

MASTER

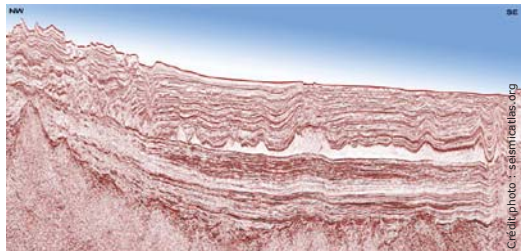
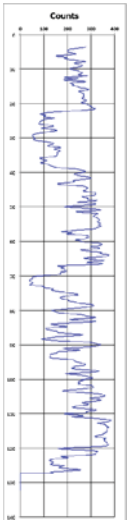
FIELD : SCIENCES, TECHNOLOGY, HEALTH

EARTH AND PLANETARY SCIENCES, ENVIRONMENT (STPE)

SPECIALITY : GEOLOGY OF SEDIMENTARY BASINS (GEOBAS)



GEOLOGY - MODELING - FOSSIL ENERGIES





Sedimentary basins host mineral resources and most of fossil fuels. Prospecting and producing sedimentary ores requires geologists with a good academic knowledge but also professional skills for handling tools used in industry.

The GEOBAS master of science is devoted to high level studies of the structural controls, sedimentary infilling and diagenetic evolution of sedimentary basins. Besides class lectures and numerical or analogic lab experiments, the training also comprises one month field work and marine seismic surveying. A 6 months internship in a company or a reasearch lab finally consolidates the CV of the future graduated students who are then ready to be hired by industry or to start a PhD.

Pr. Jean-Yves Reynaud, Head of GeoBas



General information

The GEOBAS training is composed of lectures, practicals and a traineeship ended by a public defense. The practicals include seismic, structural and stratigraphic geomodeling on workstations, as well as analogic experiments on salt and clay tectonics. Several field sessions are an important part of the training : Devonian reefs of the Ardennes, Upper Jurassic mixed shelf of the Boulonnais, Jurassic and Cretaceous slope and turbidite deposits of the french Tethyan margin, and Miocene molassic deposits of the alpine foreland. A modern, tide-dominated estuary is also visited (bay of Somme). A 5 days oceanographic cruise is also included, during which very-high resolution seismics is operated in the Eastern Channel. Depending of the class, the lectures are given either in french or english. The trainee reports are in english. The training is hosted by the LOG (Laboratoire d'Océanologie et Géodynamique).

Linking the professional world

Several invited lecturers come from the private realm. They also take part of the steering committee of GEOBAS and provide internships in mains companies and a network of consulting offices.



Agenda

Each year comprises two terms. The first year (M1) is shared with the PALEO master. The second year (M2) corresponds to the specialized GEOBAS program :

Term 1 : consolidating the background

- GIS and geomatics (5 credits)
- Sedimentology and sequence stratigraphy (5 credits)
- Geodynamics of sedimentary basins (5 credits)
- Integrated paleontology (5 credits)
- Laboratory techniques of characterization of geological samples (5 credits)
- English (5 credits)
- Open module (5 credits)

Term 2 : first internship and specialized modules

- Traineeship of 8 weeks (15 credits)
- Quantitative geomorphology and sedimentary fluxes (5 credits)
- Geochemistry and geology of organic matter (5 credits)
- Diagenesis of geological reservoirs (5 credits)
- Open module (5 credits)

Term 3 : field work and specialized modules

Mandatory modules :

- Field trips (10 credits)
- Reflection seismics and marine geophysics (5 credits)
- Sedimentary basin modeling (5 credits)

Options (2 from the list) :

- Biochronology and applied case studies* (5 credits)
- Micropaleontology* (5 credits)
- Quantitative paleontology* (5 credits)
- Salt and clay tectonics** (5 credits)
- Paleoclimatology-geobiology** (5 credits)
- Personal project** (5 credits)

* From the PALEO master - ** Research module

Term 4 :

- Internship of 6 months (30 credits)

Main business sectors

- Energy and mining (hydrocarbons, mineral ores)
- Environmental management
- Academics

Job examples

- Geologist in an oil company
- Private consulting in geology
- Teacher-researcher at the university (after a PhD)



How to apply ?

The candidates to the M1 must have a Licence de Sciences de la Terre or equivalent (Bsc). Candidates to the M2 who graduate from the M1 STPE are preferred but direct recruitment is possible.

There is a limited number of students in the GEOBAS class. Application form can be downloaded at : sciences-de-la-terre.univ-lille1.fr

Campus France Agency

Check with your Embassy or with the Campus France Agency (www.campusfrance.org) if there is a specific agreement between France and your residence country. In this case, **it is compulsory to follow the Campus France procedure.**

Applicants from outside the French education system, must complete the «validation des études» application by the end of April, to verify their previous degree equivalence to the M1. Online application for «validation des études» :

www.univ-lille1.fr/etudes/Admission-Inscription



The project University of Lille is launched. The three universities (Lille 1, 2 and 3) will merge in 2018, giving way to a better visibility and higher influence at a local, national and international scale.

CONTACTS

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