



**CENTRALE
LYON**

Sensory Engineering Engineer

Degree level: Specialty engineering

Training time: 3 years

Language: French

Status: Student

Campus: Saint-Etienne Campus

Objectives

The CTI-accredited Sensory Engineering course at Centrale Lyon ENISE will enable future engineers to:

- Conceptualize, design and develop a product around sensory components
- Taking well-being into account, comfort indicators and the subject/object/context relationship
- Develop interfaces enabling user immersion in a virtual environment
- Implement the tools of sensory analysis
- Design a man-machine interface and machine interface and develop a mechatronic system
- Choose and master a manufacturing process with sensory specifications
- Choose a material and a manufacturing process with a view to producing a complex prototype
- Characterize the physical quantities of a surface and correlate them with perceptual expectations

Program

Professional training / Internships

In order to enable the acquisition of practical knowledge of the world of work, Centrale

Lyon ENISE engineering training integrates 3 internship periods:

- 8- to 12-week internships in 2nd year
- 18-week internships in 4th year
- 22- to 24-week internships in 5th year

Projects

An engineer will be required to solve the concrete, complex technical problems posed to him or her, through the management of projects integrating technical, organizational and financial dimensions. Several integrative projects punctuate the training:

- **The 3rd semester project** aims to open up student engineers to scientific or societal issues, going beyond the strict framework of disciplinary teaching
- **The 5th semester project** aims to apply scientific and technical skills to a multidisciplinary issue within the student engineer's chosen profession (eg: from architectural design to site organization in Civil Engineering);
- **The 8th semester project** aims at development/innovation in an entrepreneurial logic by associating two complementary trades (e.g. Mechanical Engineering + Civil Engineering, Civil Engineering + Sensory Engineering, etc.) in order to develop the skills of the student engineer.) to develop innovation skills in a multicultural environment;
- **The 9th semester project** is dedicated to the discovery of a research activity linked to Centrale Lyon ENISE's areas of expertise.

International mobility

A stay abroad in the form of an internship or academic exchange enables students to both consolidate their language skills and open up to other cultures. A minimum of one semester's mobility abroad is a prerequisite for graduation. It can take the form of an Erasmus academic stay, an internship or a double degree in one of our 117 academic partners in 34 countries.

Languages

Language courses are designed to give you linguistic fluency in a professional environment. A TOEIC certification of 790 points in English is compulsory to obtain the diploma, for which intensive one-week preparation courses are planned over the last 3 years of training. A second language is included in the training program.

Passerelles avec l'École Centrale de Lyon

In 3rd year, engineering students recruited from post-baccalaureate programs have the option of joining École Centrale de Lyon and continuing on to the general engineering curriculum (integration in 1st year of the engineering cycle). Selection is based on applications and an interview.

In 4th year, depending on their career plans, engineering students can choose from one of the 5th year specialties offered by École Centrale de Lyon.

Diplôme et certification

This program awards a national engineering diploma, supervised by the French government and accredited by the "Commission des Titres d'Ingénieur".



Career opportunities

- Sensory analysis engineer

- Product manager engineer
- Virtual reality expert
- Design engineer
- Research and development engineer

Sectors of activity

Bioengineering, Medical, Energy, Agri-food, Home automation, Robotics, Transport, Textiles, Cosmetics

Focus

Strong industrial roots

Internships, professionalization contracts, apprenticeship training, professional contributions to training, industrial contracts... so many partnership projects with all the socio-economic players that testify to the strong links between Centrale Lyon ENISE and the business world.

Admission requirements and application

Requirements

- Bac + 2 or a Bac +3 (Cycle préparatoire intégré Centrale Lyon ENISE, Cycle préparatoire CapECL, CPGE, BUT 2ème ou 3ème année de BUT, licence 3)

Application

Access to the training: Competition on file

Application on file on the dedicated platform:

[Apply](#)

Tuition fees

Registration fees are set nationally (€2,572 for 2024-2025 plus CVEC at €103). CROUS scholarship students are exempt from tuition fees and CVEC. In addition, financial aid from the establishment may be granted, accessible to both scholarship and non scholarship holders.

Training is free of charge for students on work-study contracts.

Administrative contact

Scolarité Centrale Lyon ENISE

Informations et inscriptions

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Educational contact

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