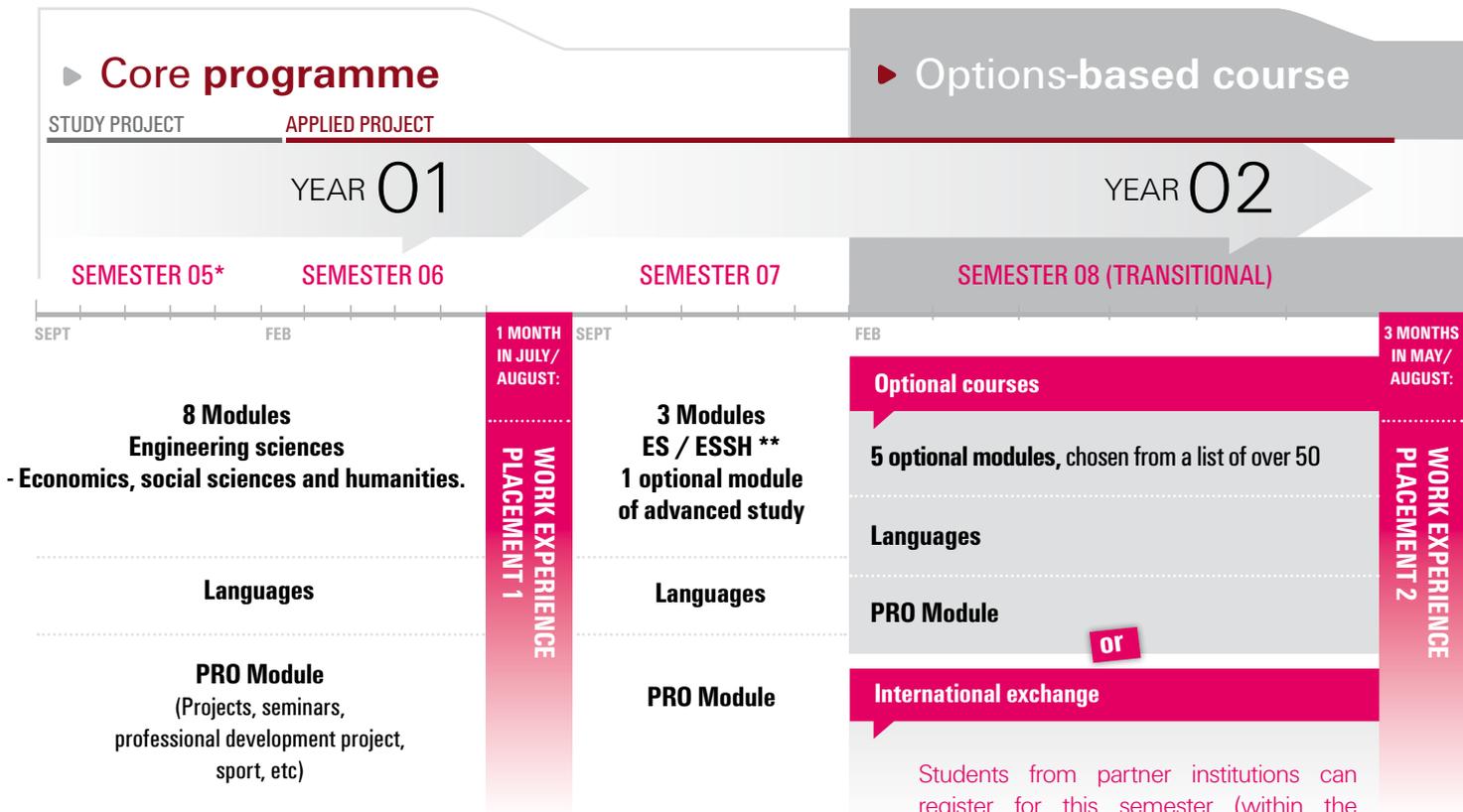


ÉCOLE CENTRALE DE LYON
ENGINEERING THE FUTURE



The wide range of subjects covered in the core programme provides students with a sound theoretical understanding of all the different aspects of engineering science, providing them with the tools needed to tackle the complex, multidisciplinary problems faced by modern engineers. This is confirmed by the fact that engineers from the École Centrale de Lyon have risen to the highest levels in all areas of the engineering profession, both in France and abroad.

25% of student work in each module takes the form of independent study, either individually or in small groups, to develop the capacity to work independently and to take the initiative.

An important element of the teaching in these core modules is the importance given to work in small groups, both in the many laboratory classes associated with each module and in the student projects, which are also designed to provide hands-on training in project management.



