



UNIVERSITÀ
DEGLI STUDI
DI BRESCIA

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ANNEX A - PhDs PROGRAMMES DATA SHEETS

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; 13 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, 2024
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



	<p>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-70 Scienze e tecnologie alimentari 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 società 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</p> <p>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.</p> <p>For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners.</p> <p>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.</p> <p>Bachelor's Degrees are not admitted.</p> <p>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.</p>
Total number of posts available	<p>n. 9:</p> <ul style="list-style-type: none"> - n. 7 posts benefiting of a scholarship / other forms of financial support and - n. 2 posts without scholarship / other forms of financial support
Posts without a research topic (among those already available)	<p>(CODES A1-A2-A3-A4)</p> <p>n. 4 posts for EU and non-EU candidates benefiting of a scholarship financed by the University of Brescia</p>
Posts linked to a research topic (among those already available)	<p>(CODE B)</p> <p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the D.M. 630/2024 and by the company GRUPPO CONCORDE S.P.A. having the research topic <i>“Sviluppo di protocolli per il benessere lavorativo con l’ausilio di sistemi di neuroscienze applicate all’innovazione” / “Development of protocols for workplace</i></p>



	<i>well-being using neuroscience systems applied to innovation”</i>
Out of which reserved posts	(CODES P1-P2) n. 2 - 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.
Out of which posts not benefiting a scholarship (among those already available)	(CODES OSB1-OSB2) - n. 2 posts without scholarship / other forms of financial support
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: - 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; - Publications: 0-4 points; - 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; 03 -Chemical Sciences
Macro areas	03/D; 05/A; 05/D; 05/E; 05/G; 06/A; 06/D; 06/F; 06/I; 06/M
Duration	3 years
Starting date	November 1st, 2024



Proponent Structure	Department of Molecular and Translational Medicine
Coordinator	Prof. Alessandra Valerio (Advocate)
Curricula	Neuroscience Oncology and Immunology Pharmacology and Microbiology
Admission requirements	<p>The following University Degrees achieved in Italy:</p> <p>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/SNT1 Nursing and Midwifery Sciences LM/STN2 Rehabilitation Sciences for Health Professions</p> <p>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.</p> <p>For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners.</p> <p>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.</p> <p>Bachelor's Degrees are not admitted.</p> <p>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.</p>
Total number of posts available	<p>n. 12:</p> <ul style="list-style-type: none"> - n. 9 posts benefiting of a scholarship / other forms of financial support and - n. 3 posts without scholarship / other forms of financial support
Posts without a research topic (among those already available)	<p>(CODES A1-A2-A3-A4)</p> <p>n. 4 posts for EU and non-EU candidates benefiting of a scholarship financed by the University of Brescia</p>
Posts linked to a research topic (among those already available)	(CODE B)



	<p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the D.M. 630/2024 and by the company PHRONEMA S.R.L. having the research topic “<i>Analisi morfologica e ottica della struttura corneale: Valutazione dell’interferometria polarimetrica come tecnologia a fini diagnostici e chirurgici</i>” / “<i>Morphological and optical analysis of the corneal structure: Evaluation of polarimetric interferometry as a technology for diagnostic and surgical purposes</i>”</p> <p>(CODE C) n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by the University of Brescia and by the funds released by Dott.ssa Grillo (Ref.: CARIPLO GIOVANI-CUP D53C23000440007), having the research topic “<i>Disfunzione del tessuto adiposo nelle malattie metaboliche</i>” / “<i>Adipose tissue dysfunction in metabolic diseases</i>”</p> <p>(CODE D) n. 1 post for candidates being private and public administration employees that envisage the upholding of the salary treatment promoted by Fondazione Serena Onlus-Centro Clinico NeMO, having the research topic “<i>Disfunzioni mitocondriali e neuroinfiammazione nella sclerosi laterale amiotrofica: studio per l’individuazione di nuovi biomarcatori</i>” / “<i>Mitochondrial dysfunction and neuroinflammation in amyotrophic lateral sclerosis: study for the identification of new biomarkers</i>”</p>
Out of which reserved posts	<p>(CODES P1-P2) n. 2 - 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.</p>
Out of which posts not benefiting a scholarship (among those already available)	<p>(CODES OSB1-OSB2-OSB3) - n. 3 posts without scholarship / other forms of financial support</p>
Selection Procedure	
Evaluation of Curriculum Vitae/Publications, etc.	<p>Maximum score: 30/100</p> <ul style="list-style-type: none"> - 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	<p>Maximum score: 70/100</p> <p>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.</p> <p>The Interview is passed if the achieved score is no lower than 30.</p> <p>Knowledge of the Italian language is not required to foreign candidates.</p> <p>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.</p>
Place and date of the interview	<p>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</p>
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 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, 2024
Proposing Structure	Department of Civil, Environmental, Architectural Engineering and Mathematics
Coordinator	Prof. Marco Pilotti (Advocate)
Curricula	<p>The research activity concerns specific topics pertaining to the different curricula:</p> <ul style="list-style-type: none"> - 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	<p>All University Degrees of the type enlisted below are eligible:</p> <p>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.</p>



