Master 2 Computer Science

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

Objectives



The **Master 2 Informatique** de Centrale Lyon prepares students for careers as computer engineers through **4 specialization paths**:

- Data Science
- Artificial Intelligence
- Image Development and Technology
- Information Technology and the Web

Program

Data Sciences Artificial intelligence

Image Development and Technology

Information Technology and the Web

This course prepares students for the job of "data scientist". With the new orders of magnitude of data, data processing and visualization must be rethought and apprehended in new ways.

Teachings

- Automatics and Artificial Intelligence
- Graphical and Probabilistic Models
- Statistics and Econometrics
- Big Data and Computer Science
- Mathematics for Data Science and Modeling
- Visualization and interaction with data

Internship

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

This path trains students in the most advanced techniques in the field of AI for modeling and engineering intelligent systems.

Courses

- Artificial Intelligence and Cognitive Systems
- Multi-Agent Systems and Autonomous Agents
- Machine Learning
- Data Science
- Mathematics and Modeling
- Statistics and Econometrics

Internship

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

This course provides a foundation of skills essential to the profession of engineer and researcher in the field of image and computer graphics.

Courses:

- Computer Vision and Image Processing
- Geometric Modeling and Computer Graphics
- 3D Image Synthesis and Rendering
- Animation and Video Games
- Coding, Compression and Transmission of Images and Videos
- Mathematical and Statistical Modeling
- Embedded Technologies and Augmented Reality
- Data Science and Decision-Making

Internship

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

This course trains in advanced concepts and new technologies in the field of information systems and the web.

Teachings

- Machine Learning and Artificial Intelligence
- Statistics and Data Analysis
- Optimization and Operations Research
- Enterprise Computing and Big Data
- Graphic Computing and Visualization

Internship

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

Diploma and certification

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



Career opportunities

- Technical architect
- IT consultant
- IT security consultant
- Studies, research and development manager
- Teacher-researcher
- Research engineer

Focus

A master's degree co-accredited with Université Claude Bernard Lyon 1

As part of this partnership, some courses will take place on the La Doua campus in Villeurbanne.

- 43, boulevard du 11 novembre 1918, 69100 Villeurbanne

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 Université Lyon 2 website.

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 Discover the average budget for studies at Centrale Lyon

Administrative contact

Education department - French-speaking Masters

Information and registration

scolarite.master-lyon@listes.ec-lyon.fr

Educational contact

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Useful links

- Discover the training syllabus
- Lyon 1 University website