



PROFESSIONAL MASTER'S PROGRAMME DATA SHEET

Title	Master in Data Science and Business Analytics
Code	5835
Level	1st level
Director	Claudio Sartori
Disciplinary area	Science and Technology
Professional Master's Programme description: outcomes/targets	<p>Pursuant to Decree no. 270 of 22 October 2004 of the Ministry of Education, University and Research, for academic year 2024/2025, Alma Mater Studiorum – Università di Bologna, Administrative office of Bologna, will run a 1st level Professional Master's Programme in "Data Science and Business Analytics".</p> <p>The Professional Master's Programme has been set up on the proposal of the Department of Computer Science and Engineering (DISI) and is run in cooperation with Fondazione Bologna Business School (BBS).</p> <p>The Master's in Data Science and Business Analytics is designed to provide highly specialized training for those with a deep curiosity about data processing, aiming to refine it in the search for insights that can influence business decision-making processes. Through the application of the most innovative analytical methodologies and the use of a wide range of tools, the course lays the foundation for transforming raw data into actionable insights that can help solve problems requiring tactical or strategic decisions within companies. The program combines a mix of skills, aimed at highlighting its three core components: business economics, computer science, and finally, speculative analytical or statistical-mathematical skills. The Master's program is distinguished by its approach of not being limited to the use of software from a specific vendor but allows students to experiment with various programming and analytical tools, particularly open-source ones.</p>
Qualifications required for admission	<p>The Programme is reserved for candidates who, by the time of enrolment 23/04/2025 for window 1, 19/06/2025 for window 2, 9/09/2025 for window 3, 14/10/2025 for window 4, are in possession of the following qualifications and access requirements:</p> <ul style="list-style-type: none"> • All first cycle degree and/or second / single cycle degree obtained under D.M. 270/04 or first cycle degree and/or second / single cycle degree obtained under the laws previously in force (DM 509/99 and Old Regulations). • First cycle degree and/or second / single cycle degree obtained abroad deemed equivalent to those described in the



	<p>point above by the admission committee, for the purposes of admission to the Master.</p>
<p>Other admission requirements (registration with a professional register, specialisation school, other qualifications, English proficiency, work experience, etc.)</p>	<p>The required documents for the selection process are listed in the procedural instructions (double-sided copy of a valid identity document; academic qualification and transcript) and must be submitted with the specific documents listed below:</p> <ul style="list-style-type: none"> a) Curriculum Vitae in English; b) Motivational Letter in English; c) Reference Letters in English (optional); d) A photo of the candidate for identity recognition purposes; e) English Language Proficiency certificate (TOEFL, IELTS or Cambridge English) certifying a minimum English level of B2 in the European framework. Candidates who do not possess this certificate will have to take a written test to assess their language skills (see article 5); f) If available, GMAT or GRE certificate, with a score of 550 or above (GMAT) or equivalent (GRE). <p>Candidates without this certificate will have to take a written aptitude test (see article 5).</p> <p>Candidates with a degree obtained abroad and who pass the selection procedures must show the original hard copies of documents to the Master's Office.</p>
<p>Course structure diagram</p>	<ul style="list-style-type: none"> • Big Data for Industry 4.0 – ING-INF/05 – Federico Baffetti • Business Intelligence and Data Warehouse - ING-INF/05 – Stefano Rizzi; Enrico Gallinucci • Performance Measurement System – SECS-P/07 – Lorenzo Dal Maso; Eleonora Monaco; • Customer and Marketing Analytics – SECS-P/08 – Umut Konus • Statistics and Data Analysis – SECS-S/01 – Matteo Farné; Furio Camillo; • Data Mining – ING-INF/05 – Claudio Sartori; Enrico Gallinucci; Matteo Francia • Business Ethics and Sustainability – SPS/08 – Sara Zanni; • Big Data Lab – ING-INF/05 – Giorgio Pedrazzi; • Fundamentals of Artificial Intelligence – ING-INF/05 – Maurizio Gabbrielli; Federico Pennino; • Machine Learning – ING-INF/05 – Claudio Sartori; • Text Mining and Natural Language Processing – ING-INF/05 – Gianluca Moro; Giacomo Frisoni; • Law and Tech – IUS/01 – Paola Manes;



