

# CHOOSE EXCELLENCE FOR YOUR SEMESTER ABROAD!

English-taught Exchange Programme  
Engineering Science & Technology







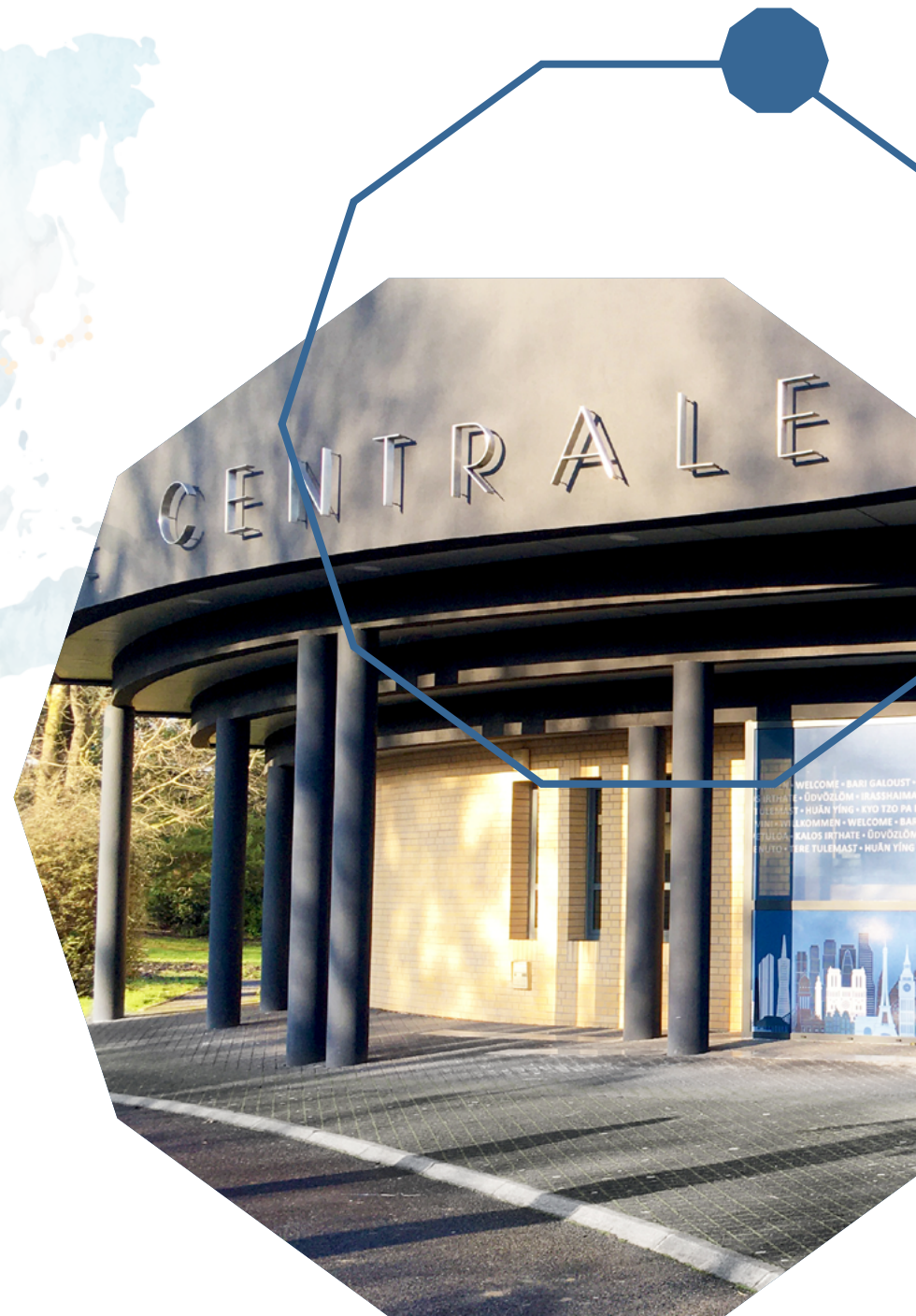
# École Centrale de Lille, a great choice for your study abroad!

Studying at École Centrale de Lille for one semester is **a great opportunity for non-French-speaking students** to experience the French Grande École system while living in a major economic and cultural hub of northern Europe, between Paris, Bruxelles and London!

Our mission is **to train engineers at the highest level in various disciplines**, develop professionals with strong scientific and technical expertise, and nurture talents with the ability to find innovative solutions for today's many challenges.

You will **discover the French-style academic excellence** which includes top lecturers in their fields and research laboratories with top-notch infrastructure.

