ANNEX A - PhDs PROGRAMMES DATA SHEETS

PhD PROGRAMME IN ANALYTICS FOR ECONOMICS AND MANAGEMENT - AEM	
Scientific areas	Area 01 (Mathematics and Informatics) Area 13 (Economics and Statistics)
Macro areas	01/A – Mathematics 13/A – Economics 13/B - Business Administration and Management 13/D - Statistics and Mathematical Methods for Decisions
Duration	3 years
Starting date	November 1st, 2023
Proposing Structure	Department of Economics and Management
Coordinator	Prof.ssa Giorgia Oggioni
Curricula	None
Admission requirements	All University Degrees of the type enlisted below are eligible A University degree achieved in Italy, such as University Degree (Italian Laurea) achieved pursuant to the Italian academic system prior to Ministerial Decree 509/1999, amended with Ministerial Decree 270/2004; equivalent Advanced Degree (Italian Laurea Specialistica) / Master's Degree (Italian Laurea Magistrale) or any equivalent academic Master Degree achieved from foreign Universities. For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners. The eligibility of the foreign university degree is ascertained by the Board of Examiners of the selection procedure of the PhD Programmes, in compliance with the legislation in force in Italy and in the country where the university degree was awarded, as well as by the Treaties or international agreements on recognition of university degrees for the continuance of studies. **Bachelor's Degrees are not admitted**. Undergraduates can apply for admission, but they must have passed the degree examination by the start date of the PhD Programme activities: these candidates are required to provide the marks of the exams taken during their undergraduate career. Proficiency in English is required. This is verified through the interview.
Total number of available posts	n. 10 posts: - n. 8 posts benefiting of a scholarship/other forms of financial support and - n. 2 posts without scholarship / other forms of financial support
Out of which reserved posts	**A maximum number of 6 posts in all PhD Programmes, financed by maintenance allowance, are reserved to candidates of**

	Pakistani citizenship, in compliance with the MoU signed by *The Higher Education Commission, Government of the Islamic Republic of Pakistan* (hereinafter referred to as HEC Pakistan) and by the University of Studies of Brescia on 03 December 2020.
Number of scholarships / or equivalent financial support	- n. 3 for ordinary posts for EU and no EU citizens not having a research topic
Posts linked to a research topic (among those already available)	- n. 1 ordinary post for EU and no EU citizens co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund Ministerial Decree n. 118/2023 on Public Administration, having the research topic: "*Transition risk in the Eurozone: a network estimation approach*". - n. 1 ordinary post for EU and no EU citizens as candidates being private and public administration employees that envisage the upholding of the salary treatment promoted by the business company Metra SpA on the research topic: "*Models and methods for the optimization of production and logistics*". - n. 1 ordinary post for EU and no EU citizens co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund, project "Centro Nazionale per la Mobilità Sostenibile – MOST (National Centre for Sustainable Mobility)", having the research topic: "*Design, implementation and validation of optimization models and methods for the real-time management of vehicular traffic on a road network equipped with advanced sensors*".
	Selection Procedure
Evaluation of Curriculum Vitae and academic / professional history / Publications, etc.	The candidate must upload her / his curriculum vitae organized as follows: Personal data. Study Programme: - Name of the Master's Degree; - Institution providing the Master's Degree; - Degree grade (if the candidate is not yet graduated, she / he must provide the average exam grade, an extended abstract to the Master thesis and the degree exam prospected date or a document similar to the thesis drawn up during the foreign university course for candidates having an eligible University Degree achieved in a non-Italian University); - List of exams with the corresponding marks. List of job experiences strictly related to the PhD Programme research topics. List of publications, including the Master thesis (or of a document similar to the thesis drawn up during the foreign university course for candidates having an eligible University Degree achieved in a non-Italian University) and working papers (5 publications at most). List of any other supporting documentation and qualifications that are relevant and useful for the admission evaluation process (5 documents at most).

	English language level. In addition to the curriculum vitae, the candidate must upload the following documentation: - Publications, included the Master thesis (or of a document similar to the thesis drawn up during the foreign university course for candidates having an eligible University Degree achieved in a non-Italian University) - or the extended abstract of the Master thesis if the candidate is not yet graduated (complete document, 5 publications at most); - Copy of the supporting documentation and qualifications (5 documents at most); - English language certificate (if obtained); - At least one recommendation letter. **The maximum score for the evaluation of the documents and qualifications is 60 out of 100.** **Only candidates who score at least 36 points in the evaluation of their documents and qualifications will be admitted to the interview.**
Evaluation of a project proposal	Not envisaged
Interview	The interview will be in English and will consist of: - a presentation of the candidate's curriculum, background and Master thesis (or of a document similar to the thesis drawn up during the foreign university course for candidates having an eligible University Degree achieved in a non-Italian University) - about 10 minutes; - the assessment of the candidate's motivation to carry out research on the scientific areas covered by the PhD Programme; - the assessment of the candidate's aptitude to carry out research on the scientific areas covered by the PhD Programme; - the assessment of the candidate's proficiency of English. **The maximum score for the interview is 40 out of 100.** Candidates may be allowed to be interviewed remotely with the use of a video conference application, pursuant to the prescriptions envisaged by Article 8, paragraphs 6 and 7 of the Call for Admission. **Only candidates who score at least 24 points in the interview will enter the** PhD Programme **final ranking list of merit to be admitted to the** PhD Programme**.**
Place and date of interview	The date (and, if needed, the place) of the interview will be published at least 20 days in advance on the UNIBS web site https://www.unibs.it/en/node/1078
Academic contact information of the PhD Programme	Prof. Giorgia Oggioni, e-mail: giorgia.oggioni@unibs.it
Teaching and research PhD activity	https://permalink.unibs.it/phd/aem/en

PhD PROGRAMME IN
ARTIFICIAL INTELLIGENCE IN MEDICINE AND INNOVATION IN CLINICAL RESEARCH AND METHODOLOGY

Scientific areas	06 Medical Sciences; 05 Biological Sciences; 09 Industrial and Information Engineering; 13a Economic and Statistical Sciences; 01 Mathematical and Informatic Sciences
Macro areas	05/D; 05/H; 06/B; 06/D; 06/E; 06/F; 06/G; 06/I; 06/L; 06/M; 09/D; 09/E; 09/F; 13/A; 01/B
Duration	3 years
Starting date	November 1st, 2023
Proponent Structure	Department of Clinical and Experimental Sciences
Coordinator	Prof. Domenico Russo
Curricula	- Artificial Intelligence in Medicine - Regenerative Medicine - Innovation in Clinical Research and Methodology
Admission requirements	LM-6 Biologia LM-7 Biotecnologie agrarie LM-8 Biotecnologie industriali LM-9 Biotecnologie mediche, veterinarie e farmaceutiche LM-13 Farmacia e farmacia industriale LM-16 Finanza LM-17 Fisica LM-18 Informatica LM-21 Ingegneria biomedica LM-22 Ingegneria chimica LM-25 Ingegneria dell'automazione LM-26 Ingegneria della sicurezza LM-27 Ingegneria delle telecomunicazioni LM-28 Ingegneria elettrica LM-29 Ingegneria elettronica LM-30 Ingegneria energetica e nucleare LM-32 Ingegneria informatica LM-33 Ingegneria meccanica LMG/01 in Giurisprudenza LM-40 Matematica LM-41 Medicina e chirurgia LM-42 Medicina veterinaria LM-43 Metodologie informatiche per le discipline umanistiche LM-44 Modellistica matematico-fisica per l'ingegneria LM-46 Odontoiatria e protesi dentaria LM-51 Psicologia LM-52 Relazioni internazionali LM-53 Scienza e ingegneria dei materiali LM-54 Scienze chimiche LM-55 Scienze cognitive LM-56 Scienze dell'economia LM-60 Scienze della natura LM-61 Scienze della nutrizione umana LM-66 Sicurezza informatica LM-67 Scienze e tecniche delle attività motorie preventive e adattate LM-71 Scienze e tecnologie della chimica industriale LM-77 Scienze economico-aziendali LM-78 Scienze filosofiche LM-82 Scienze statistiche LM-83 Scienze statistiche attuariali e finanziarie LM-86 Scienze zootecniche e tecnologie animali LM-90 Studi europei

