



# Bachelor of Science in Data Science for Responsible Business



**Isabelle Huault**  
Executive President & Dean  
**emlyon** business school




*In a complex world made of socio-environmental issues, **emlyon** business school is on a mission to provide life-long training and support, to informed people, who can readily transform organizations for a fairer society, with more solidarity and respect for the planet.*

*In that respect, the School's strategy was constructed based on three main aspects: social and environmental commitment, network internationalization and academic excellence.*

*The Bachelor of Science "Data Science for Responsible Business" fully embraces this new orientation and addresses the needs for a responsible training hybridizing high standard knowledge.*

*By renewing the historical synergies between **emlyon** business school and the Ecole Centrale de Lyon, this program is now a track where disciplines no longer walk side by side, but where they merge together for mutual-fertilization purposes.*

*As a true hybrid track, the Bachelor of Science aims at developing cross-functional skills in keeping with responsibility, and the technical and scientific competences of students, based on the interconnections of learnings and the way they are put into perspective. This program combines the best technical and managerial teachings for a training up to the level of the issues of responsible data.* 


**Pascal Ray**  
Director  
École Centrale de Lyon



*Institutions of higher education must be key players leading the transition regarding environmental, energetic, digital and social matters. Centrale Lyon decided to build its strategy around these challenges. The creation of the Transition Lab, a complete ecosystem on the matters symbolizes this strategy, whose recognition is shown by our position in national and international rankings.*

*Digital and data sciences are another strength of our School: Yohann de Castro, scientific referee of the Bachelor and teacher-researcher in mathematics has also been a member of the Institut Universitaire de France since October 1, 2022.*

*Industry 4.0, predictive medicine, aeronautics, cybersecurity, but also banking, insurance or tourism: many sectors need skills in data management and analysis, artificial intelligence and machine learning.*


*Today, it is fundamental to reconcile digital sciences and social responsibility; the question of uses and impact must be inherent in the development of these new technologies. This is why, thanks to the cross-disciplinary views of emlyon and Centrale Lyon, we are offering a transdisciplinary educational approach. The hybrid course we have designed not only provides the technical skills and managerial know-how that are essential, but also transmits the tools and attitudes that will enable young graduates to act as visionary, committed, and responsible actors.* 

**Jean Savinien**  
Academic Director  
**emlyon** business school

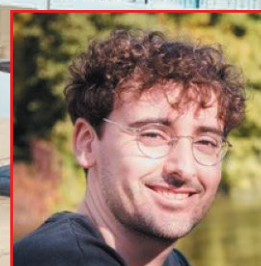


*AI impacts us in many profound ways and invites us to rethink the relations and traditional boundaries which exist between science, business, and human and social questions.*

*We are convinced that responsible commitment is necessary when working in AI and that it requires the creation of bridges between engineering and business units.*

*Our program targets high-potential students and delivers a hybrid advanced training in data science and management to fill a gap in organizations, and to answer their need for responsible and enlightened AI experts.* 


**Yohann de Castro**  
Scientific Referee  
École Centrale de Lyon – Institut Universitaire de France



*The emergence of artificial intelligence in the modern economy is new and requires a whole new talent pool of decision-makers trained in its specificities.*

*Understanding the fundamentals of automated tasks, decision support, and optimal strategy learning is a major asset today.*

*I am firmly convinced that this knowledge is within the reach of our students in the context of a high-level international education.*

*An enlightened manager could not afford not to know the specificities, limits and challenges of artificial intelligence. Advanced training in this field is the guarantee of being able to contribute actively and responsibly to this breakthrough.* 



# Key points

## emlyon business school

**Top 1%  
of business  
schools  
worldwide**

accredited  
AACSB, EQUIS, AMBA



**No. 2**

French business  
school for global  
employability

Times Higher Education 2021



**139**

articles per year  
in international scientific  
papers



**9,020**

students

**6 campuses**

Lyon, Shanghai,  
Saint-Étienne, Paris,  
Bhubaneswar and Mumbai



**38,600**

graduates  
in 130 countries

## École Centrale de Lyon



**3,040**

students

**Shanghai Global  
Ranking of  
Academic Subject  
2021:**

**76-100  
in mathematics**

**330**

teacher-researchers  
and teachers

**6**

teacher-  
researchers

members of the IUF  
(Institut Universitaire  
de France) since 2007

**13 M€**

research  
agreement



**+450**

articles per year  
in international scientific  
journals

2022 figures

# Bachelor of Science Data Science for Responsible Business key points

The **Bachelor of Science Data Science for Responsible Business** is a **4-year Bachelor's Degree** of excellence in data science and management. For those looking to pursue with higher education, this program can be a passageway to some of the best Master's Degrees.

The Bachelor of Science targets **high-potential students** and delivers a **hybrid advanced training in data science and management** to fill a gap in organizations and answer their need for responsible and enlightened AI experts.

