Tell me more about

ENGINEERING PROFESSIONS

EEA¹, CIVIL ENGINEERING, MECHANICAL ENGINEERING AND MECHANICS

• I have a natural curiosity for science.
• I have a good capacity for analysis and abstraction.
• I know how to conduct logical reasoning.
• I like to manipulate and experiment with things.
• I’m interested in technological innovations.
• I would like to be able to use IT and modelling tools.
• I am willing to work hard at my studies.
• I have a solid grounding in scientific subjects.
• Candidates should ideally have a secondary-level background in science.

WHICH PROFESSIONS?

Engineering graduates can be found across all business sectors: agri-food, construction and public works, energy, environment, transport, metallurgy...

DESIGN - DEVELOPMENT
• Design engineer
• Engineering and design technician
• Mechatronics engineer
• Robotician
• Renewable energy project manager
• Acoustician
• Soil mechanics engineer
• Embedded electronics engineer

CONSULTANCY - CONTROL - SALES
• Customer support engineer
• Energy efficiency engineer
• Business engineer
• Test engineer
• Quality control technician

TEACHING - RESEARCH
• University lecturer
• Research engineer
• Secondary school teacher

PRODUCTION - MANUFACTURING - MAINTENANCE
• Operations engineer
• Methods engineer
• Systems engineer
• Maintenance technician
• Works foreman
• Home automation technician
• Head of production

Most of the professions listed require master’s level qualifications, but some of them can be accessed after 2 or 3 years’ higher education. Examples taken from the list of professions compiled by ODIF (Observatoire de la Direction des Formations), part of the University of Lille.

https://odif.univ-lille.fr/

¹ Electronics, electrical energy and automation
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EEEA\(^1\), CIVIL ENGINEERING, MECHANICAL ENGINEERING AND MECHANICS

POST-SECONDARY COURSES AVAILABLE AT THE UNIVERSITY OF LILLE

PROFESSIONAL TRAINING IN 2 YEARS

Theory combined with apprenticeships in the field. Selective admission.

DUT ELECTRICAL ENGINEERING AND INDUSTRIAL COMPUTING \(\text{A A}\)

Also available as parallel student/employee programme.

Trains technicians in areas involving electronics, automation, industrial computing, electrotechnology, power electronics, networks and modern communication tools.

DUT MECHANICAL & PRODUCTION ENGINEERING \(\text{A A}\)

Also available as parallel student/employee programme.

Trains senior technical staff capable of analysing and contributing to the design of mechanical systems across all sectors.

3-YEAR BACHELOR’S DEGREES

Theoretical grounding to prepare for further study up to master’s level and/or civil service examinations.

The “exact science and engineering” (SESI) programme offers gradual specialisation, with all first years taking the following 8 subjects: chemistry, EEEA\(^1\), civil engineering, computer science, mathematics, mechanics, physics, and combined physics & chemistry. In semester 2, students can choose a path that will lead into either the EEEA, Civil engineering or Mechanics degree programmes.

Different options are available.

DEGREE EEEA\(^1\) \(\text{A}\)

OPTION ESEA\(^2\) – FUNDAMENTALS

Course available in 2\(^{nd}\) year, enabling students to master the tools needed to identify problem-solving approaches in EEEA.

DEGREE CIVIL ENGINEERING \(\text{A}\)

OPTION CIVIL ENGINEERING

Course available in 2\(^{nd}\) year, offering broad training with a focus on the design and gauging of structures and infrastructure.

DEGREE CIVIL ENGINEERING \(\text{A}\)

OPTION URBAN ENGINEERING

Course available in 2\(^{nd}\) year, looking at the challenges related to planning, urban networks and managing collective resources. Trains future professionals in planning and sustainable development.

DEGREE EEEA\(^1\) \(\text{A}\)

OPTION ELECTRICAL ENGINEERING

Course available in 3\(^{rd}\) year, teaching students how to use the most common electrical measurement, analogue and digital tools or spectrum analysers, as well as computerised tools to simulate electronic circuits and for digital electronics, electrotechnology and automation.

DEGREE MECHANICS \(\text{A}\)

OPTION MECHANICAL ENGINEERING

Course available in 2\(^{nd}\) year, designed to equip students with the scientific, technical and practical skills needed for mechanical engineering.

DEGREE MECHANICS \(\text{A}\)

OPTION MECHANICAL SCIENCE AND ENGINEERING

Course available in 2\(^{nd}\) year, training highly qualified mechanics professionals capable of innovating and transferring cutting-edge skills developed in university laboratories to the industrial world.

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1. Electronics, electrical energy and automation
2. Electronics, electrical systems and basic automation
ENGINEERING PROFESSIONS

Cursus master's in engineering (CMI)
Selective programme
Course available from year 1 and taught over 5 years. Based on the coursework of the primary degree with additional modules. Graduates qualify as engineers.

Two CMI options are available:

DEGREE EEEA
OPTION EEEA - MINT

DEGREE MECHANICS
OPTION MECHANICS

3 Microelectronics - nanotechnology - telecommunications

OPTION SESI BILINGUAL Selective programme
Course with limited capacity providing specific competency in scientific English. Offered in 1st year; students can continue to 2nd year in mathematics and combined physics & chemistry.

Parcours tailored SESI Selective programme
Course intended for holders of a technological baccalaureate or equivalent to help them succeed and pursue their studies to bachelor’s level in the following areas: chemistry, EEEA, civil engineering, computer science or combined physics & chemistry.

Parcours PeIP Selective programme
2-year programme to prepare for Polytech engineering schools. Based on the same teaching as the regular programme but with additional coursework focusing on engineering as a profession and English language skills with a view to gaining admission to the engineering cycle of the Polytechnetwork.

specific bachelor’s degree programmes with selective admission and limited capacity

After 2 years of higher education

Whatever your background, you have the option of completing professional training. This course lasts one year and allows you to specialise, obtain a dual qualification or enter the job market after 3 years in higher education. This professional diploma is designed to lead immediately to employment.

After 2 years of professional training, subject to certain conditions, you can also join a bachelor’s degree programme.

AFTER A BACHELOR’S DEGREE

You can continue your studies to master’s level (5 years in higher education) in fields such as civil engineering, mechanics, mechanical engineering, industrial engineering, robotics, electrical systems, networks and telecommunications.

Graduates can also apply for admission to engineering schools at the end of their 2nd or 3rd year (e.g. PolytechLille).

The information here is valid for the reference year 2018-2019. The academic programmes at ULille are subject to change in September 2020

More info: consult the catalogue of courses at https://www.univ-lille.fr/formations or contact SUAIO

Parcoursup
Find out about the requirements and terms of access for each course at: www.parcoursup.fr
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