	LM-91 Tecniche e metodi per la societa dell'informazione
	LM-92 Teorie della comunicazione
	LM-93 Teorie e metodologie dell'e-learning e della media education
	LM/SNT1 Scienze infermieristiche e ostetriche
	LM/SNT2 Scienze riabilitative delle professioni sanitarie
	LM/SNT3 Scienze delle professioni sanitarie tecniche
	LM/SNT4 Scienze delle professioni sanitarie della prevenzione
	A University degree achieved in Italy, such as University Degree (Italian Laurea) achieved pursuant to the Italian academic system prior to Ministerial Decree 509/1999, amended with Ministerial Decree 270/2004; equivalent Advanced Degree (Italian Laurea Specialistica) / Master's Degree (Italian Laurea Magistrale) or any equivalent academic Master Degree achieved from foreign Universities.
	For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners.
	The eligibility of the foreign university degree is ascertained by the Board of Examiners of the selection procedure of the PhD Programmes, in compliance with the legislation in force in Italy and in the country where the university degree was awarded, as well as by the Treaties or international agreements on recognition of university degrees for the continuance of studies.
	Bachelor's Degrees are not admitted.
	Undergraduates can apply for admission, but they must have passed the degree examination by the start date of the PhD Programme activities: these candidates are required to provide the marks of the exams taken during their undergraduate career.
Total number of posts available	n. 12: - n. 9 posts benefiting of a scholarship / other forms of financial support and - n. 3 posts without scholarship / other forms of financial support
Out of which reserved posts	**A maximum number of 6 posts in all PhD Programmes, financed by maintenance allowance, are reserved to candidates of Pakistani citizenship**, in compliance with the MoU signed by The Higher Education Commission, Government of the Islamic Republic of Pakistan (hereinafter referred to as HEC Pakistan) and by the University of Studies of Brescia on 03 December 2020.
Posts linked to a research topic (among those already available)	- n. 2 for ordinary posts for EU and no EU citizens within the research area of one of the three (3) PhD curricula: Artificial Intelligence in Medicine; Regenerative Medicine; Innovation in Clinical Research and Methodology - n. 1 ordinary post for EU and no EU citizens co-financed by the University of Brescia and the Italian PNRR (National Recovery and Resilience Plan) - Next Generation EU Fund Ministerial Decree n. 118/2023 on Public Administration, pursuant to Article n. 9 and having the research topic *"Management of clinical trials and innovative clinical trial design methodology in hematology and oncology field"* - n. 2 ordinary posts for EU and no EU co-financed by the University of Brescia and the PNRR (National Recovery and Resilience Plan) - Next Generation EU Fund Ministerial Decree n. 118/2023 on M4C1 –

	Inv. 4.1, category: General Research NPRR, pursuant to Article n. 8 and having a research area of interest within the three (3) curricula of the PhD Programme: Artificial Intelligence in Medicine; Regenerative Medicine; Innovation in Clinical Research and Methodology.
	- n. 1 ordinary post for EU and no EU citizens financed by the "Dipartimento di Eccellenza 2023-2027" (Department of Excellence 2023-2027) - Obiettivo 2 "Piattaforma di Neuroscienze applicate", having a research topic on "*Investigation of non-invasive brain stimulation protocols (NIBS) targeting neural connectivity in the sensorimotor system*" - n. 1 ordinary post for EU and no EU citizens co-financed by the University of Brescia and the EU project called RICINT_2022_HORIZON_ERC_INCEPTION", having a research topic on "*Development of optimal neuromodulation protocols based on machine learning for restoring neural connectivity in individuals with motor deficits in arm and shoulder muscles*"
Selection Procedure	
Evaluation of Curriculum Vitae/Publications, etc.	Preliminary, the Board of Examiners evaluates the Curriculum Vitae of the Candidate. The Candidate will be admitted to the qualifications evaluation as a result of the positive relevance assessment between the Curriculum Vitae and the research areas of the PhD Programme. Evaluation score: 0-20 points as follows: a) Undergraduate University degree final score: 0-10 points or average grade of examinations passed during the course (only for undergraduates who will pass the degree examination by the start date of the PhD Programme activities; b) Publications: 0-4 points; c) Other qualifications: 0-6 points.
Evaluation of a project proposal	Evaluation of the research project proposal: 0 - 40 points. Only candidates who score at least 24 points in the evaluation of their research proposal will be admitted to the interview.
Interview	The interview includes to discuss about the research project proposal that the candidate presents, the candidate's list of publications and qualifications. The scores granted at the interview: 0 - 40 points The interview is passed if a candidate achieves a score of at least 20 points. For candidates who do not understand Italian language, the interview will be held in English language. Candidates may be allowed to be interviewed remotely with the use of a video conference application, pursuant to the prescriptions envisaged by Article 8, paragraphs 6 and 7 of the Call for Admission.
Place and date of the interview	The date (and, if needed, the place) of the interview will be published at least 20 days in advance on the UNIBS web site https://www.unibs.it/en/node/1078
Contact information of the PhD Programme	Professor Domenico Russo, Department of Clinical and Experimental Sciences, email: domenico.russo@unibs.it
PhD Teaching and research activity	https://permalink.unibs.it/phd/iamed/en

PhD PROGRAMME IN

BIOMEDICAL SCIENCES AND TRANSLATIONAL MEDICINE	
Scientific areas	05- Biological Sciences; 06-Medical Sciences
Macro areas	05/G; 05/E; 06/M; 06/A; 06/D; 06/F; 06/I
Duration	3 years
Starting date	November 1st, 2023
Proponent Structure	Department of Molecular and Translational Medicine
Coordinator	Prof. Alessandra Valerio (Advocate)
Curricula	Neuroscience Oncology and Immunology Pharmacology and Microbiology
Admission requirements	The following University Degrees achieved in Italy: LM-6 Biology LM-7 Agricultural Biotechnologies LM-8 Industrial Biotechnologies LM-9 Medical, Veterinary and Pharmaceutical Biotechnologies LM-13 Pharmacy and Industrial Pharmacy LM-17 Physics LM-18 Informatics LM-21 Biomedical Engineering LM-41 Medicine and Surgery LM42 Veterinary Medicine LM-51 Psychology LM-55 Cognitive Sciences LM61 Human Nutrition Sciences LM-67 Science and Technology of Preventive and Adaptive Motor Activities. LM/STN2 Rehabilitation sciences for health professions A University degree achieved in Italy, such as University Degree (Italian Laurea) achieved pursuant to the Italian academic system prior to Ministerial Decree 509/1999, amended with Ministerial Decree 270/2004; equivalent Advanced Degree (Italian Laurea Specialistica) / Master's Degree (Italian Laurea Magistrale) or any equivalent academic Master Degree achieved from foreign Universities. For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners. The eligibility of the foreign university degree is ascertained by the Board of Examiners of the selection procedure of the PhD Programmes, in compliance with the legislation in force in Italy and in the country where the university degree was awarded, as well as by the Treaties or international agreements on recognition of university degrees for the continuance of studies. **Bachelor's Degrees are not admitted**. Undergraduates can apply for admission, but they must have passed the degree examination by the start date of the PhD Programme activities: these candidates are required to provide the marks of the exams taken during their undergraduate career.
Total number of posts available	n. 8: - n. 6 posts benefiting of a scholarship / other forms of financial support and - n. 2 posts without scholarship / other forms of financial support
Out of which reserved posts	**A maximum number of 6 posts in all PhD Programmes, financed**

	by maintenance allowance, are reserved to candidates of **Pakistani citizenship**, in compliance with the MoU signed by The Higher Education Commission, Government of the Islamic Republic of Pakistan (hereinafter referred to as HEC Pakistan) and by the University of Studies of Brescia on 03 December 2020.
Number of scholarships / or equivalent financial support	- n. 3 for ordinary posts for EU and no EU citizens not having a research topic
Posts linked to a research topic (among those already available)	n. 1 ordinary post for EU and no EU citizens pursuant to Article n. 8 of the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund Ministerial Decree n. 118/2023 on M4C1 – Inv. 4.1, category: General Research NPRR

Selection Procedure	
Evaluation of Curriculum Vitae/Publications, etc.	Maximum score: 30/100 - Undergraduate University degree final score: maximum score 10 - Average grade of examinations passed during the undergraduate course (only for undergraduates who will pass the degree examination by the start date of the PhD Programme activities): maximum score 10 - Publications: maximum score 8 - Abstracts and presentations to scientific meetings: maximum score 6 - Other qualifications: specialization, research fellowships or contracts; educational courses and stage, conference attendance, English language certificates: maximum score 6
Evaluation of a project proposal	Not envisaged
Interview	Maximum score: 70/100 The interview will focus on one of the thematic areas of the curriculum indicated by the candidate; discussion of the qualifications provided; evaluation of the candidate's aptitude and motivation to carry out research activities; evaluation of communication skills and the knowledge of the English language. The Interview is passed if the achieved score is no lower than 30. Knowledge of the Italian language is not required to foreign candidates. Candidates may be allowed to be interviewed remotely with the use of a video conference application, pursuant to the prescriptions envisaged by Article 8, paragraphs 6 and 7 of the Call for Admission.
Place and date of the interview	The date (and, if needed, the place) of the interview will be published at least 20 days in advance on the UNIBS web site https://www.unibs.it/en/node/1078
Contact information of the PhD Programme	Prof. Alessandra Valerio, e-mail: alessandra.valerio@unibs.it
PhD Teaching and research activity	https://permalink.unibs.it/phd/scienzebio/en