**École Centrale de Lille is open to the world** and welcome students and researchers from across the globe...



# ○ The exchange programme

École Centrale de Lille has designed a **semester-long programme fully taught in English** and granting access to a large selection of course units to **international students coming from our academic partners worldwide**.

The duration of the programme is one full academic semester **from February to July**, or which participants receive **30 ECTS Credits**.

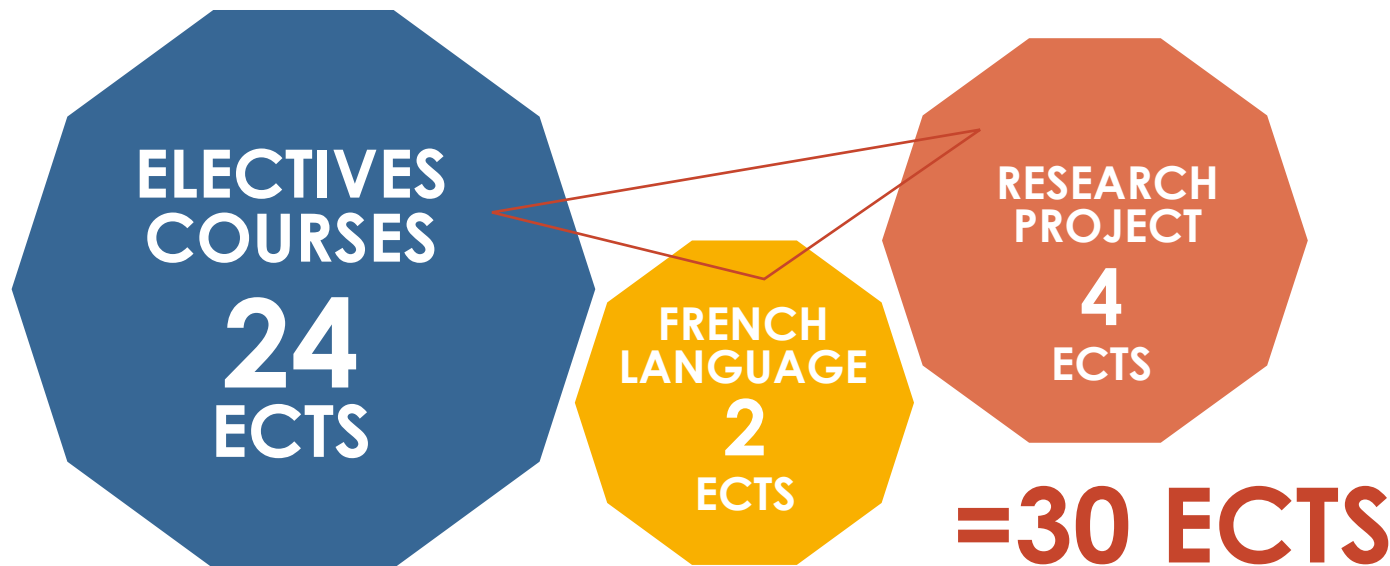
The core of the programme covers a choice of **6 elective courses (3 per half-semester)**. These elective courses are taught in English and must be chosen within the list of available subjects.

In addition, the school provides students with **French Language classes** and students participate in a **semester-long research project in a lab** supervised by one of our researchers.



**Full Semester Programme**

**February to July**



1 ECTS credit = circa 24hrs (12hrs face to face teaching + 12hrs for personal work)

# Choose your elective courses

The teaching and learning team has selected a series of elective courses in each of the main teaching areas of the École Centrale de Lille's curriculum.

**Each student is required to take 3 elective courses per half semester.**

Follow the link <https://ecole.centraledelille.fr/semesterinenglish> for the full list of elective courses and the description of each course.

Design and Control of an Automated Production Line

Electronic for Biomedical Engineering

Rapid Prototyping of Sensors Systems

Smart Decision

Biorefineries

Smart Systems

Optimization and Prescriptive Analysis

Object-Oriented Programming

Representation of Signals and Inverse Problems

Geotechnics and Tunnels for Smart Cities

Aerodynamics

Advanced Physics

Wave Imaging

Quantum Theory of the Solid State

Sustainable Entrepreneurship

Sustainable Project Management

## Biorefineries

Many products based on renewable resources have been developed in recent years whereby biorefineries play a key-role for the transformation of complex raw materials (plants, waste) into high value-added biofuels and molecules.

This course aims to provide a general understanding of the context, the similarities between a conventional refinery and a biorefinery, the pretreatment and transformation processes of the raw material and the purification.

Basics in thermodynamics, distillation, kinetics and reactor modeling will be acquired throughout this course and applied in the frame of a project work for designing a biorefinery process.

