

A series of specialized Master programs with one ambition: to help you excel as you pursue your career path.

MASTER OF SCIENCE PROGRAMS



BIG DATA ANALYTICS FOR BUSINESS



ACADEMIC BACKGROUND

27.7 Engineering

21.3 Business Administration

21.2[%] Management

17% Economics, Finance and Accounting

12.8% IT and Informatics

AGE RANGE

8.5%	< 23
55.3 %	23-27
36.2%	27+



CAREER OPPORTUNITIES*

ROLES

PU

- Business Analyst
- Business Intelligence Engineer
- Data Analyst
- > Data Engineer
- > Data Scientist

POST-MSC SALARY

> **€83,966** Average Annual Salary (bonus included)

EXAMPLES OF COMPANIES THAT HAVE RECRUITED ALUMNI

- > ACCENTURE
- **BOSTON CONSULTING GROUP**
- > NASDAQ

- > ALIBABA
- > CRITEO

> DANONE

- > AMAZON
- > HEINEKEN

> PWC

- > BOOKING.COM
- > HEINEKEI

> TRIVAGO

THE IÉSEG COMMUNITY IS PRESENT ON 5 CONTINENTS



ORIGIN OF OUR CURRENT STUDENTS



LOCATION OF OUR ALUMNI



^{*2021} Survey led by the *Conférence des Grandes Écoles* with graduates from the 2018, 2019 and 2020 classes of the program which was cross-referenced with LinkedIn and the IÉSEG Network database

MSc IN BIG DATA ANALYTICS FOR BUSINESS

DATA SCIENCE - A DRIVING FORCE FOR BUSINESS



OBJECTIVES

The MSc in Big Data Analytics for Business is a unique, hands-on and international program that trains data scientists.

Participants are exposed to the leading-edge fundamentals in data-driven decision-making by extracting knowledge and insights from big data, including customer transactional databases, streaming data, social media data, and call center data. Participants learn how to solve managerial problems by critically asking questions in the spirit of 'What do we know?' (data driven) rather than 'What do we think?' (gut feeling).



ADVANTAGES

- > Exposure to leading data science methodologies (descriptive and predictive modelling, statistical and machine learning algorithms, forecasting, social network analysis, social media mining, and optimization tools, amongst others)
- > Exposure to leading data science technologies (Python, R, SAS, GIT, GITHub, Google Colab, Databricks, JupyterLab, Jupyter Notebooks, Hadoop, Hive, Spark, Kaggle, IBM SPSS Statistics, Tableau, Excel, amongst others)
- > Exposure to industry-based learning through a hackathon, workshops, and recruitment meetings with industry experts
- > Exposure to cutting-edge innovations in the field of data science, thanks to the quality of the IÉSEG research team and its marketing analysis center - ICMA
- > IÉSEG provides every participant with a performant laptop, fully installed and usable for the entire academic year



IÉSEG CAMPUS

> LILLE



ADMISSION REQUIREMENTS

Minimum: Bachelor's Degree in Business Administration, Engineering, Computer Science, IT, Mathematics, Statistics or similar, with strong academic performance, from a recognized institution.



IN PARTNERSHIP WITH





For more information: www.ieseg.fr/en/msc-big-data/



ZOOM ON... AN INTEGRATED BUSINESS PROJECT

The MSc in Big Data Analytics for Business offers its participants a real-life consulting challenge at the end of the academic year. This project has the intention to put the competences and skills absorbed over the academic year into practice. In collaboration with a company, participants have the opportunity to solve real business problems using the various techniques and methods that they have acquired. Last academic year, the project was organized in the form of a three-month data science hackathon. Previous supporting companies are Microsoft, Graydon, Mealhero, Delaware Consulting, Oney, Cofidis and Crédit Agricole.

PARTNERSHIP

IÉSEG is proud to partner with Capgemini, SAS and Air France for its Big Data Analytics for **Business program.**

These partnerships with some of the world's foremost leaders in data science and analytics enrich students' views on big data analytics for business. Partners share their expertise, professional perspectives and insights on current trends with students through coaching sessions, guest lectures, real-life case studies and company visits. The opportunity to learn about concrete professional issues from business leaders, and to gain exposure to the real-world experience of successful practitioners, are key assets of the program.

