconservation 2 : Case studies & Applications
- English scientific writing & communication

BCC6 (6 ECTS)

- Specialization (1 optional unit to be taken from 2 available):
 - Field training Alpes
 - Macroevolution
 - PE : Project (design) Management

Terme 2 (30 ECTS)

BCC1 (6 ECTS)

- Paleoenvironmental reconstructions 1
- Advanced micropaleontology

BCC3 (6 ECTS)

- English course or French as a Foreign Language (for Anglophone students)

BCC4 (6 ECTS)

- Field training ou Supervised Project

BCC5 (6 ECTS)

- Internship Prof Experience (8 weeks)
- Literature review

BCC6 (9 ECTS)

- Specialization (3 optional units to be taken from 4 available):
 - Vertebrate Paleontology, Paleobotany ;
 - Multivariate statistics;
 - Organic matter;
 - Vertical movements & Sediment flows.

Term 4 (30 ECTS)

BCC5 (30 ECTS)

- Specialization (1 optional unit to be taken from 2 available):
 - Internship Professional Experience (4 to 6 months)
 - Supervised Research Project + Internship (2 months)

Pour plus d'informations sur les diplômes nationaux proposés par la faculté des sciences et technologies de l'Université de Lille, consultez le catalogue des formations :

www.univ-lille.fr/formations.html