## Wave Imaging

This course focuses on the principles, methods, and technologies of wave-based imaging (ultrasonic and electromagnetic waves) that underpin a large range of disruptive imaging solutions at the macro- and micro-scales and applications spanning from research to industry to medicine.

The course benefits greatly from the high-end numerical and experimental platforms of the Institute of Electronics, Microelectronics and Nanotechnology of Centrale Lille and the skills of its recognized scientists in the field.





# The Research Project

Our institution is a prominent actor in research at the service of the economy with **4 research themes** that are cross-disciplinary with an international scope and a societal dimension: Digital Technology, Health, Energy, Environment.

**The Research Project introduces students with the reality of scientific research** with a semester-long experience in the life of a laboratory, helping them comprehend the roles of each stakeholder and the financial aspects of research projects.

This course unit offers students the opportunity to familiarize themselves with the scientific research approach through an immersion period in one of the institution's labs: bibliographic review analysis to comprehend the latest developments on a specific topic, (re)wording of the subject, making hypothesis, ideating solutions, looping back on the hypothesis, communicating results in writing and orally...

## Our research laboratories

Researchers at Centrale Lille contribute to the research projects of **7 different labs in Lille:**

**CRISTAL**, UMR 9189, Research Centre in Computer Science, Signal and Automatics of Lille

**IEMN**, UMR 8520, IResearch Institute in Electronics, Microelectronics and Nanotechnology

**LMFL**, FRE 2017, Lille Fluid Mechanics Laboratory

**L2EP**, EA 2697, Lille Electrotechnics and Power Electronics Laboratory

**LaMCUBE**, FRE 2016, Multiphysic and Multiscale Mechanics Laboratory

**UCCS**, UMR 8181, Catalysis and Solid-State Chemistry Research Unit

**UMET**, UMR 8207, Materials and Transformation Research Unit



HEALTH



ENERGY



ENVIRONMENT



DIGITAL TECHNOLOGY



# Welcoming International Students

Providing the best possible experience to our International Students is one of our priorities. This is why we have set up a comprehensive onboarding and integration period for them.

Our Office for International and Academic Relations organises their arrival, **their pick-up at the train station and offers them permanent administrative support during their stay at Centrale Lille.**

Moreover, students joining this semester-long programme will have **the possibility to be hosted in Centrale Lille's own student residence** (a more affordable solution than the private housing sector or short-term flat rentals). A special Arrival Kit may also be reserved beforehand, which includes kitchenware, bathroom towels and linen.

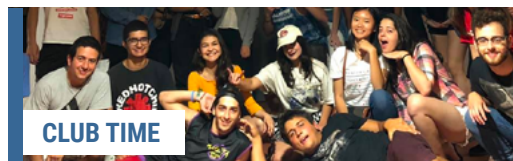


**International Students are hosted with other École Centrale de Lille's students at the Léonard de Vinci Residence** located 10 minutes walking distance from the school. The residence offers a very friendly environment with regular events being organised all year long.

**Students may choose between two types of flats:** individual studios (circa 20sqm, incl. a bedroom, a kitchenette, an en suite shower room with toilets) or 2-person flats (circa 40sqm with two individual bedrooms, a common kitchen and a shared shower room with separate toilets).



An Arrival Kit is available on demand for a fee



**The Club TIME is a student organisation providing support to International Students during their study period at École Centrale de Lille.**

Club TIME is responsible for welcoming international students, helping them integrate into the student community and foster promotion of their university of origin.

Outings and trips are organised on a regular basis in Lille or all over France and events are facilitated to introduce French culture and heritage.

*Check out the Club TIME's Facebook page for further information. You may also contact them directly prior to your arrival: (@clubtime.eclille)*







# Live in Lille, Discover France

**Welcoming and cheerful**, Lille is a vivid city and a great place to live. The city boasts a rich architectural, industrial and cultural heritage with a great abundance of peculiar places and plenty of activities of all kinds.

**Cultural animations, artistic and sporting events come in succession all year long**, allowing people to discover the various aspects of the city and its vicinity.

**The well-earned reputation of friendliness granted to people in Northern France makes Lille a very festive place** where you can enjoy a richness of pubs, restaurants, theatres and concert halls.

The whole Hauts-de-France region enjoys **a remarkable diversity of beautiful landscapes**: farmland, sand dunes, endless beaches, white chalk cliffs, forests, former coal mines sites, industrial cities, state-of-the-art buildings, you name it! And, as those who live here know very well, we do have beautiful weather in North of France too!

