THIS ANNEX A to the CALL FOR ADMISSION, TRANSLATED INTO ENGLISH, IS AN UNOFFICIAL COPY OF THE ORIGINAL. THE ONLY COPY OF LEGAL VALUE IS THE OFFICIAL DOCUMENT IN ITALIAN LANGUAGE

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	December 1st, 2022
Proposing Structure	Department of Economics and Management
Coordinator	Prof. Luca Bertazzi
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
Total number of posts available	n. 5 in total - n. 4 posts benefiting of a scholarship / other forms of financial support and - n. 1 posts without scholarship / other forms of financial support
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)	**See the provisions of Annex B**

<div align="center">

Selection procedure for ordinary and reserved posts

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Evaluation of Curriculum Vitae and academic / professional history / Publications, etc.	The candidate must upload her / his curriculum vitae organized as follows: Personal data Study Program: - 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) - 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 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 (if obtained) In addition to the curriculum vitae, the candidate must upload the following documentation: - Publications, included the Master thesis 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 language and will consist of: - a presentation of the study Program and of the master thesis (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 language. 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, paragraph. 4 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 interview will take place on September 15th and 16th, 2022, beginning at 10:00 am (Italy time), at the Department of Economics and Management of the University of Brescia, Room A6, Contrada Santa Chiara, 50, 25122 Brescia, Italy
Academic contact information of the PhD Programme	Prof. Luca Bertazzi, e-mail: luca.bertazzi@unibs.it
Teaching and research PhD activity	https://permalink.unibs.it/phd/38/aem/site https://permalink.unibs.it/phd/38/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	December 1st, 2022
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 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 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
LM-53. Ingegneria dei materiali

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 in total - n. 8 posts benefiting of a scholarship / other forms of financial support and - n. 2 posts without scholarship / other forms of financial support
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)	See the provisions of Annex B

Selection procedure for ordinary and reserved posts	
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, paragraph. 4 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/it/node/1078
Contact information of the PhD Programme	Professor Domenico Russo, Department of Clinical and Experimental Sciences, e-mail: domenico.russo@unibs.it
PhD Teaching and research activity	https://permalink.unibs.it/phd/38/comptrasv https://permalink.unibs.it/phd/38/langskprj https://permalink.unibs.it/phd/38/formric https://permalink.unibs.it/phd/38/general-en https://permalink.unibs.it/phd/38/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	December 1st, 2022
Proponent Structure	Department of Molecular and Translational Medicine
Coordinator	Prof. Mariacristina Missale
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 LM-51 Psychology LM-55 Cognitive 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. 6 in total - n. 5 posts benefiting of a scholarship / other forms of financial support and - n. 1 posts without scholarship / other forms of financial support
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	See the provisions of Annex B

(among those already available)	

<table>
<tr><td colspan="2" align="center">Selection procedure for ordinary and reserved posts</td></tr>
<tr>
<td>Evaluation of Curriculum Vitae/Publications, etc.</td>
<td>Maximal score: 30/100
- Undergraduate University degree final score: maximal 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): maximal score 10
- Publications: maximal score 8
- Presentations to scientific meetings: maximal score 6
- Other qualifications: specialization, educational courses and stages, conference attendance, English language certificates: maximal score 6</td>
</tr>
<tr>
<td>Evaluation of a project proposal</td>
<td>Not envisaged</td>
</tr>
<tr>
<td>Interview</td>
<td>Maximal score: 70/100
Interview on one of the thematic areas of the curriculum indicated by the candidate; to discuss about the 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.

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, paragraph. 4 of the Call for Admission.</td>
</tr>
<tr>
<td>Place and date of the interview</td>
<td>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/it/node/1078</td>
</tr>
<tr>
<td>Contact information of the PhD Course</td>
<td>Prof. Mariacristina Missale, e-mail: mariacristina.missale@unibs.it</td>
</tr>
<tr>
<td>PhD Teaching and research activity</td>
<td>https://permalink.unibs.it/phd/38/comptrasv
https://permalink.unibs.it/phd/38/langskprj
https://permalink.unibs.it/phd/38/formric
https://permalink.unibs.it/phd/38/general-en
https://permalink.unibs.it/phd/38/scienzebio/en</td>
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</table>

<table>
<tr><td colspan="2" align="center">PhD PROGRAMME IN
BUSINESS & LAW INSTITUTIONS AND BUSINESS: VALUE, RULES AND SOCIAL RESPONSIBILITY</td></tr>
<tr>
<td>Scientific areas</td>
<td>Area 12 (Law); Area 13 (Economics and Statistics); Area 14 Political and Social Sciences)</td>
</tr>
<tr>
<td>Academic disciplines</td>
<td>12/A, 12/B, 12/C, 12/E, 13/A, 13/B, 13/C, 14/D</td>
</tr>
<tr>
<td>Duration</td>
<td>3 years</td>
</tr>
<tr>
<td>Starting date</td>
<td>December 1st, 2022</td>
</tr>
<tr>
<td>Proponent Structure</td>
<td>Department of Economics and Management</td>
</tr>
<tr>
<td>Coordinator</td>
<td>Prof. Nadia Maccabiani (advocate)</td>
</tr>
<tr>
<td>Admission requirements</td>
<td>LMG/01 Law;
LM16 Finance;
LM49 Planning and Management of Tourism Systems;
LM56 Economic Sciences;
LM63 Science of Public Administrations;
LM76 Economics of the Environment and Culture;
LM77 Economics and Business Sciences;</td>
</tr>
</table>

| | LM81 Science for Development Cooperation; LM88 Sociology and Social Research.