PhD PROGRAMME IN BUSINESS & LAW INSTITUTIONS AND BUSINESS: VALUE, RULES AND SOCIAL RESPONSIBILITY	
Scientific areas	Area 12 (Law Studies); Area 13 (Economics and Statistics); Area 14 Political and Social Sciences)
Academic disciplines	IUS/01; IUS/04; IUS/07; IUS/09; IUS/21; SECS-P/03 ; SECS-P06; SECS-P07; SECS-P/08; SECS-P/12; SPS/09
Duration	3 years

Starting date	November 1st, 2023
Proponent Structure	Department of Economics and Management
Coordinator	Prof. Nadia Maccabiani
Admission requirements	LMG/01 Law; LM16 Finance; LM49 Tourism development and management; LM56 Economics; LM63 Public Administration; LM76 Environmental and cultural economics; LM77 Management; LM81 Development Cooperation; LM88 Sociology and Social Research. A University Degree achieved in Italy (Italian Laurea) or a University Degree granted in Italy according to the Italian academic system prior to Ministerial Decree 509/1999, amended by the Ministerial Decree 270/2004. Equivalent Advanced Degree (Italian Laurea Specialistica) / Master's Degree (Italian Laurea Magistrale) or any equivalent academic Master's Degree granted by foreign Universities. With specific and exclusive reference to the PhD admission purposes, the equivalence, in terms of duration and contents, between degrees awarded abroad and Italian degrees will be assessed by the Admission Board. The eligibility of the foreign university degree is ascertained by the Admission Board of the selection procedure of the PhD Programmes, in compliance with the legislation in force in Italy and in the country where the university degree was awarded, as well as in compliance with the Treaties or international agreements on recognition of university degrees for the continuance of studies. **Bachelor's Degrees are not admitted**. Undergraduates can apply for admission upon condition of the achievement of the Degree by the starting date of the PhD Programme activities: these candidates are required to submit the grades of the exams taken during their university career. Proficiency in English is required.
Total number of posts available	n. 8 - n. 6 posts benefiting of a scholarship / other forms of financial support and - n. 2 post without scholarship / other forms of financial support
Out of which reserved posts	**A maximum number of 6 posts in all PhD Programmes, financed by maintenance allowance, are reserved to candidates of Pakistani citizenship**, in compliance with the MoU signed by *The Higher Education Commission, Government of the Islamic Republic of Pakistan* (hereinafter referred to as HEC Pakistan) and by the University of Studies of Brescia on 03 December 2020.
Number of scholarships / or equivalent financial support	- n. 2 for ordinary posts for EU and no EU citizens not having a research topic
Posts linked to a research topic (among those already available)	- n. 1 ordinary post for EU and no EU citizens co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund Ministerial Decree n. 118/2023 on Public Administration, having the research topic: "*Applied research aimed at the mutual implementation of the governance, organization and*

	strategic management of public administrations with specific reference to provinces, by means of a management control system and periodic financial and non-financial reporting activities, according to a multidisciplinary perspective" - n. 1 ordinary post for EU and no EU citizens co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund Ministerial Decree n. 118/2023 on Public Administration, having the research topic: "*An in-depth overview of some relevant organisational, management and strategic dynamics in public administrations, with a particular focus on one of the following research domains: a) the new procurement code: innovative and experimental forms of public-private partnership; b) governance of public companies, according to the latest regulations, between business goals, legal constraints and corporate social responsibility; c) planning and design of a municipal welfare through the involvement of public institutions and third sector entities in order to improve the deployment of available resources"*
Selection Procedure	
Evaluation of Curriculum Vitae/Publications, etc.	Maximum score for curriculum vitae/publications: 30 out of 100 Eligible qualifications: - Master thesis (or a document similar to a thesis drawn up during the foreign university course for candidates having an eligible University Degree achieved in a non-Italian University) and the related University curriculum; - Scientific publications; - Any other supporting evidence that can be considered relevant and useful for the admission proceedings. If the candidate is not yet graduated, the average grade of his/her university curriculum will be taken into consideration. The following step of the evaluation proceedings (i.e., the assessment of the research project) will be undertaken upon condition that the applicant receives at least 18 out of 100 at this stage.
Evaluation of a project proposal	Maximum score for the research project proposal: 30 out of 100 The research project proposal must be submitted online jointly with the admission form. The research project must consist of a written proposal, either in Italian or in English, with a maximum length of 25,000 characters (spaces excluded), and shall be drafted according to the following requirements: 1. Author 2. Title 3. Short literature review 4. Research questions and purposes 5. Methodology 6. References. Only applicants who receive at least 18 out of 100 in the evaluation of their research proposal will be admitted to the interview.
Interview	Maximum score for the interview: 40/100 The interview will focus on the discussion of the research project proposal and the candidate's curriculum vitae/publications. Furthermore, the interview also aims at assessing candidate's English proficiency.

	Applicants may be allowed to be interviewed remotely by video conference, pursuant to the prescriptions envisaged by Article 8, paragraphs 6 and 7 of the Call for Admission.
	At the end of the whole evaluation process, candidates with an overall score lower than 70 out of 100 will not be admitted to the PhD Programme.
Place and date of the interview	The scheduled dates for the interview are the following: July 25th and 26th, 2023 at 10:30 am. The place of the interview will be published at least 20 days in advance on the UNIBS web site https://www.unibs.it/en/node/1078
Contact information of the PhD Programme	Prof. Nadia Maccabiani, Department of Economics and Management, email: nadia.maccabiani@unibs.it Dott.ssa Francesca Guerini, email: francesca.guerini@unibs.it
PhD Teaching and research activity	https://permalink.unibs.it/phd/bl/en

PhD PROGRAMME IN CIVIL AND ENVIRONMENTAL ENGINEERING, INTERNATIONAL COOPERATION AND MATHEMATICS	
Scientific areas	01 - Mathematical and Computing Sciences; 02 – Physical Sciences; 04 - Geological Sciences (Scienze della Terra); 06 - Medical Sciences; 07 - Agricultural and Veterinary Sciences; 08a - Civil Engineering; 08b – Architecture; 11a - Historical, Philosophical and Pedagogical Sciences; 13a - Economical and Statistical Sciences.
Macro areas	01/A; 02/A; 04/A; 06/D; 07/D; 07/E; 08/A; 08/B; 08/D; 08/E; 08/F; 11/A; 11/B; 13/D.
Duration	3 years
Starting date	November 1st, 2023
Proposing Structure	Department of Civil, Environmental, Architectural Engineering and Mathematics
Coordinator	Prof. Marco Pilotti (Advocate)
Curricula	The research activity concerns specific topics pertaining to the different curricula: - Appropriate Methodologies and Techniques for International Development Co-operation (Health track and Technology track) - Mathematical Methods and Models for Engineering - Natural Risks Assessment and Management - Structural Rehabilitation of Historical and Modern Buildings - Technologies and Processes for the Environment and Agriculture - Urban Planning and Mobility
Admission requirements	All University Degrees of the type enlisted below are eligible: A University degree achieved in Italy, such as University Degree (Italian Laurea) achieved pursuant to the Italian academic system prior to Ministerial Decree 509/1999, amended with Ministerial Decree 270/2004; equivalent Advanced Degree (Italian Laurea Specialistica) / Master's Degree (Italian Laurea Magistrale) or any equivalent academic Master Degree achieved from foreign Universities. For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners. The eligibility of the foreign university degree is ascertained by the

	Board of Examiners of the selection procedure of the PhD Programmes, in compliance with the legislation in force in Italy and in the country where the university degree was awarded, as well as by the Treaties or international agreements on recognition of university degrees for the continuance of studies. **Bachelor's Degrees are not admitted**. Undergraduates can apply for admission, but they must have passed the degree examination by the start date of the PhD Programme activities: these candidates are required to provide the marks of the exams taken during their undergraduate career.
Total number of posts available	n. 10, subdivide as follows: - n. 8 posts benefiting of a scholarship / other forms of financial support and - n. 2 posts without scholarship / other forms of financial support
Out of which reserved posts	**A maximum number of 6 posts in all PhD Programmes, financed by maintenance allowance, are reserved to candidates of Pakistani citizenshi**p, in compliance with the MoU signed by *The Higher Education Commission, Government of the Islamic Republic of Pakistan* (hereinafter referred to as HEC Pakistan) and by the University of Studies of Brescia on 03 December 2020.
Number of scholarships / or equivalent financial support	- n. 4 for ordinary posts for EU and no EU citizens not having a research topic
Posts linked to a research topic (among those already available)	- n. 2 ordinary post for EU and no EU citizens co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund Ministerial Decree n. 118/2023 on Cultural Heritage, having a research topic/area as comprised under Article 10.
Selection Procedure	
Evaluation of Curriculum Vitae and academic / professional history / Publications, etc.	Academic Degree: up to 10 points. For candidates pending to graduate, at most 10 points will be assigned, according to the following criterion: average mark between 101/110 and 110/110 corresponds to points from 1 to 10. Further qualifications: up to 10 points.
Presentation of a project proposal	The application form must include the presentation of a research project. Those candidates interested in one of the following curricula must submit a research project that fits into one of the topics listed below: **Natural Risks Assessment and Management**: - Hydrological processes and adaptation strategies to variations caused by climatic and anthropogenic stressors. The candidate describes the expected impacts of climate change and of anthropogenic pressures on the hydrologic cycle and possible structural and nonstructural adaptation measures in the urban context or in agriculture. - Hydraulic hazard analysis in mountainous and/or highly anthropized areas: the candidate considers typical aspects of hydraulic hazards and shows the conceptual schemes and numerical approaches that can be used for their quantification. **Appropriate Methodologies and Techniques for International Development Cooperation**: *- Technology track:*

The candidate illustrates the main issues related to the management of solid waste in developing contexts. After hypothesizing a specific problem in a resource limited context, chosen by the candidate, a research project is drawn up aimed at identifying appropriate solutions to ensure sustainable management of the problem. The proposed research project must clearly present the intended objectives, methodology and scientific results.

