

Erasmus Mundus Master's Programme in Big Data Management and Analytics (BDMA) Student Agreement 2024 – 2026

Université libre de Bruxelles, located at 50 avenue F.D. Roosevelt, 1050 Bruxelles, Belgium, coordinating institution of the Erasmus Mundus European Master's Programme in Big Data Management and Analytics (BDMA), hereafter referred to as "the Consortium Coordinator", on behalf of the BDMA consortium formed by the following universities

- Université libre de Bruxelles (hereafter referred to as "ULB"),
- Universitat Politècnica de Catalunya (hereafter referred to as "UPC"),
- Technische Universiteit Eindhoven (hereafter referred to as "TU/e"),
- CentraleSupélec, Paris-Saclay (hereafter referred to as "CentraleSupélec"), and
- Università degli Studi di Padova (hereafter referred to as 'UniPD')

and

(Surname, First Name).....
(date and place of birth).....
(nationality, passport number).....
(address)

hereafter referred to as "the Student", agree to the following terms and conditions.

1. General Information

1.1 Programme

The Consortium offers a two-year Erasmus Mundus Joint Master Degree in "Big Data Management and Analytics" (BDMA), hereafter referred to as "the Programme".

1.2 Mobility Scheme

Every student enrolled in the programme will have to attend several universities, as follows:

- Year 1 – Semester 1
Université libre de Bruxelles (Belgium): Business Intelligence Fundamentals (mandatory)
- Year 1 – Semester 2
Universitat Politècnica de Catalunya (Spain): Big Data Fundamentals (mandatory)
- Intermediate Event:
"European Business Intelligence and Big Data Summer School" (eBISS), organised annually by one partner institution (mandatory).
- Year 2 – Semester 3
(host university according to the chosen specialisation)
 - Technische Universiteit Eindhoven (Netherlands): Business Process Analytics
 - CentraleSupélec (France) : Decision Support and Analytics
 - Università degli Studi di Padova (Italy): Statistics & Deep Learning For Data Analytics
- Year 2 – Semester 4

Master's thesis carried out in any main or associated partner of the consortium and supervised by the chosen partner university of the specialisation, i.e., TU/e, CentraleSupélec or UniPD (mandatory).

- Final Event: “Master’s Theses Defences and Graduation Ceremony”, organized annually by one partner institution (mandatory).

The courses will begin in September 2024, and end in September 2026.

1.3 Degrees Awarded

The programme relies on the following nationally accredited degrees in computer science included in the catalogue of the partner HEIs:

- ULB: Master of Science in Computer Science and Engineering
- UPC: Master Erasmus Mundus in Big Data Management and Analytics
- TU/e: Master of Science in Computer Science and Engineering
- CentraleSupélec: Master Sciences de l’ingénieur, mention Mathématiques appliquées et sciences de l’information, spécialité Ingénierie des connaissances
- UniPD : Laurea Magistrale in Data Science (LM-91).

The Programme will deliver a joint degree to the graduates following the mobility ULB, UPC and CentraleSupélec and will deliver three degrees from ULB, UPC, and the university specialisation (TU/e or UniPD) to the graduates following the other mobilities. In addition, graduates will receive a Joint Diploma Supplement and a Joint Certificate delivered by the Coordinating Institution.

2. Student’s Commitment

The Student declares he/she not have already obtained an EMJMD scholarship or an Erasmus Mundus Master Course/Joint Doctorate scholarship. EMJMD scholarship holders cannot benefit from another EU funded scholarship scheme to follow the same EMJMD course and this for the entire period of the course. In case of false declarations, the student reimburses scholarships unduly paid.

The Student declares he/she meets the minimum academic requirements needed to join the programme: Bachelor’s degree in Computer Science (or related areas) and proficiency in English equivalent to Common European Framework of Reference for Languages (CEFR) level B2.

He/she hereby commits him-/herself to duly take part in the master’s programme, in accordance with all terms and conditions of the present agreement. If the Student received an Erasmus+ scholarship, he/she will not embark on any vocational occupation with a regular salary during the whole duration of the course. If the Student is enrolled in the programme on a self-funded basis, he/she may embark on a vocational occupation with a regular salary to the extent permitted by the visa obtained.