	<ul style="list-style-type: none"> • Digital Transformation – SECS-P/08 – Azzurra Meoli; • Digital Economics – SECS-P/01 – Andrea Mantovani; • Operation Analytics (elective) – ING-IND/35 – Anna Fedorova; • Neural networks and deep learning (elective) – INF/01 – Andrea Asperti; • Fundamentals of Cyber Security (elective) – INF/01 – Gabriele D’Angelo • Blockchain Finance (elective) – INF/01 – Stefano Ferretti; • Entrepreneurial Finance (elective) – SECS-P/09 – Alexander Groh
<p>Closing date for applications (to register for selection)</p>	<p>Round 1 – by 17 March 2025</p> <p>Round 2 – from 18 March 2025 to 12 May 2025</p> <p>Round 3 – from 13 May 2025 to 7 July 2025</p> <p>Round 4 – from 8 July 2025 to 15 September 2025</p> <p>Attention - the 4 windows are independent paths and independently concluded. It is not possible, for example, to pre-register to window 1 and attend the selections in window 2.</p> <p>At the closure of enrolment of each window, candidates who have not yet enrolled, lose the right to enroll.</p>
<p>Selection method</p>	<p>Admission to the Master is subject to a positive total score of the selection process, which is based on a written aptitude test, a written English language test and a motivational interview. The maximum score given by the Admission Board is 100 points. A minimum score of 60/100 must be achieved to pass the selection.</p> <p>The written aptitude test and the written language test do not award any points but are instead judged on a pass/fail basis as a necessary qualification to attend the motivational interview.</p> <p>All selection tests will take place online in videoconference mode, at a time that will be communicated and in any case between 8 a.m. and 8 p.m., Italian time.</p> <p>Candidates attending the test must bring a valid identification document with them.</p> <p>Admission to the professional master programme is granted to eligible candidates, within the limits of available seats, based on the ranking drawn up on in accordance with the total score awarded.</p>



	In the event of two candidates with the same score, the younger candidate will rank higher.
Selection date	The evaluation process will take place: - for those enrolled to window 1: 20/03/2025 (written aptitude test and written language) and 26/03/2025 (motivational interview) - for those enrolled to window 2: 15/05/2025 (written aptitude test and written language test) and 21/05/2025 (motivational interview) - for those enrolled to window 3: 10/07/2025 (written aptitude test and written language test) and 16/07/2025 (motivational interview) - for those enrolled to window 4: 18/09/2025 (written aptitude test and written language test) and 24/09/2025 (motivational interview)
Ranking list publication date	Round 1: 3/04/2025 Round 2: 29/05/2025 Round 3: 24/07/2025 Round 4: 2/10/2025 The indicated dates may vary by 1-2 days in case of institutional needs and obligations. The ranking lists may be viewed on Studenti Online using your username and password
Enrolment period	Round 1: from 3/04/2025 to 23/04/2025 Round 2: from 29/05/2025 to 19/06/2025 Round 3: from 24/07/2025 to 9/09/2025 Round 4: from 2/10/2025 to 14/10/2025
Available places	Round 1: 16 Round 2: 8 plus any remaining from the Window 1 for a maximum total of 40 Round 3: 8 plus any remaining from the Window 1 and Window 2 for a maximum total of 40 Round 4: 8 plus any remaining from the Window 1, the Window 2 and Window 3 for a maximum total of 40
Fees	Selection procedure participation fee: € 60,00 (non-refundable fee for administrative services, Art. 1 of the Call for Applications)



Total amount 14.800,00 (fourteen thousand eight hundred/00) Euro: first instalment 1.850,00 (one thousand eight hundred fifty/00) Euro (to be paid by the deadline set for enrolment 23/04/2025 for window 1, 19/06/2025 for window 2, 9/09/2025 for window 3, 14/10/2025 for window 4); second instalment 7.000,00 (seven thousand/00) Euro (to be paid by 30/11/2025); third instalment 5.950,00 (five thousand nine hundred fifty/00) Euro (to be paid by 28/02/2026).

Where there is external funding (fundraising activities), the cost of enrolment can be reduced, assigning these reductions to candidates based on their position in the 4 ranking lists.

Reduced fees according to the bands listed below are available for students' awarded positions of merit in the qualifying lists for the 4 selections:

Band 1: Fees reduced to 10.800,00 (ten thousand eight hundred/00) Euro. The first instalment is 1.850,00 (one thousand eight hundred and fifty/00) Euro. The second instalment is 7.000,00 (seven thousand/00) Euro. The third instalment is 1.950,00 (one thousand nine hundred and fifty/00) Euro;

Band 2: Fees reduced to 8.800,00 (eight thousand eight hundred/00) Euro. The first instalment is 1.850,00 (one thousand eight hundred and fifty/00) Euro. The second instalment is 6.950,00 (six thousand nine hundred and fifty/00) Euro.

Band 3: total tuition waiver; in the case of all tuition fees being waived, the student must nonetheless pay a fixed fee of 184,54 (one hundred and eightyfour/54) Euro (required for the regional tax, stamps, insurance and professional master programme certificate).

The second instalment must be paid within 30/11/2025. Third instalment must be paid within 28/02/2026.

Information on how to make payments related to the instalments after the first will be provided via email in due time before the respective deadline.

The late payment of the second and third instalments beyond the set date will lead to the payment of a fine of 60.00 Euro. Late instalments and relative fines must be paid within 30 days of the deadline. Students who fail to pay all the amounts due may not attend lectures.