- *Health track*:

With reference to the Sustainable Development Goal (SDG) n. 3 (Ensure health and well-being for all at all ages) and in particular target 3.3 (By 2030, eliminate HIV, tuberculosis and malaria, and control infections by hepatitis viruses, infections transmitted by water and other infectious diseases) the candidate illustrates the problems related to HIV infection in resource limited countries. Taking into consideration a specific context, chosen by the candidate, a plan is drawn up aimed at reducing the impact of the infection with a horizon of 5 years. The plan must include, without going into detail, elements of prevention, treatment and monitoring and must also specify indicators and targets to be achieved in the five-year period.

Mathematical Methods and Models for Engineering:

Partial differential equations for the description of physical phenomena. The candidate describes some analytical methods for the qualitative study of solutions, and techniques for their numerical simulation.

- Models for solid and fluid mechanics. The candidate describes modern analytical and numerical applications and/or methods that he/she intends to develop in the PhD.

Structural Rehabilitation of Historical and Modern Buildings:

- The candidate discusses a research project concerning innovative reinforcement techniques on existing structural elements (of buildings, structures and infrastructures).
- The candidate discusses a research project concerning the use of advanced materials for the structural rehabilitation of existing structural elements (of buildings, structures and infrastructures).

Technologies and Processes for the Environment and Agriculture:

The candidate will propose a research project with a theme concerning one of the following topics:

1. The design or management of processes, solutions and technologies for environmental protection and/or environmental remediation;
2. Sustainable management of natural resources;
3. The minimisation, valorisation and recovery of resources from wastewater and waste of urban or industrial origin in the context of the circular economy;
4. The managerial and technological problems inherent in water purification in the light of climate change and emerging pollutants
5. The development of production strategies for sustainability in agriculture;
6. Technologies for the ecological transition in agriculture;
7. The use of agriculture as a landscape management and hydrogeological hazard mitigation technique.

8. Analysis and evaluation of biodiversity and ecosystem services

Urban Planning and Mobility:
1. The proposed research project arises from the growing need for state-of-the-art Intelligent Transport Systems (ITS) tools and technologies to improve the performance of transport systems. As part of the research project, the PhD student will participate in the implementation of a decision support system for the analysis of the performance of transport systems. Specifically, the following will be of particular interest: big data analyzes in the field of mobility and the monitoring of road infrastructures.
2. The candidate discusses a research project concerning the development of risk models for the evaluation of the safety of land road transport systems. As part of the research project, the PhD student will participate in the implementation of a decision support system for the analysis of the security performance of an urban and/or suburban network. Specifically, the application of models based on traditional econometric approaches and/or innovative approaches using Artificial Intelligence algorithms will be of particular interest.
3. The candidate discusses a research project concerning economic evaluation among design alternatives by adopting the different methodologies available (e.g., multi-criteria approaches, etc.)
4. planning in areas at physical risk; the candidate sets up a research on methods of analysis of land use transformations and the implementation of expeditious methods for evaluating the effects
5. urban planning; the candidate analyzes land value capturing methodologies and proposes an approach linked to the sustainability of neighbourhoods

In addition, for positions with fellowships financed by PNRR DM 118/2023 funds and related to Cultural Heritage, applicants are required to submit a research project that is ascribed to the topics listed in Article 10 of DM 118/2023, limited only to the CUN areas represented in DICATAM.

In order to correctly evaluate the research project, the candidate must:
   • indicate on the research project the reference curriculum among those listed above
   • Structure the paper with a maximum of 25,000 characters as follows:
1. Author
2. Title
3. A brief literature review
4. Motivations behind the research
5. Hypotheses and research design
6. Methods and tools
7. References.

The research project proposal must be uploaded on-line upon submission of the application.

Maximum score: 40 points.
Minimum score to be admitted to the interview: 24 points.

Interview	The interview will focus on the main curriculum topics and on the research project proposal, envisaging a maximum of 40 points. Minimum score to pass the interview: 24 points.
	Candidates may be allowed to be interviewed remotely with the use of a video conference application, pursuant to the prescriptions envisaged by Article 8, paragraphs 6 and 7 of the Call for Admission.
Place and date of the interview	The date (and, if needed, the place) of the interview will be published at least 20 days in advance on the UNIBS web site https://www.unibs.it/en/node/1078
Academic contact information of the PhD Programme	**By Curricula** - Appropriate Methodologies and Techniques for International Development Cooperation: sabrina.sorlini@unibs.it - Mathematical Methods and Models for Engineering: hynek.kovarik@unibs.it - Natural Risks Assessment and Management: giovanna.grossi@unibs.it - Structural Rehabilitation of Historical and Modern Buildings: fausto.minelli@unibs.it - Technologies and Processes for the Environment and Agriculture: stefano.barontini@unibs.it - Urban Planning and Mobility: michele.pezzagno@unibs.it
Teaching and research PhD activity	https://permalink.unibs.it/phd/dicacim/en

PhD PROGRAMME IN ENERGY TRANSITION AND SUSTAINABLE PRODUCTION SYSTEMS	
Scientific areas	All the scientific fields related to Mechanical Engineering and the curricula of the PhD Programme
Macro areas	01/A - mathematical analysis, probability and mathematical statistics; 02/A – Physics of Fundamental Interactions; 03/B - Inorganic Chemistry and Applied Technologies; 08/B – Structural and Geotechnical Engineering; 09/A – Mechanical and Aerospace Engineering and Naval Architecture; 09/B – Manufacturing, Industrial an Management Engineering; 09/C – Energy, Thermomechanical and Nuclear Engineering; 09/D – Chemical and Materials Engineering; 09/E – Electrical and Electronic Engineering and Measurements; 09/G – Systems Engineering and Bioengineering; 12/E – International, European Union, Comparative, Economic and Market Law; 13/A – Economy; 14/D – Sociology of economic processes, work, environment and territory.
Duration	3 years
Starting date	November 1st, 2023
Proponent Structure	Department of Mechanical and Industrial Engineering
Coordinator	Prof. Marialuisa Volta
Curricula	- Curriculum in Energy Transition - Curriculum in Sustainable production systems
Admission requirements	All University Degrees of the type enlisted below are eligible: A University degree achieved in Italy, such as University Degree (Italian Laurea) achieved pursuant to the Italian academic system prior to Ministerial Decree 509/1999, amended with Ministerial Decree 270/2004; equivalent Advanced Degree (Italian Laurea Specialistica) / Master's Degree (Italian Laurea Magistrale) or any equivalent academic

	Master Degree achieved from foreign Universities. For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners. The eligibility of the foreign university degree is ascertained by the Board of Examiners of the selection procedure of the PhD Programmes, in compliance with the legislation in force in Italy and in the country where the university degree was awarded, as well as by the Treaties or international agreements on recognition of university degrees for the continuance of studies. **Bachelor's Degrees are not admitted**. Undergraduates can apply for admission, but they must have passed the degree examination by the start date of the PhD Programme activities: these candidates are required to provide the marks of the exams taken during their undergraduate career.
Total number of posts available	n. 8 - n. 6 posts benefiting of a scholarship or other forms of financial support - n. 2 posts without scholarship or other financial support.
Out of which reserved posts	**A maximum number of 6 posts in all PhD Programmes, financed by maintenance allowance, are reserved to candidates of Pakistani citizenshi**p, in compliance with the MoU signed by *The Higher Education Commission, Government of the Islamic Republic of Pakistan* (hereinafter referred to as HEC Pakistan) and by the University of Studies of Brescia on 03 December 2020.
Number of scholarships / or equivalent financial support	n. 2 for ordinary posts for EU and no EU citizens not having a research topic
Posts linked to a research topic (among those already available)	- n. 1 ordinary post for EU and no EU citizens co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund Ministerial Decree n. 118/2023 on Public Administration, having a research topic / area as comprised under Article n. 9 - n. 1 ordinary post for EU and no EU citizens co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund Ministerial Decree n. 118/2023 on M4C1 – Inv. 4.1, category: General Research NPRR having a research topic / area as comprised under Article n. 8.
Selection Procedure	
Evaluation of Curriculum Vitae and academic / professional history / Publications, etc.	Maximum score: 20/100. Eligible documentation: - University curriculum, including the specification of the degree achieved or to be achieved, title and one - page summary of the Master thesis (or of a document similar to the thesis drawn up during the foreign university course for candidates having an eligible University Degree achieved in a non-Italian University), and transcript of academic records - Scientific publications - Any other supporting documentation and qualifications that can be considered relevant and useful for the admission evaluation process.
Evaluation of a project proposal	Maximum score for the research project proposal: 40/100

