

# **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.

#### Discover the syllabus

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 mechanical 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 at Bac+4 (240 ECTS) obtained in civil engineering.
- Centrale Lyon engineering students as part of a double degree.

#### **Application**

This course is open to Centrale Lyon engineering students as part of a double degree via the dedicated platform.

For all external applicants, please consult the <u>Université Lyon 2 website</u>.

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

### **Educational contact**

Nechak Lyes

Enseignant-Chercheur

lyes.nechak@ec-lyon.fr

## **Useful link**

• Training syllabus