According to the information given by the Consortium and the above-mentioned mobility scheme, the Student confirms he/she will start the Programme at ULB during the first Semester, will move to UPC during the second semester, and will move to TU/e, CentraleSupélec or UniPD during the third semester. He/she notes that a master’s thesis shall be submitted during the fourth semester and will therefore move to the main or associated partner of the Consortium, in which the thesis will be carried out.

3. Obligations of the Student

The Student shall inform the Consortium Coordinator on any problem (academic, logistic, administrative) that could arise, and shall comply with the following requirements.

3.1 Attendance

The Student will duly attend the Programme (lectures, examinations, placement, seminars, summer school, final event), and external activities (including jobs or summer internships) should not interfere with course or examination periods of the programme. Otherwise, he/she will have to justify any non-attendance by providing medical certificates or ask in advance for permission to the Programme staff.

The Consortium will consider course attendance as an integral part of the qualification for which the Student is preparing. Lack in course attendance greater than 25% will result in disciplinary measures, which in extreme cases may result in the exclusion of the Student from the Programme.

3.2 Examinations

The Student will attend all examinations required by the Programme.

Local regulations will apply regarding examinations and students' evaluation. The Consortium will use grading scales of each partner country, and conversion to ECTS will be done subsequently using local conversion rules. Upon completion of the Programme, students' grades will be translated into the ECTS grading scheme. In case of failure of a course, the Student will have the possibility to resit the examination. This resit examination will be organised at least two weeks after the first examination. If the Student is already in the partner of the next mobility period, this partner will provide conditions (room, invigilating) to allow the student to resit the examination according to the material provided by previous partner and will be responsible for returning the completed material to the previous partner for evaluation. If the Student fails the exam again, the Executive Board of the Programme will decide on a case-by-case basis whether he/she can be accepted into the second year or obtain the diploma (depending on whether the course belongs to the first or second year). If this is not the case, the Student will have to leave the Programme.

In case of failure of the master's thesis defence, a resit session will be organised at least two months and at most six months after the first defence. The timetable for this resit session will be decided by the Consortium in accordance with the timetables and regulations of the partner institutions. The members of the jury who evaluated the thesis will communicate in writing to the student the aspects of the thesis that must be improved to be able to resubmit the thesis again. The president of the jury is responsible for verifying that the new version of the thesis submitted by the student complies with the comments of the jury. A new defence of the thesis can then be organised, possibly through video-conference, in front of the same jury. If the student fails the defence again, he/she will have to leave the Programme.

In case of failure of the first or second year, the jury has the right to refuse the student to retake the failed year. The EACEA's scholarship holders that fail a year can no longer receive their scholarship. Students retaking a failed year must pay the full registration fees.

3.3 Behaviour/Ethics

The Student will comply with national law of home countries and regulations in force in the host institutions visited, including computer rules and responsibilities. In particular, the Student agrees to participate in any group activities of the programme and to do his/her best to contribute and collaborate with his/her teammates, including helping resolving conflicts between different group members.

The Student agrees to adhere to the BDMA Code of Scientific Conduct (annexed to this agreement). In particular, the Student shall commit no fraudulent act, such as cheating, falsification or plagiarism, and shall not impede by his/her behaviour the work of the other students; otherwise, he/she will face disciplinary measures, which, depending on the severity of the act, may lead to the exclusion from the Programme.

3.4 Intellectual Property

The Student agrees that:

- the results of his/her Master's Thesis are disseminated to the broadest possible research as well as business communities by means of publications and presentations,
- his/her Master's thesis title and abstract will be posted on the Programme portal,
- the degree-awarding universities may store and protect the thesis, either as a hard copy or as a digital copy, following their respective procedures,
- the thesis is made available to the research community by making it available in the libraries of the degree-awarding universities,
- based on an additional signed agreement by the Student, his/her thesis may be displayed at the Programme portal. The agreement will not be deemed as a copyright transfer.

The results of the Student's work will be protected by intellectual property law.

3.5 Publicity Rights

The Student authorizes the Consortium to use his/her image, captured on photo or video while participating to the Programme, for promotional purposes unless the Student explicitly expresses his/her non-consent.

3.6 Programme Evaluation and Student Association

The Student will participate in the evaluation of the Programme, in particular by completing the course, semester, and programme evaluation questionnaires. The student will also join the Erasmus Mundus Students and Alumni Association (EMA)¹.

4. Rights of the Student

The Student will benefit from a master programme in accordance to what has been announced by the consortium in the Programme website and in other promotional documents. He/she will notably have the following rights.