	<p>For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners.</p> <p>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.</p> <p>Bachelor's Degrees are not admitted.</p> <p>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.</p>
Total number of posts available	<p>n. 20, subdivide as follows:</p> <ul style="list-style-type: none"> - n. 15 posts benefiting of a scholarship / other forms of financial support and - n. 5 posts without scholarship / other forms of financial support
Posts without a research topic (among those already available)	<p>(CODES A1-A2-A3)</p> <p>n. 3 posts for EU and non-EU candidates benefiting of a scholarship financed by the University of Brescia</p>
Posts linked to a research topic (among those already available)	<p>(CODE B)</p> <p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the D.M. 630/2024 and by the Centro di Ricerche Sismologiche dell'Istituto Nazionale di Oceanografia e Geofisica Sperimentale – OGS, as well by the funds released by Prof. Tira, having the research topic “La resilienza delle infrastrutture di trasporto e dei sistemi di mobilità in condizioni di rischio fisico (The resilience of transport infrastructures and mobility systems under physical risk)</p> <p>(CODE C)</p> <p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the D.M. 630/2024 and by the company Villa Franciacorta di Bianchi Alessandro e Roberta S.S. having the research topic “Mappatura del capitale naturale e dei servizi ecosistemici in vigneto” / “Mapping natural capital and ecosystem services in vineyards”</p> <p>(CODE D)</p> <p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the D.M 629/2024 M4C1 – Inv. 4.1, art. 10 – category “Dottorati per il patrimonio culturale” / “PhD Programmes on Cultural Heritage”</p> <p>(CODE E)</p> <p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by the University of Brescia and by the funds released by Prof. Gilioli (Ref. Comune di Brescia-CT2022), having the research topic “Modelli di dinamica di popolazioni” / “Population dynamics models”</p> <p>(CODE F)</p>



	<p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by the University of Brescia and by the funds released by Prof. Minelli (Ref. Provincia di Brescia-2022), having the research topic <i>“Rinforzo strutturale di strutture in c.a. e c.a.p. esistenti soggette a degrado severo”</i> / <i>“Structural reinforcement of existing reinforced concrete and prestressed concrete structures subject to severe degradation”</i></p> <p>(CODE G) n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by the University of Brescia and by the funds released by Prof. Sesana (Ref. UE-EPCRECAST/MEZEROE), having the research topic <i>“Sviluppo di una metodologia integrata per l'analisi prestazionale di soluzioni d'involucro innovative per edifici sostenibili e resilienti, attraverso strumenti di simulazione e di monitoraggio per la valutazione di fabbisogni, emissioni e circolarità”</i> / <i>“Development of an integrated methodology for the performance analysis of innovative envelope solutions for sustainable and resilient buildings, through simulation and monitoring tools for the evaluation of needs, emissions and circularity”</i></p> <p>(CODE H) n. 1 post for EU and non-EU candidates benefiting of a scholarship financed by the Centro di Ricerche Sismologiche dell'Istituto Nazionale di Oceanografia e Geofisica Sperimentale – OGS having the research topic <i>“Urgent computing of ground motion modelling, integrating vulnerability and exposure assessment, to facilitate rapid response to earthquakes”</i></p> <p>(CODE I) n. 1 post for EU and non-EU candidates benefiting of a scholarship financed by the funds released by Prof. Gilioli (Ref. GRANLATTE-CT2022/ERSAF-CT2021), having the research topic <i>“La sostenibilità nei sistemi agro-zootecnici”</i> / <i>“Sustainability in agro-zootechnical systems”</i></p>
Out of which reserved posts	<p>(CODES P1-P2) n. 2 - 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 <i>The Higher Education Commission, Government of the Islamic Republic of Pakistan</i> (hereinafter referred to as HEC Pakistan) and by the University of Studies of Brescia on 03 December 2020.</p> <p>(CODES CH1-CH2) n. 2 posts benefiting of a scholarship, reserved to candidates eligible under the European Call HORIZON-MSCA-2022-COFUND-01-01 “CHORAL”. Candidates are in the process of being identified through a separate EU evaluation procedure.</p>
Out of which posts not benefiting a scholarship (among those already available)	<p>(CODES OSB1-OSB2-OSB3-OSB4-OSB5) n. 5 posts without scholarship / other forms of financial support</p>
Selection Procedure	
Evaluation of Curriculum Vitae and academic / professional history / Publications, etc.	<p>University Degree Thesis: up to 10 points. For candidates pending to graduate, at most 10 points will be assigned, according to the following criterion: (average - 101) +1 being the average of the candidate's votes converted into hundredths Further qualifications: up to 10 points.</p>



