## FURTHER INFORMATION

For further information, please contact the person in charge of the coordination of :

MSc in Applied and Fundamental Physics (MME)
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labex-cappa.fr/master-atmospheric-sciences

## INTERNATIONAL RELATIONSHIP

- The University of Lille has a policy of supporting international access to its courses. That's why it has introduced special procedures to make international students feel welcome and form collaborations.

  https://www.univ-lille.fr/home/international-student/

- Practical information for your stay at the University of Lille

  https://www.univ-lille.fr/home/international-student-tool-box/

## APPLICATIONS

The master Atmospheric Sciences is targeting European and International students holding

For the first year: a Bachelor of Science (i.e. 180 ECTS) or an equivalent Diploma in the following fields of studies: Chemistry, Physical Chemistry, or Physics.

The minimum advised language level corresponds to the B1 level (independent user) of the Common European Framework of Reference for Languages.

For the 2nd year: a first year of a Master of Physics or Applied Physics or Chemistry or Physical Chemistry (60 ETCS)

International students must complete the Campus France procedure as soon as possible (campusfrance.org/en) for application to the Master and Student Visa.

Students with no Campus France agency and Europeans have to go through the university's application program e-candidat https://ecandidat-2020.univ-lille.fr/

## RECRUITMENT CALENDAR

- Campus France: before 06/03/2020
- e-candidat: 02/03 to 24/04/2020

## SCHOLARSHIPS

Scholarships are available for students having the highest academic records. Each selected candidate will receive 7 500€ for the academic year. Scolarships applications have to be purchased independently. The application forms for the bursaries are available on the labex CAPPA website (http://www.labex-cappa.fr/Master-atmospheric-sciences/fellowships) and must be returned by March 15th.

FRANCE compétences

Responsable de la rédaction : Lynne FRANJIÉ - Coordination : SUAIO - Maquette et réalisation : Communication - Impression : Imprimerie Université de Lille - Document non contractuel - Imprimé en décembre 2019

New master Program subject to accreditation

GRADUATE PROGRAM 'SCIENCE FOR A CHANGING PLANET'

**FACULTÉ DES SCIENCES ET TECHNOLOGIES**

MASTER

# GRADUATE STUDIES IN ATMOSPHERIC SCIENCES

MASTER IN CHEMISTRY
PHYSICAL AND ANALYTICAL CHEMISTRY (PAC)

MASTER IN APPLIED AND FUNDAMENTAL PHYSICS - MATTER, MOLECULE AND THEIR ENVIRONMENTS (MME)

*High level of education - Research at the top level*
*Stimulating environment*

**SCHOLARSHIPS AVAILABLE**

Université de Lille · FACULTÉ DES SCIENCES ET TECHNOLOGIES Département Physique · Université de Lille · FACULTÉ DES SCIENCES ET TECHNOLOGIES Département Chimie

## TRAINING ORGANISATION

| | | | |
|---|---|---|---|
| MASTER 2 – APPLIED & FUNDAMENTAL PHYSICS Matter Molecule, and their Environments (MME), speciality Atmospheric Sciences | | MASTER 2 - PHYSICAL & ANALYTICAL CHEMISTRY Atmospheric Sciences | |
| MASTER 1 – APPLIED & FUNDAMENTAL PHYSICS | | MASTER 1 – PHYSICAL & ANALYTICAL CHEMISTRY | |
| LICENCE CHIMIE | LICENCE PHYSIQUE | LICENCE PHYSIQUE-CHIMIE | BACHELOR OF SCIENCES IN CHEMISTRY, PHYSICAL CHEMISTRY, PHYSICS |

The master Atmospheric Sciences is a 2 year course (120 ECTS credits). Three semesters (30 credits each) of integrated courses delivered in english.

The first semesters (S1 to S3) are dedicated to lectures and practical work, while the last semester (S4, 01 Feb-30 June in the 2nd year) focuses on a full-time laboratory research project. A large selection of research projects will be offered to students.

**MASTER 1:**
COMMON BACKGROUND with fundamentals and transversal skills (project management…)
+ 3 courses in atmospheric sciences

**MASTER 2:**
**Semester 3**
Aerosols, Radiative Transfer (Phys), Atmospheric Modelling, Advanced Spectroscopy, Space observatories (Phys)

**Semester 4 - Feb-June**
Full-time research position in a laboratory involved in the labex CaPPA

In addition, transferable skills (internship, bibliographic search, scientific communication, project management).

## STRENGTH OF THE TRAINING

- Students are immersed in an international environment and all courses are delivered in English.
- Students from more than 14 nationalities attended to our master since 2013.
- Lecturers are carrying research in one of the 7 laboratories of the Labex CAPPA:
  LOA, Laboratoire d'Optique Atmosphérique
  PC2A, PhysicoChimie des Processus de Combustion et de l'Atmosphère
  PhLAM, Laboratoire de physique des lasers, atomes et molécules
  LASIR, LAboratoire de Spectrochimie Infrarouge et Raman
  ICARE, Cloud-Aerosol-Water-Radiation Interactions
  LPCA, Laboratoire de Physico-Chimie de l'Atmosphère
  SAGE, Sciences de l'Atmosphère et Génie de l'Environnement
- In order to facilitate interactions and discussions with professionals, master students are involved in the events organised by the Laboratory of Excellence CaPPA such as conferences or seminars, that can also be given by visiting professors from international laboratories.

## OBJECTIVES

A 2-years program graduating a Master of Science in physics or chemistry of the atmosphere, at the highest level aiming to give intendants a strong background in:

- Physical and chemical properties of the atmosphere from the molecular to the global scale,
- Analytical sciences applied to airborne environment,
- Recent research activities on air pollution and climate changes.

The international Master « Atmospheric Sciences » is supported by the french **Laboratory of Excellence CaPPA** which involves large complementary research projects gathering together partner teams with strong scientific qualifications. It leads **top-level research activities** thanks to the diversity of researchers' disciplines and its promising research topics.

Training is dedicated to students in physics and/or chemistry wishing to follow a specialization in atmospheric sciences to get a strong background in theory and practical work.

A visit to every laboratory involved in the Labex CaPPA is organized, helping students to identify the research topic they want to specialize in.

## JOB OPPORTUNITIES & FURTHER STUDIES

- PhD thesis in a research laboratory
- Engineer in air quality, in atmospheric measurements, in remote sensing, in programming and data analysis
- Environmental consultancy

Most of the students continue with a PhD thesis after the M2. A wide range of offers is available each year in the seven laboratories involved in the Master program.

## A MASTER DEGREE IN A STIMULATING SCIENTIFIC ENVIRONMENT WITHIN THE GRADUATE PROGRAM 'SCIENCE FOR A CHANGING PLANET'

- 22 laboratories included in excellence or high level programs
- 292 Phd students
- An interdisciplinary training from the master to the doctorate including an international environment, mobility and thematic summer schools.

Scan me

## THIS MSC PROGRAM IS SUPPORTED BY THE LABEX CAPPA

**Laboratory of Excellence Chemical and Physical Properties of the Atmosphere » (CaPPA):** labex-cappa.fr