**Lille is well connected with the rest of France and Europe with two train stations, an airport and numerous highways.** Paris is just one hour away by train and it will only take you one hour driving to reach the coastline. The French Riviera and South of France are also a stone's throw from Lille by plane.

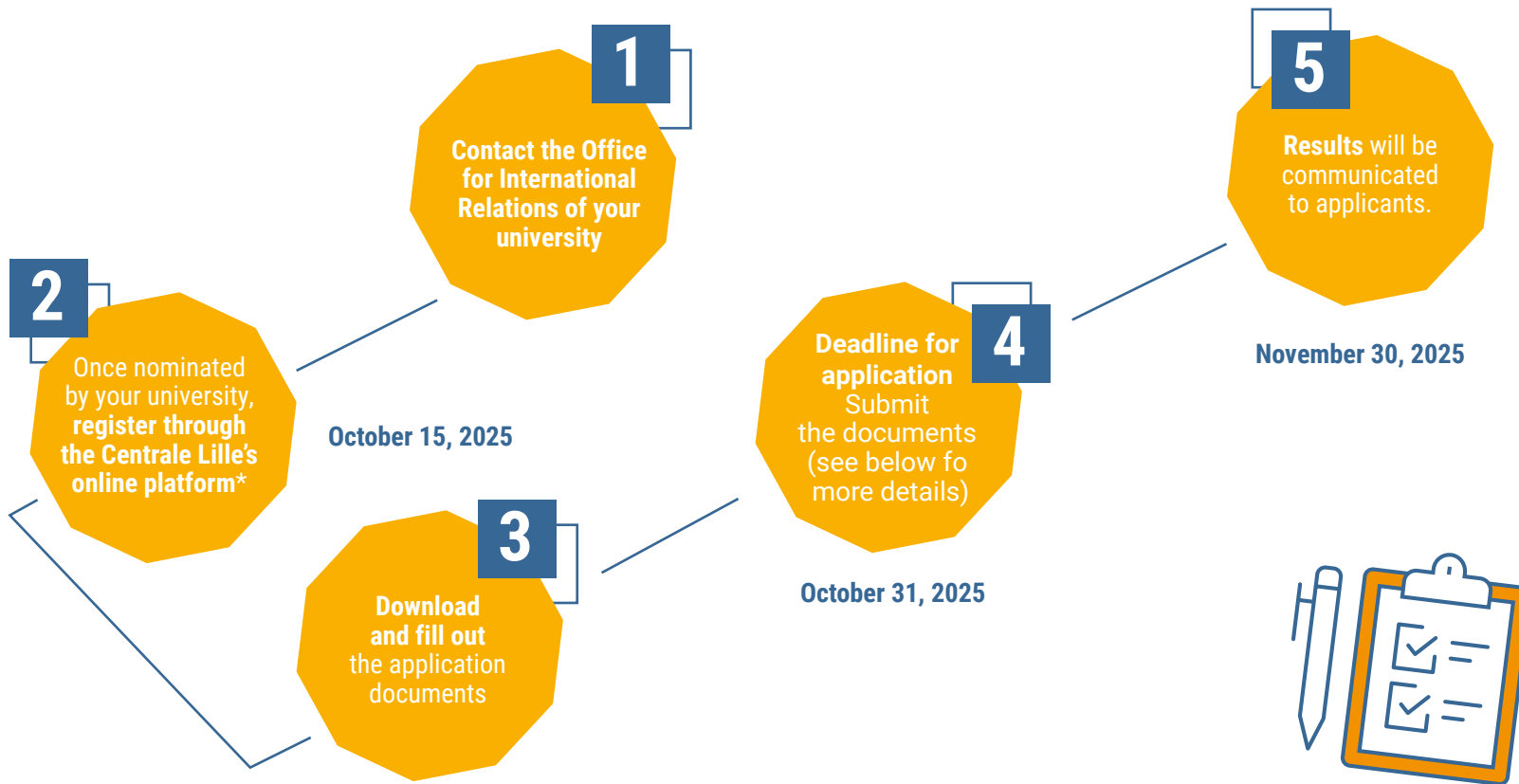






# Apply to the exchange programme

Applications to the semester exchange programme in English are reserved to non-French-speaking students from Centrale Lille's partner universities. **The programme is especially suitable for students in their 1st year of Master's Degree or 2nd year engineering students. Final year Bachelor students (or equivalent) may also apply.**



\*link to be communicated to each candidate individually



For more information on this programme, contact the office for International and Academic Relations : [pole.ria@centralelille.fr](mailto:pole.ria@centralelille.fr)

<https://ecole.centralelille.fr/semesterinenglish>

Follow us:     