	The research project proposal must be submitted on-line jointly with the admission form. The topic of the research project must fall within research activities that are relevant to any of the curricula of the PhD Programme. The research project must be presented as a written proposal, in either Italian or English, with a maximum length of 25.000 characters (excluding spaces), and should be organized as follows: 1. Author 2. Title 3. Summary of State-of-the-art 4. Main motivations and goals of the proposed research proposal 5. Detailed description of the research project 6. Proposed scientific methodology 7. Bibliographic references. Only candidates who score at least 24 points in the evaluation of their research proposal will be admitted to the interview.
Interview	Maximum score at the interview: 40/100 The interview will focus to discuss about the research project, about the publications and the academic and professional qualifications outlined by the candidate. The interview is inclusive of the evaluation of the knowledge of the English language. Only candidates who score at least 24 points in the interview will be considered eligible. Candidates may be allowed to be interviewed remotely with the use of a video conference application, pursuant to the prescriptions envisaged by Article 8, paragraphs 6 and 7 of the Call for Admission.
Place and date of interview	The date (and, if needed, the place) of the interview will be published at least, 20 days in advance on the UNIBS web site https://www.unibs.it/en/node/1078
Academic contact information of the PhD Programme	Prof. Marialuisa Volta, email: marialuisa.volta@unibs.it
Teaching and research PhD activity	https://permalink.unibs.it/phd/tesps/en https://permalink.unibs.it/phd/tesps/site

PhD PROGRAMME IN INFORMATION ENGINEERING	
Scientific areas	09 – Industrial and Information Engineering; 01 – Mathematical and Information Sciences; 02 – Physical Sciences; 03 – Chemical Sciences
Macro areas	01/A Mathematics 01/B Computer Technology 02/B Physics of Matter 02/A Physics of Fundamental Interactions 03/A - Analytical, Physical-chemistry 03/B - Inorganic-technological 03/C - Organic-Industrial 05/E - Biochemistry and experimental and clinical molecular biology 07/E – Chemistry and agricultural genetics 09/E Electrical Engineering, Electronics and Measures 09/F Telecommunications Engineering and Electromagnetic Fields 09/G Systems and Bio Engineering 09/H Computer Engineering

Duration	3 years
Starting date	November 1st, 2023
Proponent Structure	University of Brescia, Department of Information Engineering
Coordinator	Prof. Ivano Alessandri
Curricula	- Curriculum in Electronic Engineering, Sensors and Instrumentation - Curriculum in Computer Science/Engineering and Control Systems - Curriculum in Telecommunication Engineering - Curriculum in Physical, Chemical and Mathematical Sciences for Engineering NOTE: Candidates are requested to attach to their submitted admission form a written list, ordered by preference, of the curricula they are interested in. Otherwise, candidates admitted to the interview shall express their preference of curricula at the interview.
Admission requirements	All types of University degree. A University degree achieved in Italy, such as University Degree (Italian Laurea) achieved pursuant to the Italian academic system prior to Ministerial Decree 509/1999, amended with Ministerial Decree 270/2004; equivalent Advanced Degree (Italian Laurea Specialistica) / Master's Degree (Italian Laurea Magistrale) or any equivalent academic Master Degree achieved from foreign Universities. For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners. The eligibility of the foreign university degree is ascertained by the Board of Examiners of the selection procedure of the PhD Programmes, in compliance with the legislation in force in Italy and in the country where the university degree was awarded, as well as by the Treaties or international agreements on recognition of university degrees for the continuance of studies. **Bachelor's Degrees are not admitted**. Undergraduates can apply for admission, but they must have passed the degree examination by the start date of the PhD Programme activities: these candidates are required to provide the marks of the exams taken during their undergraduate career. Preferential requirement is the relevance of the undergraduate University Degree awarded in the topics of the PhD Programme of Information Engineering.
Total number of posts available	n. 9: - n. 7 posts benefiting of a scholarship / other forms of financial support, among which 2 scholarships within the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund, Ministerial Decree n. 118/2023 - n. 2 posts without scholarship / other forms of financial support
Out of which reserved posts	**A maximum number of 6 posts in all PhD Programmes, financed by maintenance allowance, are reserved to candidates of Pakistani citizenship**, in compliance with the MoU signed by The Higher Education Commission, Government of the Islamic Republic of Pakistan (hereinafter referred to as HEC Pakistan) and by the University of Studies of Brescia on 03 December 2020.
Number of scholarships / or	- n. 2 for ordinary posts for EU and no EU citizens not having a research

equivalent financial support	topic
Posts linked to a research topic (among those already available)	- n. 2 ordinary posts for EU and no EU citizens co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund, Ministerial Decree n. 118/2023 on topics concerning the disciplinary areas consistent with digital and environmental issues as described under Article 7 of Ministerial Decree 118/2023. - n. 1 ordinary post for EU and no EU citizens co-financed by the University of Brescia and the project "TESLA: Progetto Cariplo-Circular Economy "Transformation of plastic waste in Electrocatalysts, Supported by exhausted gases recovery Layout" funded by Fondazione Cariplo (Circular Economy call 2022), having a research topic on "*Innovative materials for the energy transition*"
Selection Procedure	
Evaluation of Curriculum Vitae/Publications, etc.	Maximum score: 20/100 Eligible documentation: - University curriculum, including the specification of the degree achieved or to be achieved, title and one-page summary of the Master thesis, and transcript of academic records taken to obtain the degree and specialist/master's degree or, for candidates with eligible title obtained in a non-Italian University, a document analogous and equivalent to the Master thesis. - Previous study experience in prominent international research centers - Any other supporting documentation and qualifications that can be considered relevant and useful for the admission evaluation process.
Evaluation of a project proposal	Maximum score for the research project proposal: 40/100 The research project proposal must be submitted online jointly with the admission form. The topic of the research project must fall within research activities that are relevant to any of the curricula of the PhD Programme. The research project must be presented as a written proposal, in either Italian or English, with a maximum length of 25.000 characters (excluding spaces), and should be organized as follows: 1. Author 2. Title 3. Summary of State-of-the-art 4. Main motivations and goals of the proposed research proposal 5. Detailed description of the research project 6. Proposed scientific methodology 7. Bibliographic references. Only candidates who score at least 24 points in the evaluation of their research proposal will be admitted to the interview.
Interview	Maximum score for the interview: 40/100 Interview includes to discuss on the research project proposal the candidates' present; on the possible list of publications and qualifications presented by the candidate, and an oral evaluation of English language skills. Candidates may be allowed to be interviewed remotely with the use of a video conference application, pursuant to the prescriptions envisaged by Article 8, paragraphs 6 and 7 of the Call for Admission.

Place and date of the interview	The date (and, if needed, the place) of the interview will be published at least 20 days in advance on the UNIBS web site https://www.unibs.it/en/node/1078
Contact information of the PhD Programme	Prof. Ivano Alessandri: ivano.alessandri@unibs.it; Mrs. Rosaria Nardo – Secretariat Department of Information Engineering: rosaria.nardo@unibs.it
PhD Teaching and research activity	https://permalink.unibs.it/phd/drii/site https://permalink.unibs.it/phd/drii/en

PhD PROGRAMME IN MECHANICAL AND INDUSTRIAL ENGINEERING	
Scientific areas	01 – Mathematical and Information Sciences; 02 – Physical Sciences; 03 – Chemical Sciences; 08 – Civil Engineering and Architecture; 09 – Industrial and Information Engineering; 12 – Law Sciences; 13 – Economical and Statistical Sciences; 14 – Social and Political Sciences
Macro areas	01/A - mathematical analysis, probability and mathematical statistics 02/A – Physics of Fundamental Interactions 03/B - Inorganic Chemistry and Applied Technologies 08/B – Structural and Geotechnical Engineering 09/A – Mechanical and Aerospace Engineering and Naval Architecture 09/B – Manufacturing, Industrial and Management Engineering. 09/C – Energy, Thermomechanical and Nuclear Engineering 09/D – Chemical and Materials Engineering 09/E – Electrical and Electronic Engineering and Measurements 09/G – Systems Engineering and Bioengineering 12/E – International, European Union, Comparative, Economic and Market Law 13/A - Economy 14/D – Sociology of economic processes, work, environment and territory.
Duration	3 years
Starting date	November 1st, 2023
Proponent Structure	Department of Mechanical and Industrial Engineering
Coordinator	Prof. Pietro Poesio
Curricula	Smart Factory and Advanced Manufacturing Industry Sustainable Mobility Health and Well-being Production systems, safety, environment, and quality of work Development of basic and methodological knowledge
Admission requirements	All University Degrees of the type enlisted below are eligible. A University degree achieved in Italy, such as University Degree (Italian Laurea) achieved pursuant to the Italian academic system prior to Ministerial Decree 509/1999, amended with Ministerial Decree 270/2004; equivalent Advanced Degree (Italian Laurea Specialistica) / Master's Degree (Italian Laurea Magistrale) or any equivalent academic Master Degree achieved from foreign Universities. For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners. The eligibility of the foreign university degree is ascertained by the Board of Examiners of the selection procedure of the PhD Programmes, in compliance with the legislation in force in Italy and in

	the country where the university degree was awarded, as well as by the Treaties or international agreements on recognition of university degrees for the continuance of studies.