Presentation of a project proposal	<p>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:</p> <p>Natural Risks Assessment and Management:</p> <ul style="list-style-type: none"> - 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. - Analysis of hydraulic hazard in mountainous and/or highly anthropized areas: the candidate should consider the typical aspects of hydraulic hazard in the Alpine area and show which conceptual schemes and numerical approaches can be used to study flood and debris flow problems in a small basin. <p>Mathematical Methods and Models for Engineering:</p> <p>The candidate discusses a research proposal on</p> <ul style="list-style-type: none"> - Partial differential equations for the description of physical phenomena. The candidate describes some analytical methods for the qualitative study of the solutions, and techniques for their numerical simulation. - Models for the mechanics of solids and fluids. The candidate describes modern applications and/or analytical and numerical methods that he/she intends to develop in the doctorate. <p>Appropriate Methodologies and Techniques for International Development Cooperation:</p> <p>- <i>Technology track:</i></p> <p>The candidate illustrates the main problems related to the management of water for human use in developing contexts. After having hypothesized a specific problem in a context with limited resources, chosen by the candidate, a research project is developed aimed at identifying appropriate solutions to ensure sustainable management of the problem. The proposed research project must clearly present the objectives, methodology and expected scientific results.</p> <p>- <i>Health track:</i></p> <p>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 should outline the issues related to tuberculosis in low-resource countries. Taking into consideration a specific context in the Central Asia area, at the candidate's choice, a plan should be developed aimed at reducing the impact of tuberculosis with a 5-year horizon. The candidate is asked to articulate, in order of priority, the problems prevalent in the country and the targeted interventions to mitigate their impact.</p> <p>Urban Planning and Mobility:</p> <p>1. Starting from the definition of risk, the candidate develops a possible research topic on risk mitigation, acting on the systemic vulnerability of</p>
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	<p>an urban area. The research project is part of the development of risk models for the evaluation of the safety of urban systems. As part of the research project, among other things, the PhD student will participate in the implementation of a decision support system for the analysis of the safety performance of an urban and/or extra-urban network.</p> <p>2. Starting from the definition of resilience, the candidate sets up a research project on the analysis of vulnerability and exposure of transport infrastructures in conditions of physical danger. 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 analysis in the field of mobility and monitoring of road infrastructures.</p> <p>Structural Rehabilitation of Historical and Modern Buildings:</p> <ul style="list-style-type: none"> - 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) <p>Technologies and Processes for the Environment and Agriculture:</p> <p>The candidate will propose a research project with a theme concerning one of the following topics:</p> <ol style="list-style-type: none"> 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 <p>***</p> <p>For the posts benefiting a PNRR scholarships:</p> <p>For the post CODE B: benefiting of a scholarship co-financed by PNRR pursuant to the DM 630/2024 and by the Istituto Nazionale di Oceanografia e di Geofisica sperimentale (OGS) di Trieste within the curriculum " Urban Planning and Mobility" the candidate will present a research project on the analysis of vulnerability and exposure of transport infrastructures in conditions of physical danger.</p> <p>For the post CODE C: benefiting of a scholarship co-financed by PNRR pursuant to the DM 630/2024 and by the company Villa</p>
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Franciacorta having the research topic “*Mappatura del capitale naturale e dei servizi ecosistemici in vigneto*” / “*Mapping natural capital and ecosystem services in vineyards*”, the candidate identifies the research methodologies aimed at developing a sustainability assessment system for wineries that refers to vineyard management methods that preserve and enhance natural capital. The assessment system must include the monitoring and representation of biodiversity in its structural and functional components. Starting from these representations, the development of models for the estimation of ecosystem services connected to the vineyard must be foreseen. The results of the research project, through the preparation of a review of the state of the art on the topic and the creation of a digital structure for the systematic collection and processing of data, must be defined to support the introduction of innovations along the entire wine supply chain, promoting the advantages of the ecological transition in wineries.

For the post **CODE D:** benefiting of a scholarship co-financed by PNRR pursuant to the **DM 629/2024 Patrimonio culturale / Cultural Heritage** (Curriculum: “**Structural Rehabilitation of Historical and Modern Buildings**”), Candidates are required to present a research project that falls within the themes reported in Article 10 of the Ministerial Decree n. 629, limited to the CUN areas represented in the DICATAM, and which, in particular, relates to the knowledge, understanding and interpretation of the material, structural, constructive, figurative and symbolic aspects of the architectural heritage, understood as an essential set of theoretical and methodological awareness to guide the identification of the most appropriate strategies for the rehabilitation, protection, conservation and enhancement intervention..

For the post **CODE E:** benefiting of a scholarship co-financed by the **University of Brescia and by the funds released by Prof. Gianni Gilioli**, having the research topic “*Modelli di dinamica di popolazioni*” / “*Population dynamics models*”, the application must include the presentation of a report demonstrating the candidate's ability to develop a research project concerning research methodologies aimed at developing mathematical modelling tools to describe the dynamics of structured and unstructured populations. In particular, the candidate must consider the methods for parameterizing the functions of dynamics models in relation to life cycle strategies and related energy aspects. Subsequently, the mathematical tools available for the representation at the population level of the processes described at the individual level and the derivation of population growth models must be reviewed. The results of the research project will have to be explored in light of possible applications in the field of management of natural populations that have impacts on the human economy.

For the post **CODE F:** benefiting of a scholarship co-financed by the **University of Brescia and by the funds released by Prof. Fausto Minelli**, having the research topic “*Rinforzo strutturale di strutture in c.a. e c.a.p. esistenti soggette a degrado severo*” / “*Structural reinforcement of existing reinforced concrete and prestressed concrete structures subject to severe degradation*”, the application must include the presentation of a research project, organized as required for the grants of the Curriculum in “**Structural Rehabilitation of Historical and Modern Buildings**”, which



demonstrates the candidate's ability to propose innovative, durable and sustainable solutions in the field of reinforcement of reinforced concrete and pre-stressed concrete elements, with particular attention to existing bridges.

For the post **CODE G:** benefiting of a scholarship co-financed by the **University of Brescia and by the funds released by Prof. Marta Maria Sesana**, having the research topic *“Sviluppo di una metodologia integrata per l'analisi prestazionale di soluzioni d'involucro innovative per edifici sostenibili e resilienti, attraverso strumenti di simulazione e di monitoraggio per la valutazione di fabbisogni, emissioni e circolarità” / “Development of an integrated methodology for the performance analysis of innovative envelope solutions for sustainable and resilient buildings, through simulation and monitoring tools for the evaluation of needs, emissions and circularity”*, the application must include the submission of a report demonstrating the candidate's ability to develop a research project related to the sustainability of buildings with in-depth analysis of the following technical architecture topics to achieve the objectives of the research project:

- the development of an integrated analysis methodology for the quantitative assessment of embodied and operational emissions together with the energy needs of the entire building throughout the entire life cycle, supported by a systematic analysis of the state of the art;
- the definition of Performance Indicators for the quantification of parameters relating to (i) energy efficiency, (ii) carbon neutrality and (iii) circularity of buildings;
- the combined use of simulation and monitoring tools for the validation of predicted data with real data, relating to emissions and energy consumption throughout the life cycle of products and systems for the building envelope.