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. 5 in total
- n. 4 posts benefiting of a scholarship / other forms of financial support and
- n. 1 post without scholarship / other forms of financial support |
| **Out of which: Reserved posts** | n. 1 post reserved to candidates having an eligible academic degree achieved in non-Italian Universities

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)** | **See the provisions of Annex B** |
| | |
| **Selection procedure for regular and reserved posts** | |
| | |
| **Evaluation of Curriculum Vitae/Publications, etc.** | Maximum score for curriculum vitae/publications: 30/100
Eligible qualifications:
- Master thesis and the related University curriculum;
- Academic publications;
- Any other supporting evidence that can be considered relevant and useful for the admission evaluation process.

If the candidate is not yet graduated, instead of the final grade the average grade of the passed exams will be taken into account. |

	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 the evaluation of their research proposal will be admitted to the interview.
Interview	Maximum score for the interview: 40/100 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, paragraph. 4 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 Course	Prof. Nadia Maccabiani, Department of Economics and Management, e-mail: nadia.maccabiani@unibs.it
PhD Teaching and research activity	https://permalink.unibs.it/phd/38/comptrasv https://permalink.unibs.it/phd/38/bl/en https://permalink.unibs.it/phd/38/langskprj https://permalink.unibs.it/phd/38/formric

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	December 1st, 2022
Proposing Structure	Department of Civil, Environmental, Architectural Engineering and Mathematics

Coordinator	Prof. Paolo Secchi
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. 20 posts in total - n. 15 posts benefiting of a scholarship / other forms of financial support and - n. 5 posts without scholarship / other forms of financial support
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.
Posts linked to a research topic (among those already available)	**See the provisions of Annex B**
Selection procedure for ordinary and reserved posts	
Evaluation of Curriculum Vitae and academic / professional history / Publications, etc.	Academic Degree: up to 10 points. For candidates under graduation condition, 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: **Appropriate Methodologies and Techniques for International Development Cooperation**: *- Technology track:* The candidate illustrates the main problems relating to drinking water supply in contexts at risk due to climate change. After having *hypothesized* a specific problem in a limited resource context, at the candidate's choice, the candidate should draw up a research project aimed at identifying appropriate solutions to ensure the achievement of SDG 6 - target 6.1 "By 2030, achieve universal and equitable access to safe and affordable drinking water for all". The proposed research project must clearly present the objectives, the methodology and the expected scientific results. *- Health track:* With reference to the Sustainable Development Goal (SDG) number 3.3 (to eliminate HIV, TB and malaria by 2030 and control viral hepatitis infections, water transmitted diseases, and other infections) the candidate should reflect on the challenges related to TB elimination in resource limited settings. The candidate should elaborate a plan, related to a country of her/his choice, to assess whether the country adopts preventive, management and monitoring interventions against TB that are coherent with WHO recommendations. The proposed plan should include clear objectives and methods of the proposed intervention. **Mathematical Methods and Models for Engineering**: - Partial differential equations for the description of physical phenomena. The candidate is required to describe some analytical methods for the qualitative study of solutions, and techniques for their numerical simulation. - Methods for the mechanics of solids and fluids. The candidate shall describe modern applications and/or analytical and computational methods that he/she aims at developing in the PhD Programme. **Natural Risks Assessment and Management**: - Hydrological processes and adaptation strategies to climate and anthropogenic changes. The candidate is required to describe the expected impacts of climatic and man-induced changes on the hydrological processes and the possible structural and non-structural adaptation measures in the urban environment and in the agricultural sector. -Analysis of hydraulic hazard in areas of high anthropization: the candidate considers typical aspects of hydraulic hazard and shows with which conceptual schemes and numerical approaches it is possible to deal with their quantification. **Structural Rehabilitation of Historical and Modern Buildings**:

- The candidate should discuss a research proposal concerning novel strengthening techniques in structural or infrastructural elements/components.
- The candidate should discuss a research proposal concerning the utilization of advanced materials for the rehabilitation of structural or infrastructural elements/components.