4.1 Equality

Every student enrolled in the Programme is entitled to:

- be treated and served by the Consortium in the same way as local students, irrespective of gender, ethnic background, religion or other belief, sexual orientation, or disability;
- be considered as an equal partner in the Programme;
- appeal against any act he/she would consider as discriminatory. In this case, he/she may appeal to the Executive Board of the Programme.

4.2 Administrative and Academic Issues

The Student has the right to:

- be informed on the Programme in a transparent manner, and therefore to be provided with all relevant and exhaustive information, particularly regarding admission requirements and criteria, prerequisites, course content, learning outcomes, and degree awarded;
- benefit from an appropriate counselling, both before and during the master programme;
- have a free access to adequate services and means of support to complete the Programme.

¹ <http://www.em-a.eu/>

4.3 Specialisation Selection

The Student has the right to choose his/her specialisation for the third semester as follows. Each year, the universities offering a specialisation will determine in advance the maximum number of students they can host according to the available infrastructure. The Student will be able to prioritise the specialisations offered in the current edition of the programme. The final assignment of specialisation will be made by the Consortium prioritising them based on the academic results of the student during the first semester and the maximum number of students that can be hosted in each specialisation.

Students assigned to TU/e must meet the English proficiency requirement set by the Netherlands government for all public universities, which is higher than the BDMA requirement. It is the student responsibility to meet this requirement by the specialization choice date. If the student fails to fulfil this requirement, the consortium might not be able to guarantee a place in another specialization, and the student might not be able to continue in the program.

In case of a one-year break, the Student will have to restart the specialization selection procedure (the consortium can guarantee a place in one available specialization but not mandatorily the one chosen during the first year).

4.4 Student Participation and Involvement

The Student has the right to:

- provide feedback about the Programme by filling the several evaluation forms used as input to the Programme quality evaluation procedures;
- be elected as student representative in the Selection Committee and the Internal Evaluation Committee to take an active part in the running of the Programme;
- organise him-/herself with other students in legally recognised entities, such as Alumni Associations, Junior Enterprise, etc.
- to be represented in various decision-making bodies at each host institution visited.

4.5 Assistance

For administrative matters, the Student will get assistance from the International Relations Office and from the Local Administrative Manager of each host institution visited. For academic matters, the Student will get assistance from the Local Programme Coordinator of each host institution visited.

4.6 Privacy and Data Protection

The Consortium and its members respects the Regulation (EU) 2016/679 of European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data ("GDPR").

Student personal data is stored in the BDMA tool, whose servers are located at the Université libre de Bruxelles. Appropriate security measures are in place to guaranty the confidentiality and integrity of the data. This data is shared solely with the coordinating and administrative staff of the member universities (Full Partners) and with the European Commission as required for the administration of the Erasmus Mundus programme. Necessary student personal data (surname, name and email) will also be shared with the relevant Associated Partner for the sole purpose of the administration of the internship or direction of the thesis of the student (the list of these partners can be found on the BDMA website).

All persons accessing the data are subjected to the necessary confidentiality obligations.

Student data will be kept in the BDMA database for 5 years after the termination of the BDMA programme in order to guarantee graduation and, if necessary, edition and reedition of diplomas, certify the student's participation in the programme and assess the quality of the programme.

Registration data will be processed by each member university in accordance with its specific privacy policy.

Any inquiries about processing of the data stored on the BDMA tool can be addressed to the Data Protection Officer of the Université libre de Bruxelles: rgpd@ulb.ac.be. This address can also be used, upon justification of identity, to exercise the rights to request access to and rectification or erasure of the personal data or, under conditions, restriction of processing, the right to object to processing as well as the right to data portability. For any complaints, applicants are free to contact the Belgian Data Protection Authority (BDPA). ULB would appreciate the opportunity to answer to the complaint first, before it is addressed to the BDPA.

4.7 Health Insurance

During all the duration of the Programme, the Student will be covered by a medical insurance at no extra cost. Moreover, the Student will have access to medical services on the campuses of the host institutions visited (where available), in the same way as regular students.

For insurance and administrative purposes, the student is obliged to inform their BDMA Local Coordinator and the BDMA Administrative Manager at ULB in advance of any trip exceeding 7 days to be taken outside the countries designated in his/her trajectory, whatever the reasons for the trip and the duration of the trip. In case of failure to respect this obligation, the student may not be covered during this trip.

