



SCHOLARSHIP

The Erasmus+ programme provides EU-funded scholarships to students who have been selected by the consortium. Students from Programme Countries (ie. EU, Iceland, Liechtenstein, Norway, Turkey, and Former Yugoslav Republic of Macedonia, Serbia): **€24,000** per year. Students from Partner Countries: **€24,000** per year.

Note: Erasmus+ enable students to gain access to loans on favourable conditions, that are up to € 18,000 for two years.

TUITION FEES

Students from Programme Countries: **€4,500** per year

Students from Partner Countries: **€9,000** per year

SAPPLICATION DEADLINES

Students applying for an Erasmus+ scholarship:

December, 15th 2019

Students not applying for an Erasmus+ scholarship:

April 30th, 2020 (Partner countries students)

May 30th, 2020 (Programme countries students)

ADMISSION CRITERIA

To apply to BDMA, candidates must meet the following eligibility criteria: They have been awarded a Bachelor's degree (i.e., the equivalent of 180 ECTS) with a major in computer science, from an accredited university. They must be able to demonstrate proficiency in English by means of an internationally recognised test equivalent to level B2 in the CEFR.



DEGREE AWARDED

Upon completion of the programme, graduates will be awarded with a multiple degree, the nationally recognised master's degrees from ULB, UPC and the university of the specialisation.



WHY CHOOSE BDMA

- A two-year course in BI & BD fully delivered in English, given by world-renowned European institutions who jointly designed the courses and programme, including three choices of specialisation,
- The first curriculum in Europe covering the broad scope of scientific and technological fields supporting today and tomorrow's BI and BD needs,
- Strong connections with research and industry, through cooperation with industrial partners, research institutes, regional public authorities, universities around the world, and a European university network



CONTACT

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European Master's Programme in BIG DATA MANAGEMENT and ANALYTICS



CentraleSupélec

Today, public and private organisations in all sectors face an avalanche of digital data on a daily basis. While at first glance this appears to be favourable for our knowledge-based society, in many ways it is a burden. Data is neither information nor knowledge. Instead, data is of great value once it has been refined and analysed, in order to address well-formulated questions, concerning problems of interest. It is only then through data-driven innovation that the economic and social benefit can be fully realised.

The Erasmus Mundus Joint Master Degree Programme in Big Data Management and Analytics (BDMA) is a unique programme that fully covers all of the data management and analytics aspects of Big Data (BD), built on top of Business Intelligence (BI) foundations, and complemented with horizontal skills. It has been jointly designed and adheres to international studies, being structured to cover all the skills BI and BD specialists require.

PRESENTATION

BDMA favours the integration of students into a network of 5 **institutions**. The curriculum is jointly delivered by:
 Université Libre de Bruxelles (ULB), Belgium

ULB Universitat Politècnica de Catalunya (UPC), Spain

UPC Technische Universität Berlin (TUB), Germany

TU/e Technische Universiteit Eindhoven (TU/e), Netherlands

CentraleSupélec CentraleSupélec Paris-Saclay University, France

CentraleSupélec
 This consortium will prepare the graduates not only to answer today's professional challenges by a strong connection with the needs coming from the industry, but also to pursue their studies into doctorate programmes, through strong connections with the researchers' and innovators' views.

COURSE STRUCTURE

BDMA is a two-year (4 semesters, 120 ECTS) Master's programme offered by 5 higher education institutions.

The first year is devoted to fundamentals: the first semester at ULB, the second one at UPC. Then, all students participate to the European Business Intelligence & Big Data Summer School.

In the third semester, the programme offers three specialisations at TUB, TU/e and UFRT and students move to the partner of the chosen specialisation.

The fourth semester is dedicated to the master's thesis and can be realised either as a placement in industry, or as an internship in a research laboratory in any full or associated partner.

COURSE CONTENT

ULB Business Intelligence Fundamentals (ULB, Semeste 1)

Data Warehouses
 Business Process Management
 Data Mining
 Advanced Databases
 Database Systems Architecture
 Foreign Language. Humanities: Effective Communication

UPC Big Data Fundamentals (UPC, Semester 2)

Big Data Management Semantic
 Data Management Cloud Computing
 Viability of Business Projects Big Data Seminar Humanities:
 Foreign Language. Humanities: Social and Ethical

TU Large-Scale Analytics (TUB, Semester 3)

Scalable Data Science
 Management of Heterogeneous Information Management of Data Streams
 Big Data Analytics Project
 Big Data Analytics Seminar
 Humanities: Interdisciplinary Communication Business

TU/e Process Analytics (TU/e, Semester 3)

Business Information Systems
 Introduction to Process Mining
 Visualisation Statistics for Big Data
 Business Process Analytics Seminar
 Humanities: Ethics and Technology

CentraleSupélec Decision Support & Data Analytics (CentraleSupélec, Paris-Saclay Semester 3)

Machine Learning,
 Decision Modeling,
 Visual Analytics,
 Massive Graph Management & Analytics
 Big Data Research Project
 Business Innovation Management
 French Language and European Culture

MOBILITY SCHEMA

