

Master 2 Industrial Engineering

Degree level: Master Training time: 1 year Language: French Status: Student

Campus: Lyon-Ecully Campus, Saint-Etienne Campus

Objectives

The **Master 2 Industrial Engineering** at Centrale Lyon trains engineers capable of designing, optimizing, and managing complex industrial systems through **2 specialization paths**:

- Advanced industrial engineering methods for the industry of the future
- Data and artificial intelligence in industrial engineering

Program

Advanced industrial engineering methods for the industry of the future

Data and Artificial Intelligence in Industrial Engineering

The Advanced Industrial Engineering Methods for the Industry of the Future course aims to train students in modern industrial engineering techniques covering the complete product and production systems engineering chain. The approaches studied thus cover all the processes in a company's supply chains, from product design, sourcing from suppliers, through to customer deliveries

This course is taught on the Saint-Étienne campus.

Teachings

- Piloting industrial organizations
- Maintenance
- Advanced production management
- Optimizing production systems
- Supply Chain
- Information system and digital system
- System diagnostics
- System modeling systems
- Evaluation of systems
- Decision support
- Planning and scheduling of production and logistics systems
- Bibliographic study
- English

Internship

Students must complete a 5-6 month internship in a laboratory or within a company.

This course specializes in mechanics and vibration. It provides a mastery of digital modeling and simulation tools and an understanding of physical phenomena in mechanics.

This course is taught on the Lyon-Écully

Courses

- Big Data and Data science
- Bibliographic project
- Diagnostics and operational safety
- Reliability of complex systems
- Engineering the design of products and systems
- Engineering the design of products and systems
- Engineering the design of mechanical systems

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- Engineering the design of mechanical systems systems
- English
- Operational research
- Engineering systems and algorithm for business decision

Internship

Students are required to complete a 5-6 month internship in a laboratory or within a company.

Discover the syllabus

Diploma and certification

This course awards a national master's degree - controlled by the State.



Career opportunities

- Production manager
- Methods engineer
- Supply chain engineer
- Automation engineer
- Quality manager
- Planning/scheduling manager

Focus

A master's degree in co-accreditation with Université Jean Monnet in Saint-Étienne, Mines Saint-Étienne and Université Clermont Auvergne

As part of this partnership and depending on the chosen course, some courses will take place on their campuses.

- Université Jean Monnet, 10 Rue Tréfilerie, 42100 Saint-Étienne
- Mines Saint-Étienne, 158 Cour Fauriel, 42100 Saint-Étienne
- Université Clermont Auvergne, Campus des Cézeaux, 1 Rue de la Chebarde, 63178
 Aubière

Admission requirements and application

Pre-requisites

- Students holding a Master 1 or equivalent to Bac+4 (240 ECTS) obtained in industrial engineering.
- Centrale Lyon student-engineers in the context of a double degree.

Application

Applications are studied on the basis of a portfolio.

Find out how to apply

Tuition fees

Acknowledging and anticipating your expenses is essential before committing to a training course with confidence.

Find out more about Master's course fees Average budget for studies at Centrale Lyon

Administrative contact

Education department - French-speaking Masters

Information and registration

scolarite.master@listes.ec-lyon.fr

Useful link

• Training syllabus