The pedagogy of the program is applied and action oriented (individual and group projects, business games, flipped classrooms...). Students will learn the best professional practices of AI and get a real know-how of data science through concrete business projects and responsible AI missions within companies, organizations, and research labs.



**For what type  
of students?**

**For high-school  
or Baccalaureate  
students and  
graduates with a  
specialty in  
Mathematics and  
Science**

## Program highlights

- ⊕ Dual skills in business and engineering
- ⊕ Integrated pedagogy
- ⊕ Concrete vision of professional and human impacts of AI and data science
- ⊕ Management of concrete business projects
- ⊕ Strong internationalization
- ⊕ Numerous internships
- ⊕ Supportive alumni community

# Program structure

Year 1	Mathematics & Computer Science Fundamentals	3-month internship in NPO	Research Track	Data Scientist Track	Entrepreneurship Track
	Fundamentals of Responsible Business				
Year 2	Data Science   Technologies of AI	3-month internship in tech			
	Business Practice & Corporate Social Responsibility				
Year 3	Semester Abroad Advanced Language Models   Modern Trends in AI	3-month track internship			
	Digital Business   Corporate Law				
Year 4	Research Missions   Tech Seminars	6-9 month internships BSc Thesis			
	Innovation   Human & Machine Cognition				

It is possible to validate this diploma by blocks of competencies.

## Program tracks

### Data scientist

Students work in partnership with a company on a full-scale data science project during a year, join the company during their summer internship, and deliver their solution to the company.

### Research

Students work in partnership with a research lab on a research project tutored by a researcher. They join the lab during their summer internship. Partner research labs include the “**Institut Camille Jordan**” (mathematics) and “**Laboratoire d’InfoRmatique en Image et Systèmes d’Information**” (computer science) from the University of Lyon.

Data not available, as the first cohort will begin in September 2023.

### Entrepreneurship

Students are trained and supported by the incubators of **emlyon** business school and **École Centrale de Lyon** to start their own businesses. They work full time developing their company during their summer internship.



# How can I join the program?

Apply online on <https://em-lyon.com/>

### Terms of admission

You are eligible to the **Bachelor of Science in Data Science for Responsible Business** if you are:

- ☞ a holder or future holder of the French baccalaureate with a specialty in Mathematics and Science
- ☞ a holder or future holder of an international diploma accepted as equivalent to the baccalaureate with a specialty in Mathematics and Science

This program is eligible for VAE (APEL: accreditation of prior experiential learning), find all the information on [em-lyon.com](https://em-lyon.com/)

### Tuition fees

**For September 2023**

Tuition fees: €12,500 per year

Student services fees: €450 per year

Total tuition fees: **€12,950 per year**

This tuition and fee charges are in effect for the 2023-2024 academic year and are subject to change for future years. All indicated fees include tuition, student services fees, enrolment fees, academic expenses, and lifelong membership of **emlyon** business school alumni network.

### Admission path

Selection for the **Bachelor of Science in Data Science for Responsible Business** is competitive, and follows a full online admission process.

You are first evaluated on the content and quality of your High School course work, your grades, your English proficiency. After successfully submitting your application online, you will then take an online admission test.

Learn more about our admission process on: <https://em-lyon.com/>



For personalized information, please contact our advisors:  
Admission Department  
Tel: +33(0)4 27 40 50 20  
Email: [bscdata@em-lyon.com](mailto:bscdata@em-lyon.com)

You are temporarily or permanently disabled?  
Please contact our teams at [handicap@em-lyon.com](mailto:handicap@em-lyon.com) to study how you can integrate the program



## emlyon business school campuses

### LYON-ECULLY

23 avenue Guy de Collongue - CS 40203  
69134 Ecully cedex - France  
[em-lyon.com](http://em-lyon.com)

### SHANGHAI

Asia Europe Business School  
155 Tan Jia Tang Road  
Minhang District  
Shanghai 201199 - People's Republic of China  
[www.em-lyon.com.cn](http://www.em-lyon.com.cn)

### SAINT-ETIENNE

51 cours Fauriel - CS 80029  
42009 Saint-Etienne cedex 2 - France  
[bba.em-lyon.com](http://bba.em-lyon.com)

### PARIS

15 boulevard Diderot  
75012 Paris - France  
[em-lyon.com](http://em-lyon.com)

### BHUBANESWAR

Xavier City Campus  
Plot No:12(A) - Nijigada - Kurki - Harirajpur  
Pin: 752050 - Dist.-Puri - Odisha - India  
[xebs.edu.in](http://xebs.edu.in)

### MUMBAI

St Xavier College  
5 Mahapalika Marg  
Mumbai 400-001 - Maharashtra - India  
[xebs.edu.in](http://xebs.edu.in)

## Ecole Centrale de Lyon campus

36 avenue Guy de Collongue  
69134 Ecully cedex - France  
[www.ec-lyon.fr](http://www.ec-lyon.fr)



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ambassador



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