The Faculty of Science and Technology of the University of Lille offers a multidisciplinary training offer of quality, from bachelor’s, licentiate to PhD, through professional licenses and masters. She hosts every year on the campus more than 7,000 students in initial training.

LA FACULTÉ

The Faculty of Science and Technology is a training and research unit of the University of Lille.

The Faculty of Science and Technology of the University of Lille offers 9 training departments and 27 research structures in the following areas:

- Automatic
- Data processing
- Mathematics
- Mechanical
- Physical
- Earth Science
- Station Marine Wimereux

UNIVERSITY OF LILLE

The University of Lille was born from the merger of 3 institutions (law and health, human and social sciences, sciences and technologies). European reference university, recognized for the excellence of its training throughout life, it places the student at the heart of its concerns, to promote its involvement and success. It offers 180 training sessions, all backed by cutting-edge, international research conducted by 66 laboratories to meet the major challenges of our society.

APPLICATION

Candidates shall hold:
- A Master’s in chemistry, or equivalent education in the field of chemistry, biochemistry, physical chemistry or related fields.
- Relevant theoretical knowledge in chemistry or related professional expertise.
- Good English skills (minimum score for TOEFL paper test 590; IELTS 6.5; CEF European B2).
- A strong interest in spectroscopic techniques and their wide range of applications.
- Motivation to study in a multicultural environment at least at two European universities.
- Apply online before March 3rd for admission and scholarships. www.master-asc.org
- Second session (no scholarships available) open from March 1st to May 31st.
- Capacity: 65 places in master 1
- Recruitment calendar: Opening from 02/05/2019 to 17/06/2019

Mention

PHYSICAL AND ANALYTICAL CHEMISTRY

ADVANCED SPECTROSCOPY IN CHEMISTRY

2 - MASTER’S YEAR COURSE

UNIVERSITY OF Bologna

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ACCOMPANIMENT

SUAIO - University Service of Accompaniment Information and Orientation (SUAIO)

- Information, advice and support, orientation and maintenance, Custom Interviews.
- www.univ-lille.fr/etudes/preparer-s-luniversite-professionnelle/ 
- BAPF - Help desk for professional integration
- Accompaniment to professional integration, research internship and first job.
- www.univ-lille.fr/etudes/preparer-s-luniversite-professionnelle/bapf

LAYOUT OF STUDIES

In order to offer the best conditions for success for the students it hosts, the University of Lille sets up various systems that allow students to start and pursue their studies as best they can depending on their situation: student with a disability, athlete, high level artist, civic service, student in exile... More info on https://www.univ-lille.fr/etudes/preparer-s-luniversite/aménagements-des-étudiants/

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NB: a proficiency certified in French is required.

www.univ-lille.fr/etudes/preparer-s-luniversite/aménagements-des-étudiants/
STRENGTHS OF TRAINING

- A guarantee of quality: the ASC master is an accredited master's degree in all 5 partner institutions.
- The ASC master is supported by the European Union (Erasmus Mundus Joint Master Degree) and has been awarded the Euromaster label by the ECTNA (European Chemistry Thematic Network Association).
- The ASC master has developed a network of global industrial partners, competitiveness clusters and research institutes.
- The ASC master provides skills not only towards doctoral studies, but also towards professional activities in industry.
- Mobility within a network of research laboratories spread amongst 5 countries from a large area of Europe.
- A high level equipment available in the ASC network is unique.
- A high level supervision and training.
- Graduates are awarded a multiple degree from the partner institutions where they have spent at least one semester (30 ECTS credits).
- 5 student scholarships of 14000 euros funded by theASC network.

OBJECTIVES

Created in 2007, the Erasmus Mundus Joint Master's Course in Advanced Spectroscopy in Chemistry - ASC Master - has been jointly designed and is operated by 5 European partner universities (Lille - coordinating institution; Alma Mater in Bologna, Jagiellonian in Krakow, Leipzig and Helsinki). The ASC master is a program of excellence which has been awarded the Erasmus Mundus label and funding twice since 2008.

It is a two year (4 semesters, 30 ECTS credits) Master’s program including mobility periods within the ASC network. Each partner universitiy of the ASC network offers state of the art equipment and expertise covering applications of spectroscopic techniques to chemistry in a broad sense (from material sciences, environmental sciences, biomedical/health sciences etc.). Mobility within this network prepares students to become experts and develop intercultural skills towards doctoral studies, and professional industrial careers in chemical analysis and characterization of the structure of materials in the fields of molecular synthesis, biology, nanotechnologies, modeling, pharmacy, green chemistry, materials, and sustainable energies.

TARGETED SKILLS

Graduates will:
- Are experts in chemical analysis, structural characterization, characterization of fast reactions, molecular imaging;
- Are well prepared for R&D careers in industry or in public research institutes;
- Develop high skills in project management, intercultural communication, and are at least bilingual.

JOB OPPORTUNITIES & FURTHER STUDIES

Since it first opened, 241 students from 51 countries have enrolled the course. ASC graduates have acquired the ability to work in a multicultural environment and are at least bilingual. L’Oréal, R&D, Paris and Shanghai, Merck KGaA – Milipore, Darmstadt, Germany, Reckitt Benckiser, Hull, UK, among others, chose to hire them, either directly after the Master or after a PhD. Nearly 80% of the ASC graduates have started a PhD, mainly in European universities.

TRAINING’S ORGANIZATION

The ASC master is a 2 year course (120 ECTS credits).

- Three semesters (30 credits each) of integrated courses.
- The first semester provides all students with a common platform in advanced spectroscopic methods, including magnetic resonance, mass spectrometry, optical spectroscopy and diffraction techniques.
- In the second and third semesters, more specialized instruction is provided with applications in molecular synthesis, material sciences, biology, nanotechnologies, modeling, “green chemistry”, new energy sources. 10 credits are devoted to transferable skills (internship, bibliographical research, project management, norms and regulations in chemistry).
- One semester for the Master thesis (30 credits) in a research Laboratory. The ASC network offers a broad range of opportunities for internships in research laboratories within the ASC institutions, and associated partners (industry, large research facilities or research institutions). The master thesis can be based on a collaborative project between two institutions.
- In addition, a winter school is organized each year in a different location on a chosen topic to deepen one specific field of spectroscopy. This joint social event gathers students, members of the ASC institutions as well as industrial and research associated partners, and ASC alumni.

Over the years, the ASC network has developed links with global industrial partners producing spectrometers (Bruker, Magnetech) as well as with regional competitiveness clusters (MATIKEM in Lille, NEU in Leipzig). A privileged partnership has also been established with great research facilities such as synchrotron SOLEIL in France and ELETTRA in Italy.

on the National Master Degrees offered by the Faculty of Science and Technology of the University of Lille, consult the catalog of courses:

www.univ-lille.fr/formations