For the post **CODE H:** benefiting of a scholarship financed by the **Istituto Nazionale di Oceanografia e di Geofisica Sperimentale - OGS** having the research topic *“Urgent computing of ground motion modeling, integrating vulnerability and exposure assessment, to facilitate rapid response to earthquakes”*, the candidate discusses a research proposal on the indicated topic.

For the post **CODE I:** benefiting of a scholarship financed by the **funds released by Prof. Gianni Gilioli**, having the research topic *“La sostenibilità nei sistemi agro-zootecnici” / “Sustainability in agro-zootechnical systems”*, the application must include the presentation of a report demonstrating the candidate's ability to develop a research project related to the analysis and management of sustainability in agro-zootechnics. The candidate must discuss how it is possible to evaluate and support the definition of management strategies aimed at optimizing inputs, minimizing environmental impacts and increasing product quality, while preserving animal welfare. The project presented must include the development of adequate quantitative methods aimed at achieving the objective of the research project presented.

In order to correctly evaluate the research project, the candidate must:

- indicate on the research project the reference curriculum or type of scholarship among those listed above he/she refers to



	<ul style="list-style-type: none"> • Structure the research project paper with a maximum of 25,000 characters as follows: <ol style="list-style-type: none"> 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. <p>The research project proposal must be uploaded on-line upon submission of the application.</p> <p>Maximum score: 40 points. Minimum score to be admitted to the interview: 24 points.</p>
Interview	<p>The interview will focus on the PhD Programme main topics and on the research project proposal, envisaging a maximum of 40 points. Minimum score to pass the interview: 24 points.</p> <p>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.</p>
Place and date of the interview	<p>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</p>
Academic contact information of the PhD Programme	<p>By Curricula</p> <ul style="list-style-type: none"> - Appropriate Methodologies and Techniques for International Development Cooperation: sabrina.sorlini@unibs.it - Mathematical Methods and Models for Engineering: hynnek.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	<p>https://permalink.unibs.it/phd/dicacim/en https://permalink.unibs.it/phd/dicacim/site</p>

PhD PROGRAMME IN ENERGY TRANSITION AND SUSTAINABLE PRODUCTION SYSTEMS	
Scientific areas	01 - Mathematical and computer sciences; 02 – Physical Sciences; 03 – Chemical Sciences; 08 - Civil Engineering and Architecture; 09 - Industrial and Information Engineering; 12 - Law; 13 - Economic and statistical sciences; 14 – Political and Social 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, 2024
Proponent Structure	Department of Mechanical and Industrial Engineering
Coordinator	Prof. Marialuisa Volta
Curricula	- Curriculum in Energy Transition - Curriculum in Sustainable production systems
Admission requirements	<p>All University Degrees of the type enlisted below are eligible:</p> <p>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.</p> <p>For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners.</p> <p>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.</p> <p>Bachelor's Degrees are not admitted.</p> <p>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.</p>
Total number of posts available	<p>n. 12</p> <ul style="list-style-type: none"> - n. 9 posts benefiting of a scholarship or other forms of financial support - n. 3 posts without scholarship or other financial support.
Posts without a research topic (among those already available)	<p>(CODES A1-A2-A3-A4)</p> <p>n. 4 posts for EU and non-EU candidates benefiting of a scholarship financed by the University of Brescia</p>
Posts linked to a research topic (among those already available)	<p>(CODE B)</p> <p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the D.M. 630/2024 and by the company COPAN ITALIA S.P.A., having the research topic <i>“Sfide e impatti dei biofilm nell'industria e nella medicina: l'importanza della preanalitica e della sostenibilità” / “Challenges and impacts of biofilms in industry and medicine: the importance of preanalytics and sustainability”</i></p> <p>(CODE C)</p> <p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the D.M. 630/2024 and by the company CEMBRE S.P.A., having the research topic <i>“Integrazione della tecnologia Additive Manufacturing nel contesto industriale per una migliore gestione di tutte le risorse produttive garantendo una maggiore</i></p>



	<p><i>flessibilità, reattività e sostenibilità” / “Integration of Additive Manufacturing technology in the industrial context for better management of all production resources ensuring greater flexibility, reactivity and sustainability”</i></p> <p>(CODE D) n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by the University of Brescia and by the funds of prof. Simone Zanoni - Department of Civil Engineering, Architecture, Territory, Environment and Mathematics (Ref.: ICEE-UE), having the research topic “Boosting energy transition of food supply chains”</p>
Out of which reserved posts	<p>(CODES P1-P2) n. 2 -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 <i>The Higher Education Commission, Government of the Islamic Republic of Pakistan</i> (hereinafter referred to as HEC Pakistan) and by the University of Studies of Brescia on 03 December 2020.</p>
Out of which posts not benefiting a scholarship (among those already available)	<p>(CODES OSB1-OSB2-OSB3) - n. 3 posts without scholarship / other forms of financial support</p>
Selection Procedure	
Evaluation of Curriculum Vitae and academic / professional history / Publications, etc.	<p>Maximum score: 20/100.</p> <p>Eligible documentation:</p> <ul style="list-style-type: none"> - 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	<p>Maximum score for the research project proposal: 40/100</p> <p>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.</p> <p>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:</p> <ol style="list-style-type: none"> 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. <p>Only candidates who score at least 24 points in the evaluation of their research proposal will be admitted to the interview.</p>
Interview	<p>Maximum score at the interview: 40/100</p>



