CENTRALE LYON

Centrale Digital Lab

Degree level: Institutional degree
Training time: 1 year
Language: French
Status: Student
Campus: Lyon-Ecully Campus

Objectives

The Lyon Centrale Digital Lab curriculum aims to train professionals in the digital transformation of companies, to take on the missions of a CDO (Chief Digital Officer). This 1-year course is validated by a diploma from the École Centrale de Lyon.

- Acquire digital skills and innovation methods (big data, machine learning, IoT, web and mobile apps...)
- Train through practice in the principles of design thinking and agile project management
- Understand the economic, organizational and human challenges of digital transformation in contact with companies
- Create value in the digital field and develop your network by participating in three full-time projects in companies of different sizes

Program

The Centrale Digital Lab curriculum offers an innovative program that blends theoretical training with projects in conjunction with companies.

Education

Students follow 3 intensive weeks of training in the fields of artificial intelligence, Big Data and the web.

- Artificial intelligence
- Mobile application
- Customer interface
- Big data
- Connected object
- Web platform
- Machine learning
- Chatbot

Projects

3
projects
4 à 7
weeks per project
3 à 5
students per project
260h
per project and per student

During the course, students work on 1 4-week and 2 7-week full-time projects, **in direct link with sponsoring companies** on subjects involving IoT, Big Data, artificial intelligence, the web.... These projects are carried out in groups of 3 to 5 students, with support from specialists in design thinking and agile project management (Scrum method).

Examples of projects

- Improving the customer experience by implementing digital tools on smartphones: machine learning, pattern recognition, image processing...
- Optimizing industrial processes using machine learning and sensor data analysis techniques.

- Participation in the design and facilitation of the "Public Artificial Intelligences" workshop for the Metropole of Lyon, bringing together designers, developers and engineers to prototype AI solutions to public utility issues.
- Cyber security: study, adaptation and implementation of a simple "end-to-end encryption" solution for secure messaging.

Internship

The course culminates in a 6-month development internship in the digital sector, in France or internationally.

Career opportunities

- chief digital officer
- data scientist / data analyst
- business intelligence manager
- web and mobile developer
- IoT engineer...

Focus

- Advanced training in design thinking, the agile approach and IT development (AI, Big Data, Internet of Things)
- Projects linked to companies and carried out in small groups of 3 to 5 students
- Coaching by Centrale Lyon scientific leaders and professionals from partner companies

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Admission requirements and application

Requirements

- Student engineers on a gap year or after graduation.
- Holders of a validated scientific bac +4 (or in the process of validation).

- Professionals with a higher-level diploma and experience in Computer Science, Mathematics, Statistics, Econometrics.

Application

Applications are considered on the basis of a portfolio via the dedicated platform.

Recruitment timetable:

- Phase 1:
  - Opening of applications on: 08 December 2025
  - Closing date for applications: 12 May 2026
  - Deadline for replies to applicants: 05 June 2026
- Phase 2:

  - Opening of applications: May 13, 2026
  - Closing date for applications: June 30, 2026
  - Closing date for replies to applicants: July 17, 2026

  For visa reasons, the final phase is reserved for European students.

  Apply

Administrative contact

Centrale Digital Lab

Informations et inscriptions

digital-lab@listes.ec-lyon.fr

Useful link

- Discover the syllabus