AN OPTIONS-BASED TRAINING PROGRAMME THAT ENCOURAGES INDIVIDUAL DEVELOPMENT

YEAR 03

SEMESTER 09

SEMESTER 10

SEPT

APRIL

3 TO 6 MONTHS
IN LATE MAY /
SEPTEMBER

WORK EXPERIENCE
PLACEMENT 3

Professional and sectoral practice at École Centrale de Lyon

The student chooses one of 7 options, covering the main sectors of the engineering profession, and one of 6 *métiers*, representing the different types of professional activity for an engineer. The associated taught courses finish at the end of March, and the students then do a placement lasting 5 to 6 months, either in a company or in a research laboratory.

Priority to research

In the third year, engineering students have the option to gain in-depth research skills by following one of the school's fifteen or so research Master's courses in addition to their existing course. Engineering graduates also have the option of undertaking a three-year program leading to a PhD, in one of the school's laboratories.

At the École Centrale de Lyon, students follow a core program for three semesters, followed by three semesters of optional subjects.

To be awarded their degree, students must:

- ✓ Spend at least four semesters under the school's supervision,
- ✓ Demonstrate proven work experience of at least six months,

The course is divided into semesters, making exchanges easier:

The first three semesters consist of 12 taught modules, and provide the range of key skills and knowledge needed by all engineers.

The following three semesters provide the student with an introduction to a specific branch of the engineering profession and an opportunity to study a diverse range of applications of engineering science.

As well as this training, students gain first-hand, in-depth workplace experience by attending seminars, visiting factories, and taking part in six months of work experience.

Each engineering student is fully involved in his own training. Students build their course by choosing from the many opportunities available.

Students also have the possibility to register for in of the many Masters degrees offered by The École Centrale de Lyon in partnership with other establishments in Lyon.

* The semesters are named according to the LMD system to facilitate international communication.
Semester S5 corresponds to the 1st semester after the baccalaureate and the core program is therefore run during semesters S5, S6 and S7.

** ES / ESSH: Engineering sciences - Economics, social sciences and humanities.



★ Modern languages taught module

Engineering students at **École Centrale de Lyon** have a choice of **10 modern languages**:

German, English, Arabic, Chinese, French as a foreign language, Italian, Portuguese, Russian, Japanese, Spanish.

All students must study at least one foreign language from those proposed during their course, and may potentially choose 2 or 3.

To obtain the degree, every student must reach a minimum level of English (at least 550 points on the ITP (79 on the TOEFL IBT), 750 points on the TOEIC or 6.5 points on the IELTS).

Non-French speaking students doing a joint degree or students who enjoy special conditions for linguistic reasons must obtain the DELF (French language studies diploma) level B2.

► Options

- Aeronautical Engineering
- Bio-engineering and nanotechnology
- Civil and environmental engineering
- Energy
- Information Technology and communication
- Mathematics and decision-making
- Transport and traffic engineering

► Métiers

- Innovation, research and development engineer
- Industrial process management engineer
- Supply chain engineer
- Business development engineer
- Eco-design and innovation engineer
- Consultant engineer
- Management of industrial and environmental risks engineer

★ Professional training for Engineers (UE pro)

The UE PRO allows students to discover the engineering profession **through lectures, site visits, interviews, projects and internships** in industry, and helps them make use of all this information in defining their professional project.

All students must do a **4 week work experience placement after the first year and a 3 month** work experience placement as a first introduction to engineering work.

Project management skills are taught through hands-on experience acquired in two group student projects, which run throughout the core programme.

All students must participate in some form of sporting activity or physical exercise, where the aims are both to develop the capacity to work as part of a team, and to encourage students to challenge themselves so as to discover their full potential.

★ Taught modules in engineering science, economics and humanities

Electrical energy and systems control
 Fluid, Mechanics and Thermodynamics
 Mechanical engineering
 Information technology
 Materials engineering
 Mathematics
 Solid and structural mechanics
 Physics and chemistry of materials
 Economics and management
 Human and social sciences
 Information sciences and technologies
 Specialization



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Find us on

Join **École Centrale de Lyon** and open your mind.

And also:

- Benefit from an options-based course to suit all your projects.
- Discover research through constant contact with the CNRS laboratories on the campus.
- Work with internationally renowned companies.
- Acquire a good command of a foreign language and study in prestigious university.
- Get involved in an exciting range of extra-curricular activities.
- Play a sport as part of a winning team.
- Enjoy living in a resolutely European city between the mountains and the sea.