	<p>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.</p> <p>Only candidates who score at least 24 points in the interview will be considered eligible.</p> <p>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.</p>
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, 2024
Proponent Structure	University of Brescia, Department of Information Engineering
Coordinator	Prof. Ivano Alessandri
Curricula	<ul style="list-style-type: none"> - 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 <p>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.</p>
Admission requirements	<p>All types of University degree.</p> <p>A University degree achieved in Italy, such as University Degree (Italian Laurea) achieved pursuant to the Italian academic system prior to Ministerial</p>



	<p>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.</p> <p>For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners.</p> <p>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.</p> <p>Bachelor's Degrees are not admitted.</p> <p>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.</p> <p>Preferential requirement is the relevance of the undergraduate University Degree awarded in the topics of the PhD Programme of Information Engineering.</p>
Total number of posts available	<p>n. 14:</p> <ul style="list-style-type: none"> - n. 11 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. 3 posts without scholarship / other forms of financial support
Posts without a research topic (among those already available)	<p>(CODES A1-A2-A3)</p> <p>n. 3 posts for EU and non-EU candidates benefiting of a scholarship financed by the University of Brescia</p> <p>(CODE B)</p> <p>n. 1 post for candidates being private and public administration employees that envisage the upholding of the salary treatment promoted by the company APOGEO SPACE S.R.L.</p>
Posts linked to a research topic (among those already available)	<p>(CODE C)</p> <p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the D.M. 630/2024 and by the company INXENSE S.R.L. having the research topic “Studio e sviluppo di sensori innovativi per la realizzazione di smart objects” / “Study and development of innovative sensors for the creation of smart objects”</p> <p>(CODE D)</p> <p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the D.M. 630/2024 and by the company PROSPECTO S.R.L. having the research topic “Intelligenza Artificiale applicata ai Sistemi di Visione per l'Agricoltura di Precisione” / “Artificial Intelligence applied to Vision Systems for Precision Agriculture”</p> <p>(CODE E)</p> <p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the DM 629/2024 M4C1 – Inv.</p>



	<p>4.1, art. 7 – category “Transizioni digitali ed ecologiche” / “Digital and ecological transitions”</p> <p>(CODE F) n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by the University of Brescia and by the funds of the project “Sustainable Mobility CenterMOST” (CN4 - CUP D83C22000690001), Spoke N° 7 “CCAM, Connected networks and Smart Infrastructure (Resp. prof. Lo Cigno), having the research topic “Le reti veicolari, la guida cooperativa e le metodologie di percezione collaborativa attraverso le comunicazioni e la caratterizzazione/ analisi del canale di comunicazione elettromagnetico al fine di migliorare la sicurezza stradale e di abilitare gli spazi di mobilità intelligente, sia per i veicoli che per gli utenti vulnerabili (pedoni, ciclisti, ...)” / “Vehicular networks, cooperative driving and collaborative perception methodologies through communications and the characterization/ analysis of the electromagnetic communication channel in order to improve road safety and enable intelligent mobility spaces, both for vehicles and users vulnerable (pedestrians, cyclists, ...)”</p> <p>(CODE G) n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by the University of Brescia and by the funds of the project Bando a Cascata Spoke 6 – Università di Catania/Programma RESTART-SEXTET (CUP E63C22002070006) “Energy-efficient Methods and enaBling technologies for communications, netwoRking, infrastructures and smArt services in Challenging Environments (EMBRACE) (Resp. prof. Gringoli), having the research topic “La caratterizzazione dei canali di comunicazione wireless con particolare attenzione ai canali presenti negli ambienti di propagazione estremi” / “The characterization of wireless communication channels with particular attention to channels present in extreme propagation environments”</p>
Out of which reserved posts	<p>(CODES P1-P2) n. 2 - 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.</p>
Out of which posts not benefiting a scholarship (among those already available)	<p>(CODES OSB1-OSB2-OSB3) - n. 3 posts without scholarship / other forms of financial support</p>
Selection Procedure	
Evaluation of Curriculum Vitae/Publications, etc.	<p>Maximum score: 20/100</p> <p>Eligible documentation:</p> <ul style="list-style-type: none"> - 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	Maximum score for the research project proposal: 40/100



proposal	<p>The research project proposal must be submitted online jointly with the admission form.</p> <p>The topic of the research project must fall within research activities that are relevant to any of the curricula of the PhD Programme.</p> <p>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:</p> <ol style="list-style-type: none"> 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. <p>Only candidates who score at least 24 points in the evaluation of their research proposal will be admitted to the interview.</p>
Interview	<p>Maximum score for the interview: 40/100</p> <p>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.</p> <p>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.</p>
Place and date of the interview	<p>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</p>
Contact information of the PhD Programme	<p>Prof. Ivano Alessandri: ivano.alessandri@unibs.it; Mrs. Rosaria Nardo – Secretariat Department of Information Engineering: rosaria.nardo@unibs.it</p>
PhD Teaching and research activity	<p>https://permalink.unibs.it/phd/drii/site https://permalink.unibs.it/phd/drii/en</p>

