



Master of Science (MSc)

Big Data and Business Analytics



IT ALL STARTS HERE

BERLIN | LONDON | MADRID | PARIS | TURIN | WARSAW

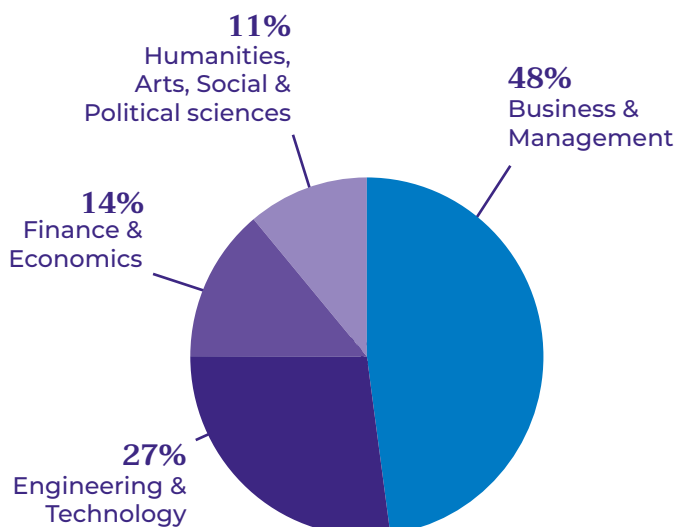
Objectives

The MSc in Big Data and Business Analytics is a 15-month full-time postgraduate specialisation that takes place across 2 countries. It will provide you with all the tools to become proficient in the use of data analytics and to make performance-enhancing strategic decisions from a management perspective.

The Degree

This specialisation is part of the ESCP Master of Science (MSc) programme. Students will obtain the French Master degree (DEAMIE) and 1 diploma, the MSc in Big Data & Business Analytics.

2024 Class Profile



♀ **50%**
Women

♂ **50%**
Men

 **34**
Nationalities



Graduate Journeys

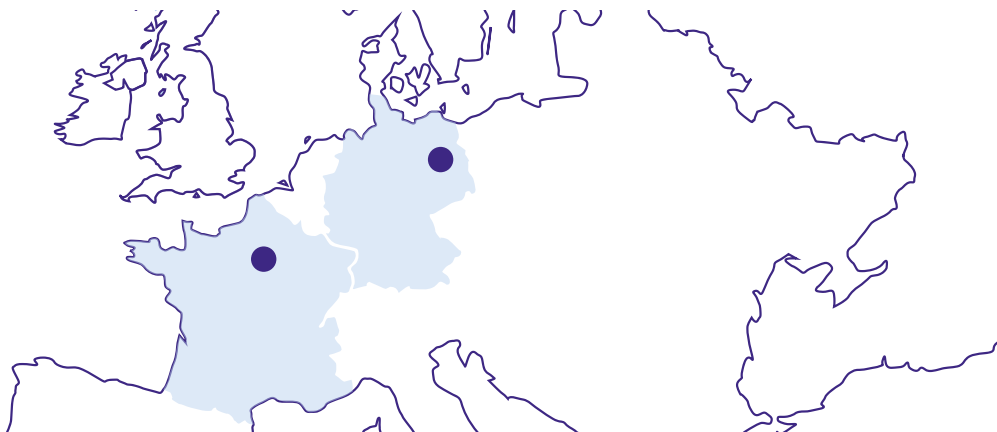
Javiera LOBOS CHÁVEZ
Class of 2020

Senior Product Data Analyst
Malt
Paris - France

Nourhan NASSAR
Class of 2021

Analyst, United Nations
Economic and Social
Commission for Western Asia
(ESCWA)
Beirut - Lebanon

Paris and Berlin Campuses



Curriculum

Data Science

- Machine Learning with Python
- Big Data in real life: architecture, infrastructure and tools
- SQL and Fundamentals of Business Intelligence
- R & Business Analytics
- Data Mining
- Design Thinking
- Data Quality & Visualisation
- Business Networks & Security
- Natural Language Processing & Text Mining

Business Analytics

- Research Methods in Business Analytics
- Microsoft Data Tools Basics
- Information Systems Management
- Data Driven Business Strategy
- Business Process Analysis & Data Modelling
- Analytical Modelling
- Managerial Decision Making & Modelling

Analytical Applications

- Accounting
- Financial Reporting
- Analytics & Reporting
- Supply Chain Management
- Management Analytics
- Digital Entrepreneurship & Innovation
- Consumer Insights & Analytics (Marketing)
- Soft Skills in the Digital Age
- Enterprise Systems Improvement (SAP, IoT, etc.)

