CHEMICAL ENGINEERING EXCHANGE PROGRAM

STUDY TRACKS IN ENGLISH FALL SEMESTER 2022





CHEMICAL ENGINEERING FOR A SUSTAINABLE WORLD

Since 1894, over 4,000 have graduated from the École Nationale Supérieure de Chimie de Lille (ENSCL), which provides a multidisciplinary chemistry education.

ENSCL engineering studies cover the major fields of chemistry to equip you with the scientific and technical skills essential to the work of a chemical engineer.

The school's partnership with internationally renowned research laboratories keeps students abreast of scientific and technological innovation.

This broad education makes an ENSCL graduate a responsible engineer and a perfect fit in today's industrial world.

Centrale Lille's four research themes

Cross-disciplinary subjects with an international scope and a societal dimension







Environment



Health



Digital Technology

Centrale Lille Research Laboratories

Researchers at Centrale Lille contribute to the research projects of 9 different labs in Lille:

CRIStAL, Research Centre in Computer Science, Signal and Automatics of Lille IEMN, IResearch Institute in Electronics, Microelectronics and Nanotechnology Institut Pasteur de Lille LMFL, Lille Fluid Mechanics Laboratory L2EP, Lille Electrotechnics and Power Electronics Laboratory LaMCUBE, Multiphysic and Multiscale Mechanics Laboratory PAUL PAINLEVE, Paul Painlevé Mathematics Laboratory UCCS, Catalysis and Solid-State Chemistry Research Unit UMET, Materials and Transformation Research Unit





















In a nutshell...





PROGRAMME

SEPTEMBER

TO JANUARY

Overview of the study tracks

OPTIMIZATION AND RELIABILITY OF MATERIALS

Designing the materials of tomorrow

Materials surround us: metals, glasses, ceramics, plastics, and composites.

These materials must have certain properties they must be tough or light, for example—and hold up under harsh conditions, e.g., rain, cold, heat, temperature variations, or fire.

The materials major learns how to develop solutions for problems that arise in the industrial use and manufacture of materials.

You will discover and optimize their properties and behaviour using cutting-edge digital and analytic tools.



FORMULATION CHEMISTRY AND APPLICATIONS

Learn to develop and optimize

formulations for cosmetics, paints, inks, detergents, fragrances, fuels, glues, and concretes.

Apply your theoretical knowledge and understanding of complex physicochemical phenomena to mix raw materials that are often otherwise incompatible in order to obtain stable, macroscopically homogeneous finished products with defined end-use properties.

Master the selection of product ingredients based on your understanding of their physicochemical and functional properties as well as mechanism of action, while adhering to the **technical**, **regulatory**, **financial**, **safety**, **and environmental constraints** set by the specifications.



Semester-long Research Project



The research projects may be hosted by one of the following laboratories:



Students will produce a research report on their project and defend it in front of a jury



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.



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).

Special Arrival Kit available for a fee, with kitchenware, duvet, linen, basic hygiene and food products.



Application Procedure



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For more information on this programme, contact the Office for International and Academic Relations : **pole.ria@centralelille.fr**

https://enscl.centralelille.fr/

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