	<p>The cost of enrolling in the Master Programme may be borne by third parties (public authorities, foundations, businesses, etc.). In this case, the candidate must promptly request from the didactic office the <i>nominal letter of intent form</i> in which the third party formalizes and signs the commitment and then the candidate must send it to the didactic office (artificialintelligence@bbs.unibo.it) and to Ufficio master master@unibo.it in copy (CC) before the selection deadline of the chosen Window.</p> <p>Following payment, the university or BBS issue an accounts receipt.</p>
<p>Places in excess of the maximum number reserved for students with a certified legal disability of 66% or more or with a certification under Law 104/92 (optional, at the director's discretion)</p>	<p>Professional Master's Programmes do not entitle to exemption from tuition fees (Legislative Decree 68/2012, Article 9, paragraph 8). However, as per the applicable Guidelines and in accordance with the Professional Master's Programme director, subject to passing the selection, the enrolment of one or two students with a certified legal disability of 66% or more or with a certification under Law 104/92 will be permitted in excess of the maximum number. Such student(s) will be exempted from paying tuition fees, net of any fixed costs and of the selection procedure participation fee.</p> <p>In order to apply for a reserved place, an express request to that effect must be submitted by the closing date for applications, in the form of a self-certificate accompanied by the legal disability certificate issued by INPS, to be attached to the application.</p> <p>The benefit will only be recognised to the student that submitted all the appropriate documentation and scored better than any other applicants requesting the same benefit.</p> <p>No. 2 places for students in excess of the maximum number are provided, subject to passing the selection. Such students will be exempted from paying tuition fees, net of any fixed costs and of the selection procedure participation fee.</p>
<p>Auditors (if applicable)</p>	<p>The participation of auditors is permitted; the admitted number shall not however exceed 20% of the enrolled students. Anyone interested may express their interest directly to the programme's didactic office and will be notified directly of the acceptance of their request as well as the details for registration and payment of the programme participation fee by the beginning of the lessons. The fee for auditors is 8.800,00 (eight thousand eight hundred/00) Euro. The first instalment is 1.220,00 (one thousand two hundred and twenty/00) Euro to be paid at registration. The second instalment is 7.580,00 (seven thousand five hundred and</p>



	<p>eighty/00) Euro to be paid before 30 days have passed since the payment of the first instalment. Attendance is not compulsory for auditors. Moreover, Auditors are not permitted to perform exams or the final examinations, do not take part in the internship, are not required to produce project work, and are not awarded a I level Professional Master Programme in “Data Science and Business Analytics”, or any CFU. Auditors are given a certificate of participation by the didactic office stating the amount of hours effectively attended.</p>
Administrative office	Bologna
Place of teaching	<p>Bologna Business School</p> <p>Villa Guastavillani - Via degli Scalini 18, 40136 Bologna New Campus – Via degli Scalini 23, 40136 Bologna</p>
Language	English
Duration	One year
University educational credits (CFUs)	60
Mandatory attendance	Required attendance 70% out of the total classes
Teaching mode	In person. Classes will be held from Monday to Fridays, in the time slot 9:00am to 06:00pm.
Internship or project work and final examination	<p>Option to choose internship (500 hours, 20 CFU) or project work (20 CFU), both followed by a final examination.</p> <p>The awarding of the professional master programme and the related university educational credit is subordinate to:</p> <ul style="list-style-type: none"> •the payment of all the fee instalments within the established deadlines (included the fees for late payments); •the achievement of a minimum mandatory attendance of 70% of classroom activities; •the completion of the internship/stage (curricular internship) hours or completion of the project work based on the requirement of the Master’s study plan; •passing the final examination with a grade of at least 18 out of 30 (all exams and assessments taken during the course of the master, at the end of each module or lessons, will not be individually recorded and will therefore not grant any separate credits. Any such exams and assessments, however, will be taken



	<p>into account by the Examination Committee when deciding the final grade of each student).</p> <ul style="list-style-type: none"> •having submitted all documentation related to the start of your academic career, including your student visa and residence permit (for non-EU students), as well as documentation related to the recognition of your degree (please contact the UNIBO Master's Office to verify the necessary documentation for your case). <p>At the end of the teaching activities, students will express their own opinions through an online questionnaire</p>
Class start date and teaching calendar information	<p>Classes will start from October 2025.</p> <p>Classes are held Monday through Friday, in the 9:00 a.m.- 6:00 p.m. time slot, from October 2025 to June 2026. This is followed by the internship or project work.</p>
Other information	<p>Students undergoing the master, after having paid one or more instalments of enrolment in the master, who then decide to withdraw from participation in the Master, are not entitled, for any reason, to a refund of the fees paid.</p> <p>The withdrawal from studies is a formal and irrevocable act through which you decide to end your university career. The notification of withdrawal must be sent to the Ufficio Master (master@unibo.it) from the student's University email address..</p> <p>For non-EU students, the withdrawal from the program will result in the loss of necessary requisites for a legal stay in Italy.</p> <p>It is not possible to transfer your enrolment from one Master Programme to another, nor to any other course offered by the University.</p>
For administrative information	<p>Please contact the Ufficio Master at master@unibo.it</p>
For scientific and teaching information	<p>Bologna Business School - Via degli Scalini 18 - 40136, Bologna Monday-Friday from 9:00 a.m. to 1:00 pm. And from 2:00 p.m. to 6:00 p.m.</p> <p>Phone: Federica Giannattasio - +39 051 2090132 Arianna Castrucci - +39 0512090146 Michele Coco - +39 051 2090169 E-mail: datascience@bbs.unibo.it</p>