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, 2024
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	<p>All University Degrees of the type enlisted below are eligible.</p> <p>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.</p> <p>For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners.</p> <p>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.</p> <p>Bachelor's Degrees are not admitted.</p> <p>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.</p> <p>Proficiency in English is required</p>
Total number of posts available	<p>n. 14:</p> <ul style="list-style-type: none"> - n. 11 posts benefiting of a scholarship / other forms of financial support and - n. 3 posts without scholarship / other forms of financial support
Posts without a research topic (among those already available)	<p>(CODICE A1-A2-A3)</p> <p>n. 3 posts for EU and non-EU candidates benefiting of a scholarship financed by the University of Brescia</p>
Posts linked to a research topic (among those already available)	<p>(CODE B)</p> <p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the D.M. 630/2024 and by the Istituto dei Sistemi e delle Tecnologie Industriali e Intelligenti per il Manifatturiero Avanzato del Consiglio Nazionale delle Ricerche (STIIMA-CNR) having the research topic “Sistemi di misura dell’interazione di persone con robot tramite eye tracking e sistemi indossabili” / “Systems for measuring the interaction of people with robots via eye tracking and wearable systems”</p>



	<p>(CODE C) n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the D.M. 630/2024 and by the Istituto dei Sistemi e delle Tecnologie Industriali e Intelligenti per il Manifatturiero Avanzato del Consiglio Nazionale delle Ricerche (STIIMA-CNR) having the research topic “Sviluppo di soluzioni robotizzate per la manipolazione e l’assemblaggio di schede rigido-flex” / “Development of robotic solutions for the manipulation and assembly of rigid-flex boards”</p> <p>(CODE D) n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the D.M. 630/2024 and by the company ECOTRE VALENTE S.R.L. having the research topic “Creazione di uno strumento digitale per la generazione automatica di attrezzature dedicate al colaggio di lingotti in acciaio tramite l’utilizzo del software della simulazione della colata ProCAST” / “Set up of a digital tool for the automatic generation of equipment dedicated to the casting of steel ingots using the ProCAST casting simulation software”</p> <p>(CODE E) n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the DM 629/2024 M4C1 – Inv. 4.1, art. 8 – category “Dottorati di ricerca PNRR” / “PhD Programmes PNRR”</p> <p>(CODE F) n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by the University of Brescia and by the funds of professors Ghidoni and Poesio (Ref: GHIDONI-TURBO/SMARTFASCHION 2017/HW MIRACLE 2017), having the research topic “Ottimizzazione aerodinamica per applicazioni turbomacchinistiche basata su machine learning/ Aerodynamic shape optimization based on machine learning for turbomachinery applications”</p> <p>(CODE G) n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by the University of Brescia and by the project funds Sustainable Mobility Center- MOST (CN4) - CUP D83C22000690001 Spoke 11: “Innovative Materials & Lightweighting” e PROLAB-2197 (Resp. prof.ssa Pola), having the research topic “Materiali e alleggerimento per la mobilità sostenibile” / “Materials and lightening for sustainable mobility”</p>
Out of which reserved posts	<p>(CODES P1-P2) n. 2 - 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.</p>
Posts without a research topic (among those already available)	<p>(CODES OSB1-OSB2-OSB3) - n. 3 posts without scholarship / other forms of financial support</p>
Selection Procedure	
Evaluation of Curriculum	Maximum score: 20/100



Vitae/Publications, etc.	<p>Eligible documentation:</p> <ul style="list-style-type: none"> - 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	<p>Maximum score for the research project proposal: 40/100</p> <p>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.</p> <p>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:</p> <ol style="list-style-type: none"> 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. <p>Only candidates who score at least 24 points in the evaluation of their research proposal will be admitted to the interview.</p>
Interview	<p>Maximum score for the oral: 40/100</p> <p>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.</p> <p>Only candidates who score at least 24 points in the interview will be considered eligible.</p> <p>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.</p>
Place and date of the interview	<p>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</p>
Contact information of the PhD Programme	<p>Prof. Pietro Poesio, email: pietro.poesio@unibs.it</p>
PhD Teaching and research activity	<p>https://permalink.unibs.it/phd/drmi/site https://permalink.unibs.it/phd/drmi/en</p>

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, 2024
Proponent Structure	Department of Molecular and Translational Medicine
Coordinator	Prof. Eugenio Monti
Curricula	<ul style="list-style-type: none"> - Molecular Genetics Applied to Medical Sciences - Biotechnologies for the Health and the Environment - Forensic Medical Sciences
Admission requirements	<p>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-51 Psychology LM-54 Chemical Sciences LM-55 Cognitive Sciences LM-70 Food Sciences and Technologies LM-82 Statistical Sciences</p> <p>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.</p> <p>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.</p> <p>Bachelor's Degrees are not admitted.</p> <p>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.</p> <p>Proficiency in English is required.</p>
Total number of posts available	<p>n. 9:</p> <ul style="list-style-type: none"> - n. 7 posts benefiting of a scholarship / other forms of financial support and