Bachelor's Degrees are not admitted.

Undergraduates can apply for admission, but they must have passed the degree examination by the start date of the PhD Programme activities: these candidates are required to provide the marks of the exams taken during their undergraduate career.

Proficiency in English is required |
| **Total number of posts available** | n. 9:
- n. 7 posts benefiting of a scholarship / other forms of financial support and
- n. 2 posts without scholarship / other forms of financial support |
| **Out of which reserved posts** | **A maximum number of 6 posts in all PhD Programmes, financed by maintenance allowance, are reserved to candidates of Pakistani citizenship**, in compliance with the MoU signed by The Higher Education Commission, Government of the Islamic Republic of Pakistan (hereinafter referred to as HEC Pakistan) and by the University of Studies of Brescia on 03 December 2020. |
| **Number of scholarships / or equivalent financial support** | n. 2 for ordinary posts for EU and no EU citizens not having a research topic |
| **Posts linked to a research topic (among those already available)** | - n. 1 ordinary post for EU and no EU citizens co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund Ministerial Decree n. 118/2023 on Public Administration, having a research topic / area under Article n. 9

- n. 1 ordinary post for EU and no EU citizens co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund Ministerial Decree n. 118/2023 on M4C1 – Inv. 4.1, category: General Research NPRR, having a research topic / area under Article n. 8

- n. 1 ordinary post for EU and no EU citizens co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund "PNRR *Sustainable Mobility Center* (Centro Nazionale per la Mobilità Sostenibile)" - SPOKE 11 *Innovative Materials & Light weighting* (Materiali Innovativi e Alleggerimento) Code CN00000023, Ministerial Decree n.1033 dated 17/06/2022, CUP D83C22000690001, having the research topic on "*Materials and lightening for sustainable mobility*" |
| **Selection Procedure** | |
| **Evaluation of Curriculum Vitae/Publications, etc.** | Maximum score: 20/100

Eligible documentation:
- University curriculum, including the specification of the degree achieved or to be achieved, title and one - page summary of the Master thesis (or of a document similar to the thesis drawn up during the foreign university course for candidates having an eligible University Degree achieved in a non-Italian University), and the transcript of academic records |

	- Scientific publications - Any other supporting documentation and qualifications that can be considered relevant and useful for the admission evaluation process.
Evaluation of a project proposal	Maximum score for the research project proposal: 40/100 The research project proposal must be submitted on-line jointly with the admission form. The topic of the research project must fall within research activities that are relevant to any of the curricula of the PhD Programme. The research project must be presented as a written proposal, in either Italian or English, with a maximum length of 25.000 characters (excluding spaces), and should be organized as follows: 1. Author 2. Title 3. Summary of State-of-the-art 4. Main motivations and goals of the proposed research proposal 5. Detailed description of the research project 6. Proposed scientific methodology 7. Bibliographic references. Only candidates who score at least 24 points in the evaluation of their research proposal will be admitted to the interview.
Interview	Maximum score for the oral: 40/100 The interview will focus to discuss about the academic and professional qualifications outlined by the candidate, on a thematic area of the PhD Programme and will be designed to assess the motivation and ability of the candidate to scientific research. The interview is inclusive of the evaluation of the knowledge of the English language. Only candidates who score at least 24 points in the interview will be considered eligible. Candidates may be allowed to be interviewed remotely with the use of a video conference application, pursuant to the prescriptions envisaged by Article 8, paragraphs 6 and 7 of the Call for Admission.
Place and date of the interview	The interview will take place on **July 24th and 25th, 2023, beginning at 9:30 a.m. (Italian time)**, at the Aula Riunioni (Meeting Room) of the Department of Mechanical and Industrial Engineering in via Branze n. 38, Brescia, University of Brescia, Italy
Contact information of the PhD Programme	Prof. Pietro Poesio, email: pietro.poesio@unibs.it
PhD Teaching and research activity	https://permalink.unibs.it/phd/drimi/site https://permalink.unibs.it/phd/drimi/en

PhD PROGRAMME IN MOLECULAR GENETICS, BIOTECHNOLOGIES AND EXPERIMENTAL MEDICINE	
Scientific areas	02 – Physical Sciences; 05 – Biological Sciences; 06 – Medical Sciences
Macro areas	02/D; 05/E; 05/F; 05/H; 05/I; 06/A; 06/C; 06/D; 06/F; 06/G; 06/H; 06/M; 06/N; 11/E
Duration	3 years
Starting date	November 1st, 2023
Proponent Structure	Department of Molecular and Translational Medicine
Coordinator	Prof. Eugenio Monti

Curricula	- Molecular Genetics Applied to Medical Sciences
	- Biotechnologies for the Health and the Environment
	- Forensic Medical Sciences
Admission requirements	LMG/01 University Degree in Law
	LM-6 Biology
	LM-7 Agricultural Biotechnologies
	LM-8 Industrial Biotechnologies
	LM-9 Medical, Veterinary and Pharmaceutical Biotechnologies
	LM-13 Pharmacy and Industrial Pharmacy
	LM-17 Physics
	LM-18 Computing
	LM-21 Biomedical Engineering
	LM-22 Chemical Engineering
	LM-41 Medicine and Surgery
	LM-42 Veterinary Medicine
	LM-46 Dentistry and dental prostheses
	LM-54 Chemical Sciences
	LM-55 Cognitive Sciences
	LM-70 Food Sciences and Technologies
	LM-82 Statistical Sciences
	A University degree achieved in Italy, such as University Degree (Italian Laurea) achieved pursuant to the Italian academic system prior to Ministerial Decree 509/1999, amended with Ministerial Decree 270/2004; equivalent Advanced Degree (Italian Laurea Specialistica) / Master's Degree (Italian Laurea Magistrale) or any equivalent academic Master Degree achieved from foreign Universities.
	For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners.
	The eligibility of the foreign university degree is ascertained by the Board of Examiners of the selection procedure of the PhD Programmes, in compliance with the legislation in force in Italy and in the country where the university degree was awarded, as well as by the Treaties or international agreements on recognition of university degrees for the continuance of studies.
	Bachelor's Degrees are not admitted.
	Undergraduates can apply for admission, but they must have passed the degree examination by the start date of the PhD Programme activities: these candidates are required to provide the marks of the exams taken during their undergraduate career.
	Proficiency in English is required.
Total number of posts available	n. 8:
	- n. 6 posts benefiting of a scholarship / other forms of financial support and
	- n. 2 post without scholarship / other forms of financial support
Out of which reserved posts	**A maximum number of 6 posts in all PhD Programmes, financed by maintenance allowance, are reserved to candidates of Pakistani citizenship**, in compliance with the MoU signed by The Higher Education Commission, Government of the Islamic Republic of Pakistan (hereinafter referred to as HEC Pakistan) and by the

	University of Studies of Brescia on 03 December 2020.
Number of scholarships / or equivalent financial support	n. 2 for ordinary posts for EU and no EU citizens not having a research topic
Posts linked to a research topic (among those already available)	n. 2 ordinary posts for EU and no EU citizens co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund Ministerial Decree n. 118/2023 on M4C1 – Inv. 4.1, category: General Research NPRR, having a research topic pursuant to Article n. 8
	Selection Procedure
Evaluation of Curriculum Vitae/Publications, etc.	Maximum score 25 points, as follows: - Master's Degree final maximum score: 7. If the candidate is not yet graduated, instead of the final grade the average grade of the passed exams will be taken into consideration - Publications and abstracts in extenso, maximum score: 6 - Other qualifications (specialization, master, lab training, conference attendance, language certificates, PhD Degrees, etc.); maximum score: 6 - Other activities (research, professional activities, etc.) that are relevant for the PhD Programme or one of the curricula); maximum score: 6.
Evaluation of a project proposal	Not envisaged
Interview	The interview has a maximum score of 75 points. The interview is passed if the candidate obtains a mark of at least 45. The interview will focus to discuss the candidates' qualifications provided; on a thematic area of at least one of the curricula indicated by the candidate and will be designed to assess the motivation and ability of the candidate to scientific research. The interview is inclusive of the evaluation of the knowledge of the English language. Candidates may be allowed to be interviewed remotely with the use of a video conference application, pursuant to the prescriptions envisaged by Article 8, paragraphs 6 and 7 of the Call for Admission. Those candidates taking the interview remotely must enclose in their online application the "On-line interview form", downloadable from the website, duly completed and signed, also indicating your remote connection contact.
Place and date of the interview	The date (and, if needed, the place) of the interview will be published at least, 20 days in advance on the UNIBS web site https://www.unibs.it/en/node/1078
Contact information of the PhD Programme	Prof. Eugenio Monti, email: eugenio.monti@unibs.it
PhD Teaching and research activity	https://permalink.unibs.it/phd/genetica/en