5. Obligations of the Consortium

On behalf of the Consortium, the Coordinating Institution hereby commits itself to provide the Student with a Master's programme of excellence and a high-level service offer, in accordance to what has been announced in promotional documents, particularly regarding issues such as tuition, supervision, timetable, course content, and evaluation.

The Consortium will contribute to the integration of the Student notably by providing him/her with all useful information he/she may require.

On behalf of the Consortium, the Coordinating Institution is responsible for the payment of the scholarship to selected students according to Section 7. Financial Provisions.

The academic staff of the Programme agrees to adhere to the BDMA Code of Scientific Conduct (annexed to this agreement).

6. Rights of the Consortium

The Consortium Coordinator has the right to terminate this contract if:

- The Student does not meet the requirements mentioned in Section 3. Obligations of the Student;
- The Student has been admitted in the Programme based on false information.

7. Financial Provisions

7.1 Tuition fees

Tuition fees are set to € 4,500 per year for students from Programme Countries* and € 9,000 per year for students from Partner Countries, and include national enrolment fees, insurance cost, and participation to the mandatory summer school.

(*) Note that the tuition fees for the TU/e specialization may be higher for Programme Country students who are not EU nationals.

7.2 Scholarships

The Erasmus+ programme distinguishes between students who are nationals or residents of Programme Countries and Partner Countries. These categories are defined as follows.

- **Programme-Country students** are (1) students who are nationals of one of the 27 EU member states, Iceland, Liechtenstein, Norway, Turkey, North Macedonia and Serbia; (2) students who have resided or carried out their main activities (studies, work, etc.) for more than 12 months over the past five years (counted backward starting from the official deadline for scholarship application) in any of these countries.
- **Partner-Country students** are all other students.

The Erasmus+ programme provides EU-funded scholarships to students who have been selected by the consortium. Two categories of scholarships are available.

The scholarship for students from Programme Countries* comprises:

- Participation costs: € 4,500 per year
- Travel costs: € 1,000 per year
- Contribution to subsistence costs: € 1,000 per month for the entire duration of the Programme (24 months maximum).

(*) Note that this scholarship for students from Programme Countries who are not EU nationals does not cover the tuition fees for the TU/e specialization that may be higher.

The scholarship for students from Partner Countries comprises:

- Participation costs: € 9,000 per year
- Travel costs: € 2,000 or € 3,000 per year depending on whether the student is resident of a country whose location is, respectively, less than or more than 4,000 km away from Brussels, Belgium, the location of the Coordinating Institution.
- Installation costs: € 1,000
- Contribution to subsistence costs: € 1,000 per month for the entire duration of the Programme (24 months maximum).

The contribution to subsistence costs will not be given to:

- Scholarship holders for the periods of the Programme (study, research, internship, or thesis preparation) spent in the country of residence of the student;
- Scholarship holders from a Partner Country for the periods of the Programme exceeding three months spent in any Partner Country.
- All scholarship holders will receive an insurance meeting the minimum insurance requirements of the Erasmus+ programme. Students benefiting of an Erasmus+ scholarship cannot benefit from other European Union grant while carrying out their Erasmus Mundus activities. The scholarship does not create any employer- employee link between the Coordinating Institution and the Student; therefore, it is not subject to direct taxation.

The participation costs covering the tuition fees are directly taken by the Consortium.

The scholarship is a full scholarship, meant to cover all costs (e.g., travelling, visa costs, accommodation, final event costs, living expenses). There will be no further funding.

The scholarship will be paid by bank transfer to a European account number that should be communicated by the Student to the Coordinating Institution as soon as possible. The instalments will be paid only once the scholarship holder will be arrived at his first institution. The Student shall inform the Coordinating Institution on any change in his/her bank details.

In case of termination of course (withdrawal for personal reasons, exclusion from the Programme because of insufficient academic results or fraudulent act, etc.), the Student shall reimburse the amount received that exceed his/her actual insofar incurred expenditure. According to the number of months he/she attended and a copy of his/her return ticket, the Consortium will set the amount to be reimbursed.

8 Termination and Resolution of Claims

The Consortium bears no responsibility for accidents, illnesses, injuries, losses or to damages to persons or goods resulting from or related to the activities planned in the present Agreement.