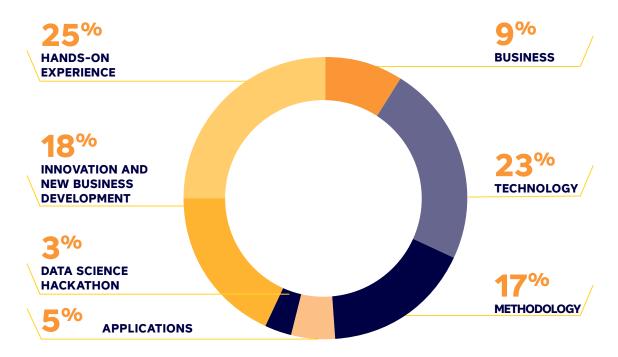


Student - Bulgaria

I chose IÉSEG because of its unique Biq Data Analytics for Business program; a combination of business and programming. This program is for business professionals who want to diversify their skills and stay current with the innovative data science trends that are disrupting the business world. An important strength of this program is the leadership's dedication to constantly update the program to keep it up to date with the evolving field. The strongest aspect of the MSc in Big Data Analytics for Business program are the real-world machine learning projects and the hands-on client experience. In our courses, we are not only learning R, Python, SQL and SAS for the sake of knowing the languages, but we are applying that knowledge to real-life cases to find the optimal solution to problems such as determining churn patterns to promote retention or modeling consumer brand opinion to determine strategies in improving brand image. At the end of the program, we tie all these skills together in a long consulting project with a regional company. As graduates from the program, students can be confident that they are knowledgeable on all the most significant industry trends and that they already have relevant professional experience to highlight during interviews.

PROGRAM STRUCTURE

(Figures indicate the percentage of the program devoted to each subject area.)



BUSINESS

9%

- > Business Analytics in a Sustainable World
- Business Ethics and Managerial Behavior I
- > Business Ethics and Managerial Behavior II
- Data Strategy
- Industry Perspectives on Big Data Analytics
- > Project Management

TECHNOLOGY

23%

- > Advanced Spreadsheet Analysis
- Big Data Tools
- > Business Reporting Tools
- > Business Analytics Tools Commercial
- > Business Analytics Tools Open Source Python
- > Business Analytics Tools Open Source R

METHODOLOGY

17%

- > Descriptive and Predictive Analytics
- > Forecasting
- > Fundamentals of Deep Learning
- > Fundamentals of Interpretable Data Science
- > Fundamentals of NPL
- > Social Network Analysis
- > Statistical and Machine Learning

APPLICATIONS

5%

- > Credit Scoring
- Optimization Techniques
- > Recommendation Tools

DATA SCIENCE HACKATHON

3%

> Connected Vision Tour

INNOVATION AND NEW BUSINESS DEVELOPMENT

18%

- > Business Consultancy in a Digital Environment
- > Career Program
- > Creativity and Design Thinking
- > Entrepreneurship and New Business Development
- > Language Courses

HANDS-ON EXPERIENCE

25%

Capstone Project: 4-to 6-month internship or work experience anywhere in the world. Alternatively, students can opt for a consulting project or a thesis.

Alongside the courses, the program offers various workshops and corporate events to further develop students' personal and professional skills and to meet professionals of the Big Data industry.



ADMISSION PROCESS

2 types of candidates are eligible to apply for the MSc programs:

- > International candidates that have graduated (or will graduate) from a Bachelor degree (minimum)
- > Candidates from the French Education system that have graduated (or will graduate) from a Licence (minimum)

APPLICATION PROCESS

Admission is via an online application at apply.ieseg.fr, the review of the supporting documents and an online conversation with a recruiter. A rolling admission is offered to qualified candidates starting in October 2021.

Application Checklist for all the MSc programs

- > Online application form
- > Recent CV/Resume
- > English proficiency test for non-native speakers: IELTS 6.5, TOEFL IBT 85, TOEIC 4 skills 850, Duolingo 105, Cambridge Exam B2 students with IELTS 6.0, TOEFL IBT 75, TOEIC 4 skills 800, Duolingo 100, Cambridge Exam B2 will also be considered
 - Native English speakers or candidates who have had two years of courses taught in English are exempt.
- > Transcripts and diploma
- > GMAT/GRE is a plus (yet not mandatory)
- > Copy of passport
- > €100 application fee

There are specific admission requirements for each of the proposed degree programs. For more information, please refer to the individual program pages.

Application Deadlines

January 2022 intake (MSc in International Business in Lille only):

- November 14th 2021 for all candidates
- > Early bird deadline: October 17th 2021

September 2022 intake

- ▶ May 31st 2022 for all candidates
- > Early bird deadline: January 16th 2022



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