PhD PROGRAMME IN RIGHTS, PERSON, INNOVATION AND MARKET	
Scientific areas	Area 12 (Law Sciences)
Macro areas	IUS/01, IUS/02, IUS 03, IUS/04, IUS/07, IUS/08, IUS/09, IUS/10, IUS 11, IUS/12, IUS/13, IUS 14, IUS/15, IUS 16, IUS/17, IUS/18, IUS 19, IUS 20, IUS/21
Duration	3 years
Starting date	November 1st, 2023
Proponent Structure	Department of Law
Coordinator	Prof. Luca Mario Masera

Curricula	Not Envisaged
Duration	All University Degrees of the type enlisted below are eligible:
	A University degree achieved in Italy, such as University Degree (Italian Laurea) achieved pursuant to the Italian academic system prior to Ministerial Decree 509/1999, amended with Ministerial Decree 270/2004; equivalent Advanced Degree (Italian Laurea Specialistica) / Master's Degree (Italian Laurea Magistrale) or any equivalent academic Master Degree achieved from foreign Universities.
	For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners.
	The eligibility of the foreign university degree is ascertained by the Board of Examiners of the selection procedure of the PhD Programmes, in compliance with the legislation in force in Italy and in the country where the university degree was awarded, as well as by the Treaties or international agreements on recognition of university degrees for the continuance of studies.
	Bachelor's Degrees are not admitted.
	Undergraduates can apply for admission, but they must have passed the degree examination by the start date of the PhD Programme activities: these candidates are required to provide the marks of the exams taken during their undergraduate career.
	Proficiency in English is required
Total number of posts available	n. 8 - n. 6 posts benefiting of a scholarship / other forms of financial support and - n. 2 posts without scholarship / other forms of financial support
Out of which reserved posts	**A maximum number of 6 posts in all PhD Programmes, financed by maintenance allowance, are reserved to candidates of Pakistani citizenship**, in compliance with the MoU signed by The Higher Education Commission, Government of the Islamic Republic of Pakistan (hereinafter referred to as HEC Pakistan) and by the University of Studies of Brescia on 03 December 2020.
Number of scholarships / or equivalent financial support	n. 2 for ordinary posts for EU and no EU citizens not having a research topic
Posts linked to a research topic (among those already available)	- n. 2 for ordinary posts for EU and no EU citizens co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund Ministerial Decree n. 118/2023 on Public Administration, having a research topic pursuant to Article n. 9
Selection Procedure	
Admission requirements	Maximum score applied to candidates' qualifications: 40/100
	Eligible qualifications: - Master's thesis (or a similar document drawn up during the foreign university course for candidates having an eligible University Degree achieved in a non-Italian University) and the related academic curriculum: maximum 20 scores; - Scientific Publications and other qualifications deemed congruent and useful for valuation purposes: maximum 20 scores.

	If the candidate is not yet graduated, instead of the final grade the average grade of the passed exams will be considered.
	The following step of the evaluation process (that is, the evaluation of the research project) will be not addressed unless the candidate receives at least 18/100 at this stage.
Evaluation of a project proposal	Maximum score for the research project proposal: 30/100 The research project proposal must be submitted online jointly with the admission form. The research project must be presented as a written proposal, in either Italian or English, with a maximum length of 25,000 characters (excluding spaces), and should be organized as follows: 1. Author; 2. Title; 3. Short literature review; 4. Research questions and objectives; 5. Methodology; 6. References. Only candidates who receive at least 18/100 in this evaluation phase will be admitted to the interview.
Interview	Maximum score at the interview: 30/100 The interview will focus to discuss the research project proposal and the candidate's curriculum vitae/publications. Furthermore, the interview also aims at assessing candidate's proficiency in English language. Candidates may be allowed to be interviewed remotely with the use of a video conference application, pursuant to the prescriptions envisaged by Article 8, paragraphs 6 and 7 of the Call for Admission. At the end of the entire evaluation process, candidates with an overall score lower than 70/100 will not be admitted to the PhD Programme.
Place and date of the interview	The date (and, if needed, the place) of the interview will be published at least, 20 days in advance on the UNIBS web site https://www.unibs.it/en/node/1078 .
Contact information of the PhD Programme	Prof. Luca Mario Masera, Department of Law, e-mail luca.masera@unibs.it
PhD Teaching and research activity	https://permalink.unibs.it/phd/diritti-persona/en

PhD PROGRAMME IN PRECISION MEDICINE

Scientific areas	02-Physical Sciences, 05-Chemical Sciences, 05- Biological Sciences; 06-Medical Sciences
Macro areas	02/B, 03/B, 03/D, 05/E, 05/F, 05/G, 06/A, 06/C, 06/D, 06/M
Duration	3 years
Starting date	November 1st, 2023
Proponent Structure	Department of Molecular and Translational Medicine
Coordinator	Prof. Stefania Maria Filomena Mitola
Curricula	Not envisaged
Admission requirements	The following University Degrees achieved in Italy: LM-6 Biology

| | LM-7 Agricultural Biotechnologies
LM-8 Industrial Biotechnologies
LM-9 Medical, Veterinary and Pharmaceutical Biotechnologies
LM-13 Pharmacy and Industrial Pharmacy
LM-17 Physics
LM-18 Informatics
LM-21 Biomedical Engineering
LM-41 Medicine and Surgery
LM-42 Veterinary Medicine
LM-54 Chemistry
LM-55 Cognitive Sciences
LM-60 Nature Sciences
LM-61 Science of Human Nutrition
LM-67 Science and Technology of Preventive and Adaptive Physical Activities
LM/SNT2 Rehabilitation Sciences

A University degree achieved in Italy, such as University Degree (Italian Laurea) achieved pursuant to the Italian academic system prior to Ministerial Decree 509/1999, amended with Ministerial Decree 270/2004; equivalent Advanced Degree (Italian Laurea Specialistica) / Master's Degree (Italian Laurea Magistrale) or any equivalent academic Master Degree achieved from foreign Universities.
For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners.

The eligibility of the foreign university degree is ascertained by the Board of Examiners of the selection procedure of the PhD Programmes, in compliance with the legislation in force in Italy and in the country where the university degree was awarded, as well as by the Treaties or international agreements on recognition of university degrees for the continuance of studies.

Bachelor's Degrees are not admitted.

Undergraduates can apply for admission, but they must have passed the degree examination by the start date of the PhD Programme activities: these candidates are required to provide the marks of the exams taken during their undergraduate career. |
| **Total number of posts available** | n. 8:
n. 6 posts benefiting of a scholarship / other forms of financial support and
- n. 2 posts without scholarship / other forms of financial support |
Out of which reserved posts	**A maximum number of 6 posts in all PhD Programmes, financed by maintenance allowance, are reserved to candidates of Pakistani citizenship**, in compliance with the MoU signed by The Higher Education Commission, Government of the Islamic Republic of Pakistan (hereinafter referred to as HEC Pakistan) and by the University of Studies of Brescia on 03 December 2020.
Number of scholarships / or equivalent financial support	n. 3 for ordinary posts for EU and no EU citizens not having a research topic
Posts linked to a research topic (among those already available)	n. 1 ordinary post for EU and no EU citizens co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund Ministerial Decree n.

	118/2023 on M4C1 – Inv. 4.1, category: General Research NPRR, having the research topic on "*Precision medicine applied to neurosciences and oncology*"
Selection Procedure	
Evaluation of Curriculum Vitae/Publications, etc.	Maximum score: 40/100 - Undergraduate University degree final score: maximum score 20/100 - Average grade of examinations passed during the course (only for undergraduates who will pass the degree examination by the start date of the PhD Programme activities): maximum score 20/100 - Publications: maximum score 8/100 - Presentations to scientific meetings: maximum score 6/100 - Other qualifications: specialization, educational courses and stages, conference attendance. English language certificates: maximum score 6/100.
Evaluation of a project proposal	Not envisaged
Interview	Maximum score: 60/100 Interview on one of the thematic areas of the curriculum indicated by the candidate; it envisages to discuss about the candidates' qualifications provided; evaluation of the knowledge of English language; evaluation of communication skill and motivation to research. The interview is passed if the achieved score is no lower than 30/100. Knowledge of the Italian language is not required to foreign candidates. To access the interview it is mandatory to have achieved a score equal to or greater than 18/40 resulting from the score achieved in the Evaluation of the Curriculum Vitae (which envisages a maximum of 40 points). Candidates may be allowed to be interviewed remotely with the use of a video conference application, pursuant to the prescriptions envisaged by Article 8, paragraphs 6 and 7 of the Call for Admission.
Place and date of the interview	The date (and, if needed, the place) of the interview will be published at least, 20 days in advance on the UNIBS web site https://www.unibs.it/en/node/1078
Contact information of the PhD Programme	Precision Medicine Secretariat: segreteria.precisionmedicine@unibs.it
PhD Teaching and research activity	https://permalink.unibs.it/phd/precmed/en