Without prejudice to the general consequences laid down in national law applicable in the present Agreement, the Coordinating Institution reserves the right to cease the effects of the present Agreement, without recourse to any juridical procedure apart from adequate communication to the Student. Failing agreement by both parts, the Belgian courts are designated as the only competent authorities to resolve any legal dispute between the Consortium and the Student emerging from the present Agreement. The present Agreement will be governed by the Belgian Law.

Both parties declare they have read and accept the conditions hereby defined. Each party receives one copy of this Agreement.

(Date and Place)

(Date and Place)

(Signature of the Student)

(Signature of the Consortium Coordinator)

Erasmus Mundus Master's Programme in Big Data Management and Analytics (BDMA) Code of Scientific Conduct²

Preamble

This Code of Conduct is organised around five central values that jointly characterise good scientific conduct. From each of these values certain behavioural norms and principles follow, of which the most important are listed below. This Code is meant to be inclusive of the variety of research, design and educational activities in the BDMA programme, and to leave room for differences in disciplinary context. Adherence to this code of scientific integrity is the responsibility of all scientists, engineers, and students of the BDMA programme, whether they work individually or in groups. They may expect to work in an institutional environment that is supportive of fulfilling this responsibility, through various institutional policies and regulations on scientific integrity. Supervisors and group leaders have a special responsibility to teach junior staff members what is acceptable scientific conduct, and to function as examples of such conduct. Institutional responsibilities include: to create a climate that stimulates regular discussions about correct practices in research, design and education (especially when there seems to be a conflict between the principles of the code, or a conflict between principles and actual practices); and to facilitate accessible, unbiased and confidential procedures for reporting and investigating possible violations of the Code, and for taking adequate measures in case they have occurred.

Code of Conduct

The BDMA consortium expects its academic staff³ and students to respect the following five central values of scientific integrity and to conform to the norms and principles that follow from them for their research, design, and educational activities:

1. *Trustworthiness*

Academic staff and students ground their views as academics on scientific evidence. This entails that:

- They do not fabricate, falsify or suppress evidence. The selective omission of research results is reported and justified.
- In presenting results of their activities, they do so with the corresponding uncertainties.
- In scientific communication, they strive for precision and nuance.
- They do not present as established facts speculations, personal opinions and claims that go beyond available evidence.

2. *Intellectual honesty*

² This Code of Conduct is based on the one from Technical University Eindhoven

<https://www.tue.nl/en/university/about-the-university/integrity/scientific-integrity/>

³ This includes guest scholars of the BDMA programme who have access to the partner institutions' facilities.

Academic staff and students respect standards of quality in their field and they respect the achievements of others. This entails that:

- They acknowledge and respect intellectual property and authorship. Plagiarism is unacceptable.
- They only claim authorship if they have made a genuine contribution.
- They carry out peer-review tasks seriously and make assessments solely on scientific grounds.
- They only accept tasks for which they have the necessary expertise.
- In educational activities, they accurately present available knowledge in the discipline.

3. *Openness*

Open and unbiased communication is essential for science and engineering. For academic staff and students, this entails that:

- They contribute actively to an academic climate in which insights and criticisms are welcome from all, regardless of academic rank and personal characteristics.
- They give room to others to develop or take their own intellectual stance in research, design and education.
- Whenever they publish research results, they present their research such that its results may in principle be replicated.
- They make accessible, after publication, all information needed for intersubjective testing of design results and design processes.
- They make accessible, after publication, research data for re-use by colleagues.

4. *Independence*

Academic staff and students operate in a context where academic freedom and independence are of great importance. Where needed, they guard this independence against commercial, political, and personal interests. This entails that:

- In research, they choose their methods and criteria primarily to achieve scientifically valuable goals.
- With external sponsors of scientific research, they arrange that all relevant results of this research may be published within a specified, reasonable amount of time.
- They report interests that may potentially conflict with the independence of research activities.
- They avoid situations in which reasonable doubt concerning the objectivity of their scientific judgements may arise.

5. *Societal responsibility*

Science and engineering are vital for the health and well-being of people and for a sustainable economy. They may also be the cause of harm and risks. For academic staff and students this entails that:

- They actively seek, within the limits and standards appropriate to their field, to contribute to society through research, design, knowledge dissemination, and/or public debate.
- In their research and design, they adhere to the ethical codes for activities in which human subjects and animals are involved.
- They report possible harm and risks of scientific and technological developments to the relevant authorities; in case of doubt, they consult ethical advisory bodies or signal the need for such ethical advice.

Possible cases of violations of this code of conduct should be reported to the BDMA consortium.