	- n. 2 post without scholarship / other forms of financial support
Posts without a research topic (among those already available)	(CODES A1-A2-A3-A4) n. 4 posts for EU and non-EU candidates benefiting of a scholarship financed by the University of Brescia
Posts linked to a research topic (among those already available)	(CODE B) n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the D.M. 630/2024 and by the company GIULIANI S.P.A. having the research topic "Microbioma dello scalpo e interattoma" / "Scalp microbiome and interactome"
Out of which reserved posts	(CODES P1-P2) n. 2 - 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.
Out of which posts not benefiting a scholarship (among those already available)	(CODES OSB1-OSB2) n. 2 posts without scholarship / other forms of financial support
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 PRECISION MEDICINE	
Scientific areas	02-Physical Sciences, 03-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, 2024
Proponent Structure	Department of Molecular and Translational Medicine
Coordinator	Prof. Stefania Maria Filomena Mitola
Curricula	Not envisaged
Admission requirements	<p>The following University Degrees achieved in Italy:</p> <p>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-22 Chemical Engineering LM-32 Information 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-70 Food science and technology LM-71 Industrial Chemical Sciences and Technologies LM-82 Statistical Sciences LM-91 Techniques and methods for the information society LM/SNT1 Nursing and Midwifery Sciences LM/SNT2 Rehabilitation Sciences of Health Professions LM/SNT3 Sciences of Technical Health Professions LM/SNT4 Prevention Health Professions Sciences</p> <p>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.</p> <p>For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners.</p> <p>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.</p>



	<p>Bachelor's Degrees are not admitted.</p> <p>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.</p>
Total number of posts available	<p>n. 13:</p> <p>n. 10 posts benefiting of a scholarship / other forms of financial support and</p> <p>- n. 3 posts without scholarship / other forms of financial support</p>
Posts without a research topic (among those already available)	<p>(CODES A1-A2-A3)</p> <p>n. 3 posts for EU and non-EU candidates benefiting of a scholarship financed by the University of Brescia</p>
Posts linked to a research topic (among those already available)	<p>(CODE B)</p> <p>n. 1 post for candidates being private and public administration employees that envisage the upholding of the salary treatment promoted by ASST SPEDALI CIVILI - S.C. Clinical Trial Center e Studi di Fase I-Ricerca e Innovazione, Laboratorio di Ricerca C.R.E.A., having the research topic “<i>Nuovi farmaci per il trattamento delle neoplasie plasmacellulari</i>” / “<i>New drugs for the treatment of plasma cell neoplasms</i>”</p> <p>(CODE C)</p> <p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by the University of Brescia and by the funds released by Prof. Sigala (Ref.: AIRC-IG 2022-27233 - CUP D73C23000130007), having the research topic “<i>Pharmacological and clinical strategies to improve efficacy of adrenocortical carcinoma to immune checkpoint inhibitors</i>”</p> <p>(CODE D)</p> <p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by the University of Brescia and by the funds released by Prof. Giacomini (Ref.: AIRC - IG 28939), having the research topic “<i>Blocking the FGF/FGFR system as a new therapeutic strategy for c-Myc-driven aggressive B-cell non-Hodgkin lymphoma</i>”</p> <p>(CODE E)</p> <p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by the University of Brescia and by the funds released by Prof. Pizzi – contact person Prof. Bellucci (Ref.: PRIN2022), having the research topic “<i>A novel therapeutic compound to hinder alpha-synuclein pathology in Parkinson's disease</i>”</p> <p>(CODE F)</p> <p>n. 1 post for EU and non-EU candidates benefiting of a scholarship financed by the Italian CNR-Consiglio Nazionale delle Ricerche / Istituto di Scienze e Tecnologie Chimiche “G. Natta”), having the research topic “<i>Sviluppo di Metodi integrati di purificazione e analisi di Nano-particelle biologiche</i>” / “<i>Development of integrated methods for purification and analysis of biological nanoparticle</i>”</p>
Out of which reserved posts	<p>(CODES P1-P2)</p> <p>n. 2 - A maximum number of 6 posts in all PhD Programmes,</p>



	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.
Out of which posts not benefiting a scholarship (among those already available)	(CODES OSB1-OSB2-OSB3) n. 3 posts without scholarship / other forms of financial support
Selection Procedure	
Evaluation of Curriculum Vitae/Publications, etc.	Maximum score: 30/100 - 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 4/100 - Presentations to scientific meetings: maximum score 2/100 - Post-graduate specialization degrees: maximum score 1/100 - Other qualifications: educational courses and stages, conference attendance, English language certificates: maximum score 3/100.
Evaluation of a project proposal	Not envisaged
Interview	Maximum score: 70/100 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. 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	Interviews are scheduled to be held on September 5 th and 6 th , 2024 at 9:00 a.m (Italian Time) at Aula B2 polifunzionale (Room B2 polifunzionale) at the Department of Molecular and Translational Medicine in viale Europa n. 11, Università degli Studi di Brescia, Brescia, Italy. For those candidates allowed to be interviewed remotely pursuant to Article 8 paragraphs 6 and 7 of the Call for Admission the Google Meet link is: meet.google.com/xoj-rvio-fft
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 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, 2024
Proponent Structure	Department of Law



Coordinator	Prof. Luca Mario Masera
Curricula	Not Envisaged
Duration	<p>All University Degrees of the type enlisted below are eligible:</p> <p>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.</p> <p>For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners.</p> <p>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.</p> <p>Bachelor's Degrees are not admitted.</p> <p>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.</p> <p>Proficiency in English is required</p>
Total number of posts available	<p>n. 8</p> <ul style="list-style-type: none"> - n. 6 posts benefiting of a scholarship / other forms of financial support and - n. 2 posts without scholarship / other forms of financial support
Posts without a research topic (among those already available)	<p>(CODES A1-A2-A3)</p> <p>n. 3 posts for EU and non-EU candidates benefiting of a scholarship financed by the University of Brescia</p>
Posts linked to a research topic (among those already available)	<p>(CODE B)</p> <p>n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the D.M 629/2024 M4C1 – Inv. 4.1, art. 9 – category “Dottorati per la Pubblica Amministrazione” / “PhD Programmes focusing on Public Administration”</p>
Out of which reserved posts	<p>(CODES P1-P2)</p> <p>n. 2 - 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.</p>
Out of which posts not benefiting a scholarship (among those already available)	<p>(CODES OSB1-OSB2)</p> <p>n. 3 posts without scholarship / other forms of financial support</p>
Selection Procedure	
Admission requirements	<p>Maximum score applied to candidates' qualifications: 30/100</p> <p>Eligible qualifications:</p>