PhD PROGRAMME IN TECHNOLOGY FOR HEALTH	
Scientific areas	03 - Chemical Sciences; 05 - Biological Sciences; 06 - Medical Sciences; 09 - Industrial and Information Engineering.
Macro areas	03/B2; 03/D2 05/D1; 05/G1; 06/A2; 06/E3; 06/F1; 06/I1; 06/M2; 09/D1; 09/E4; 09/F1; 09/F2; 09/G1; 09/G2; 09/H1
Duration	3 years
Starting date	November 1st, 2023
Proposing Structure	Department of Information Engineering
Coordinator	Prof. Nicola Francesco Lopomo
Curricula	Not envisaged
Admission requirements	LM-6 Biologia; LM-7 Biotecnologie agrarie; LM-8 Biotecnologie

industriali; LM-9 Biotecnologie mediche, veterinarie e farmaceutiche; LM-12 Design; LM-13 Farmacia e farmacia industriale; LM-17 Fisica; LM-18 Informatica; LM-20 Ingegneria aerospaziale e astronautica; LM-21 Ingegneria biomedica; LM-22 Ingegneria chimica; LM-23 Ingegneria civile; LM-25 Ingegneria dell'automazione; LM-26 Ingegneria della sicurezza; LM-27 Ingegneria delle telecomunicazioni; LM-28 Ingegneria elettrica; LM-29 Ingegneria elettronica; LM-30 Ingegneria energetica e nucleare; LM-31 Ingegneria gestionale; LM-32 Ingegneria informatica; LM-33 Ingegneria meccanica; LM-35 Ingegneria per l'ambiente e il territorio; LM-40 Matematica; LM-41 Medicina e chirurgia; LM-44 Modellistica matematico-fisica per l'ingegneria; LM-46 Odontoiatria e protesi dentaria; LM-47 Organizzazione e gestione dei servizi per lo sport e le attività Motorie; LM-53 Scienza e Ingegneria dei Materiali; LM-54 Scienze chimiche; LM-60 Scienze della Natura; LM-61 Scienze della nutrizione umana; LM-66 Sicurezza Informatica; LM-67 Scienze e tecniche delle attività motorie preventive e adattate; LM-68 Scienze e tecniche dello sport; LM-69 Scienze e tecnologie agrarie; LM-70 Scienze e tecnologie alimentari; LM-71 Scienze e tecnologie della chimica industriale; LM-74 Scienze e tecnologie geologiche; LM-75 Scienze e tecnologie per l'ambiente e il territorio; LM-79 Scienze geofisiche; LM-82 Scienze statistiche; LM/SNT1 Scienze infermieristiche e ostetriche; LM/SNT2 Scienze riabilitative delle professioni sanitarie; LM/SNT3 Scienze delle professioni sanitarie tecniche; LM/SNT4 Scienze delle professioni sanitarie della prevenzione.

A University degree achieved in Italy, such as University Degree (Italian Laurea) achieved pursuant to the Italian academic system prior to Ministerial Decree 509/1999, amended with Ministerial Decree 270/2004; equivalent Advanced Degree (Italian Laurea Specialistica) / Master's Degree (Italian Laurea Magistrale) or any equivalent academic Master Degree achieved from foreign Universities.

For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners.

The eligibility of the foreign university degree is ascertained by the Board of Examiners of the selection procedure of the PhD Programmes, in compliance with the legislation in force in Italy and in the country where the university degree was awarded, as well as by the Treaties or international agreements on recognition of university degrees for the continuance of studies.

Bachelor's Degrees are not admitted.

Undergraduates can apply for admission, but they must have passed the degree examination by the start date of the PhD Programme activities: these candidates are required to provide the marks of the exams taken during their undergraduate career.

Total number of posts available	n. 12 posts in total: - n. 9 posts benefiting of a scholarship / other forms of financial support and - n. 3 posts without scholarship / other forms of financial support
Out of which reserved posts	**A maximum number of 6 posts in all PhD Programmes, financed**

	by maintenance allowance, are reserved to candidates of **Pakistani citizenship**, in compliance with the MoU signed by The Higher Education Commission, Government of the Islamic Republic of Pakistan (hereinafter referred to as HEC Pakistan) and by the University of Studies of Brescia on 03 December 2020.
Number of scholarships / or equivalent financial support	n. 3 for ordinary posts for EU and no EU citizens not having a research topic
Posts linked to a research topic (among those already available)	- n. 1 ordinary post for EU and no EU citizens co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund Ministerial Decree n. 118/2023 on Public Administration, pursuant to Article n. 9 on the research area "*Having a particular interest in the definition of processes for the selection and adoption of enabling technologies and solutions, in order to ensure greater effectiveness, efficiency and cost-effectiveness of public action*".
	- n. 1 ordinary post for EU and no EU citizens co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund Ministerial Decree n. 118/2023 on M4C1 – Inv. 4.1, category: General Research NPRR, pursuant to Article n. 8 on the research area "*Having a particular interest in research activities oriented towards digitization and innovation or ecological transition and declined in an interdisciplinary and intersectoral way*".
	- n. 1 post benefiting of a scholarship co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund project "Centro Nazionale Mobilità Sostenibile - CNMS" of the program "Potenziamento strutture di ricerca e creazione di campioni nazionali di R&S su alcune Key Enabling Technologies", Mission 4, Component 2, Investment 1.4, Proposal ID CN00000023, decree 1033 - 17/06/2022, CUP D83C22000690001, Spoke n. 5 "Light Vehicle and Active Mobility" having the research topic "*Implementation of oxide nanowires for the optimization of gas sensors and solid-state fuel cells*";
	- n. 1 post benefiting of a scholarship co-financed by the University of Brescia and the Italian NPRR National Recovery and Resilience Plan - Next Generation EU Fund project "3A-Italy" of the program "Partenariati estesi alle università, ai centri di ricerca, alle aziende per il finanziamento di progetti di ricerca di base", Mission 4, Component 2, Investment 1.3, ID MUR PE00000004, CUP D73C22001250001 having the research topic "*Implementation of 'printed electronics' solutions for the development of 'smart' products*";
Selection Procedure	
Evaluation of Curriculum Vitae and academic / professional history / Publications, etc.	Preliminarily, the Board of Examiners will evaluate the candidates' Curriculum Vitae. The Candidate will be admitted to the qualifications evaluation, as a result of the positive relevance assessment between the Curriculum Vitae and the research areas of the PhD Programme. Evaluation score: 0-20 points as follows: a) Score of the Degree: 0-10 points or, in alternative, if the candidate is not yet graduated, instead of the final grade the average grade of the passed exams will be taken into consideration. b) Publications: 0-4 points. c) Other qualifications: 0-6 points
Evaluation of a project proposal	The maximum score: 0 - 40 points

	Only candidates who score at least 24 points in the evaluation of their research proposal will be admitted to the interview. For the posts linked to a research topic, the coherence between the proposed project and the topic itself will also be assessed, in particular.
Additional Documentation Required	Candidates must include in their application: 1) A detailed Curriculum Vitae, including: • A title and summary of one page of the thesis (for undergraduates admitted conditionally, in the absence of the thesis, a draft of it signed by the supervisor), or a document similar to the university thesis drawn up during the foreign university course for candidates with an admissible qualification obtained in a non-Italian university; • The degree score, or, if they are obtaining the degree, a list of the examinations with the relative score; • Any training experience (internships, thesis, double degrees) carried out abroad with a brief description of the performed activity. 2) A research project, which must be presented as a written proposal, having a maximum length of 25.000 characters (including spaces), and should be formatted as follows: • Author • Title • Summary of State of the art • Detailed description of the research project • Bibliographic references. 3) List of the scientific publications. 4) A brief statement in which the candidate describes the scientific interest and the motivations for the application to the doctoral program. 5) Reference letters, if available. The documents required must be written in English language.
Interview	The Interview includes a discussion on the presented research project proposal, on the possible candidate's list of publications and qualifications, and an oral evaluation of English language skills. The maximum score for the evaluation of the Interview is 40 points. The Interview is considered passed unless the candidate has achieved a score of at least 20. Applicants may be allowed to be interviewed remotely by video conference, pursuant to the prescriptions envisaged by Article 8, paragraphs 6 and 7 of the Call for Admission.
Place and date of the interview	The date (and, if needed, the place) of the interviews will be published at least, 20 days in advance on the UNIBS web site https://www.unibs.it/en/node/1078
Academic contact information of the PhD Programme	Mrs. Rosaria Nardo, Department of Information Engineering, e-mail: rosaria.nardo@unibs.it
Teaching and research PhD activity	https://permalink.unibs.it/phd/t4h/en https://permalink.unibs.it/phd/t4h/site