Sustainability Management Seminar



July 2025

Term 1

Core Courses*
Classes online

Oct. 2025

Term 2

Classes on the Paris Campus

Jan 2026

Term 3

Classes on the Paris and Berlin Campuses

May 2026

Term 3

International Seminar

**For candidates whose previous degree confers fewer than 240 ECTS.*

International Seminar

The aim of this international seminar is to allow our students to experience learning and working in an international economic, social and cultural context. Our students take courses in our academic partners' institution, visit local companies, and conduct an international project. This 1-week seminar takes place in Beijing, China.



Master Thesis

The Master thesis is an applied research project within an academic framework, written under the supervision of a Research Director. Students must structure and articulate their thoughts by exploring a business issue using sound and precise arguments.

Students defend their Master thesis in front of a jury of experts and professionals.

A mandatory Research Seminar, provides students with the tools and methodology needed to successfully write and support the thesis.

July 2026

Déc. 2026

Term 4

**Professional
Experience,
Research Seminar &
Master Thesis**

“

Sector Insights

“The biggest barriers companies face in extracting value from data and analytics are organisational; many struggle to incorporate data-driven insights into day-to-day business processes. Another challenge is attracting and retaining the right talent - not only data scientists but business translators who combine data savvy with industry and functional expertise.”

McKINSEY (2016), The age of analytics: Competing in data-driven world

”

Careers

We will help you find the right position through the support of our ESCP Careers Service and a strong network of students and alumni. Some examples of what your first professional role could be after graduation:

- Business Intelligence & Analytics Consultant
- Analytics Associate
- Big Data Analyst
- Solution Architect
- Metrics & Analytics Specialist
- Marketing Analyst
- Financial Analyst
- Business Consultant

Big Data & Business Analytics professionals:

- work in "big data" companies, such as EMC (Dell), Cisco, Oracle and IBM.
- work in Consulting Firms, such as McKinsey & Company, BCG and Accenture.
- are motivated to rethink and apply Big Data and Business Analytics strategically, as Chief Information Officer or Chief Data Officer, in Energy, Food, Clothing and Consumer Goods Industries.
- create innovative Start-Ups.

Job Survey

Class of 2022

Less than 3 months after graduation

89% of graduates are in full-time employment

92% work in an international environment

Graduate Testimonial

"This specialisation is perfect for future managers with a strong appetite for disruptive technologies and data-driven strategies."

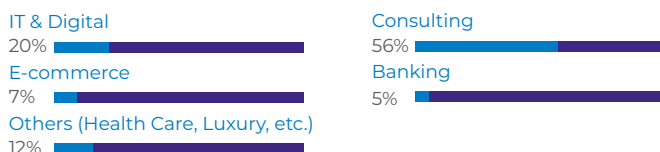
"What I appreciated the most is the diversity of the students and the variety of ideas. If you want to challenge yourself in a global environment while becoming a data specialist, then this is the right master's programme for you."

Alexis Barnier, Class of 2018
Associate (Jr. Manager), Oliver Wyman



SALARY €60,000 average annual salary

Sectors



Academic Directors



Prof. Lynn Farah
Associate Professor
(Teaching) Department
of Information &
Operations Management

Research areas:

Mathematics/Statistics Teaching and Learning



Prof. Hao Zhong
Associate Professor
Department of
Information & Operations
Management.

Research areas:

*Data Mining, Business Analytics,
Computational Design Science, Venture
Analytics, FinTech*

Admission Requirements

Previous degree conferring a minimum of 180 ECTS credits (or equivalent)

Bachelor or Master degree in any field of study

Proficiency in English

A strong interest and/or a previous experience in the sector.

How to apply

1



ONLINE APPLICATION

2



TOEFL, TOEIC OR IELTS SCORE

3



ADMISSION INTERVIEW
IF ELIGIBLE

Fees 2025

Application fee: €130

Tuition fees: €24,900*

travel and accommodation are not included in the fees.

*Master of Science (MSc): €17,200 + specialisation: €6,700 + service fees: €1,000

Term 1: An additional fee of €3,300 applies for applicants with a previous degree that equates to fewer than 240 ECTS credits.



Information

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Programme Office

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Master of Science (MSc)

Big Data & Business Analytics*



CEFDG

* This specialisation is part of the French Master Degree (DEAMIE)

ESCP benefits from the best international accreditations.
Our European campuses enjoy national recognition.



**5 European Higher Ed
accreditations**

BERLIN

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Deutschland

LONDON

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London NW3 7BG,
United Kingdom

TURIN

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Italia

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28035 Madrid, España

MARIA DE MOLINA

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28006 Madrid, España

NAVALMANZANO

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28035 Madrid, España

PARIS

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6-8, av. de la Porte de
Champerret
75017 Paris, France

MONTARNASSE

3, rue Armand Moisant
75015 Paris, France

WARSAW

c/o Kozminski University,
International Relation
Office,
57/59 Jagiellońska St.
03-301 Warsaw, Poland

BRANCH CAMPUS

DUBAI

DIFC Academy
Dubai International
Financial Center
Dubai, UAE