	<p>- 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;</p> <p>- Scientific Publications and other qualifications deemed congruent and useful for valuation purposes: maximum 10 scores.</p> <p>If the candidate is not yet graduated, instead of the final grade the average grade of the passed exams will be considered.</p> <p>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 15/100 at this stage.</p>
Evaluation of a project proposal	<p>Maximum score for the research project proposal: 40/100</p> <p>The research project proposal must be submitted online jointly with the admission form.</p> <p>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:</p> <ol style="list-style-type: none"> 1. Author; 2. Title; 3. Short literature review; 4. Research questions and objectives; 5. Methodology; 6. References. <p>Only candidates who receive at least 20/100 in this evaluation phase will be admitted to the interview.</p>
Interview	<p>Maximum score at the interview: 30/100</p> <p>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.</p> <p>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.</p> <p>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.</p>
Place and date of the interview	<p>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.</p>
Contact information of the PhD Programme	<p>Prof. Luca Mario Masera, Department of Law, e-mail luca.masera@unibs.it</p>
PhD Teaching and research activity	<p>https://permalink.unibs.it/phd/diritti-persona/en</p>

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, 2024
Proposing Structure	Department of Information Engineering
Coordinator	Prof. Mauro Serpelloni
Curricula	Not envisaged
Admission requirements	<p>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.</p> <p>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.</p> <p>For PhD admission purposes only, the equivalence between degrees awarded abroad and the Italian degrees will be assessed by the Board of Examiners.</p> <p>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.</p> <p>Bachelor's Degrees are not admitted.</p> <p>Undergraduates can apply for admission, but they must have passed the degree examination by the start date of the PhD Programme activities:</p>



	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
Posts without a research topic (among those already available)	(CODES A1-A2-A3-A4) n. 4 posts for EU and non-EU candidates benefiting of a scholarship financed by the University of Brescia
Posts linked to a research topic (among those already available)	(CODE B) n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the D.M. 630/2024 and by the company ARION S.R.L. having the research topic <i>“Soluzioni innovative e competitive per la misura e la digitalizzazione dei dati nei circuiti di condizionamento e refrigerazione ad alta efficienza e basso impatto ambientale al fine di migliorare la salute e il benessere dell'uomo” / “Innovative and competitive solutions for the measurement and digitalization of data in high-efficiency and low environmental impact air conditioning and refrigeration circuits in order to improve human health and well-being”</i> (CODE C) n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by PNRR funds pursuant to the D.M. 630/2024 and by the company EDELWEISS ENERGIA S.P.A. having the research topic <i>“Sviluppo di modelli e algoritmi per l'ottimizzazione dei cicli di ricarica di batterie per la stabilizzazione del mercato elettrico delle energie rinnovabili” / “Development of models and algorithms to optimize battery charging cycles for the stabilization of the renewable energy electricity market”</i> (CODE D) n. 1 post for EU and non-EU candidates benefiting of a scholarship co-financed by the University of Brescia and by the PNRR funds pertaining to the project “Partnership estesi - progetto “MICS - Made in Italy circolare e sostenibile” - CUP D73C22001250001 (Resp. prof. Sardini), having the research topic <i>“Studio, progettazione e realizzazione di ‘smart product’ mediante soluzioni di ‘printed electronics” / “Study, design and production of ‘smart products’ using ‘printed electronics’ solutions”</i>
Out of which reserved posts	(CODES P1-P2) n. 2 - 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.
Out of which posts not benefiting a scholarship (among those already available)	(CODES OSB1-OSB2-OSB3) n. 3 posts without scholarship / other forms of financial support
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:



	<p>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.</p> <p>b) Publications: 0-4 points.</p> <p>c) Other qualifications: 0-6 points</p>
Evaluation of a project proposal	<p>The maximum score: 0 - 40 points</p> <p>Only candidates who score at least 24 points in the evaluation of their research proposal will be admitted to the interview.</p> <p>For the posts linked to a research topic, the coherence between the proposed project and the topic itself will also be assessed.</p>
Additional Documentation Required	<p>Candidates must include in their application:</p> <ol style="list-style-type: none"> 1) A detailed Curriculum Vitae, including: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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. <p>The documents required must be written in English language.</p>
Interview	<p>The Interview includes an assessment on the presented research project proposal, on the possible candidate's list of publications and qualifications, and an oral evaluation of English language skills.</p> <p>The maximum score for the evaluation of the Interview is 0 - 40 points. The Interview is considered passed unless the candidate has achieved a score of at least 20.</p> <p>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.</p>
Place and date of the interview	<p>Interviews are scheduled to be held on September 4, 2024, from 9:30 a.m (Italian Time) at Aula n. 45 (Room n. 45) of the Department of Information Engineering in via Branze n. 38, Università degli Studi di Brescia, Brescia</p>
Academic contact information of	<p>Mrs. Rosaria Nardo, Department of Information Engineering, e-mail:</p>



the PhD Programme	rosaria.nardo@unibs.it
Teaching and research PhD activity	https://permalink.unibs.it/phd/t4h/en https://permalink.unibs.it/phd/t4h/site