Technologies and Processes for the Environment and Agriculture:

The candidate proposes a research project focused on one of the following topics:
- The design or management of processes and technologies for the environment protection and/or remediation;
- The sustainable management of natural resources;
- The minimisation, valorisation and resource recovery from municipal or industrial wastewater and waste, in the context of circular economy;
- Management o technological issues related to drinking water in view of climate change and emerging pollutants
- The development of production strategies for sustainability in the agricultural field;
- Technologies for the ecological transition in agriculture;
- The use of agriculture as a technique of landscape management or as a technique of mitigation of the hydrogeological hazard.

Urban Planning and Mobility:
1. The candidate should illustrate a research proposal concerning the estimation of missed crash risk in a road network.

2. With reference to the UN 2030 Agenda, the candidate presents the hypothesis of developing a platform for the evaluation of Sustainable Development Goals at sub regional level.

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- n. 1 scholarship financed by DM 351, in favor of PhD programs on cultural heritage, with a research theme on "Innovative systems for the definition of the degree of risk of historical and architectural rural heritage in the planning of preventive conservation and reuse and enhancement processes":

In relation to the objectives of Mission 1 - Digitalization, Innovation, Competitiveness and Culture, Component 3 - Culture 4.0 (M1C3), Measure 2 "Regeneration of small cultural sites, cultural, religious and rural heritage", Investment 2. 2: "Protection and enhancement of architecture and the rural landscape" of the Italian National Recovery and Resilience Plan (PNRR), the candidate is required to describe the main issues relating to the study, conservation and enhancement of rural architecture and its historical and cultural values. After proposing one or more specific in-depth themes, the candidate is required to prepare a research project targeted at promoting better management of this heritage, defining strategies and methods of risk analysis and management, conservation and reuse. The proposed strategies should be capable of constituting a driving force for the virtuous recovery of rural architectural complexes and the relative territorial areas of landscape-environmental value, also referring to the Faro Convention,

the SDGs of Agenda 2030 (in particular numbers 2, 3, 8, 11, 15) and the European Charter for Sustainable Tourism (ECST).

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Additionally, for those posts having a research topic and financed through scholarships or other forms of financial support, as per Annex B, it is required:

n. 1 ordinary post for EU and non-EU candidates benefiting of a three-year scholarship co-funded by the Italian Funds of the PNRR, pursuant to the Min. Decree no. 352/2022 and the Company ROTTAMI PADANA SPA, having a specific research topic about *"Environmental analysis of the recovery process of ferrous and non-ferrous metal scraps and maximization of resource recovery";*

The candidate reports the situation relating to the production and management of ferrous and non-ferrous metal scrap in Italy and in the world panorama. The most widely applied solutions for the valorization of resources from these residues should also be illustrated. Finally, the candidate should draw up a research project, applied to an industry that operates in the metal scrap processing sector, aimed at maximizing the recovery of resources from the scrap itself. The environmental sustainability of the proposed processes should be evaluated. The research project must clearly present the objectives, methodology and expected scientific results.

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n. 1 ordinary post for EU and non-EU candidates benefiting of a three-year scholarship co-funded by the Italian Funds of the PNRR, pursuant to the Min. Decree no. 352/2022 and the Company BRESCIA MOBILITA' SPA, having a specific research topic about *"Evaluating the access to stops/stations of a tramway network in urban areas"*

The proposed research project is part of a larger collective transport project that involves the construction of an electrically powered tramway route in the city of Brescia, recently funded by the Ministry of Sustainable Infrastructure and Mobility. The tram line will cover the western areas of the City, which is not served yet, by the automatic underground and will intercept, in the Fiera area, the car traffic coming from the west, through a route of 11.6 km long and characterized by 24 stations. As a part of this research project, the PhD student will focus primarily on the analysis of accessibility to stops/stations with insights on the rethinking and redevelopment of the urban space, in addition to the active participation in the phases that will lead to the realization of this important public work. The stop/station represents the first point of contact between the company that provides the service and the passenger who uses it. Therefore, it must be studied not only from the road side, that mainly involves the manoeuvrability of the vehicle (i.e., spaces for the vehicle), but also from the curb side (pedestrian/passengers spaces) that includes the accessibility, comfort in the waiting area as well as safety (and security) of users. In this regard, the urban environment in which the tram will run will be subject to an

important redevelopment, as having to redesign the area to allow the transit of the tram route will serve as an opportunity to rethink and regenerate large portions of the City, which will need to specific studies and research by the PhD student.

The candidate should illustrate a research proposal concerning the accessibility to stops/stations of a tramway network with respect to vulnerable users.

**

n. 1 ordinary post for EU and non-EU candidates benefiting of a three-year scholarship co-funded by the Italian Funds of the PNRR, pursuant to the Min. Decree no. 352/2022 and the Company ITALCEMENTI SPA, having a specific research topic about *"Use of recycled and artificial aggregates for high-durability concrete Use of recycled and artificial aggregates for high-durability concrete"*

The candidate should discuss a research proposal concerning the utilization of high performance cementitious or non-cementitious materials for the rehabilitation of structural or infrastructural elements/components.

**

n. 1 ordinary post for EU and non-EU candidates benefiting of a three-year scholarship co-funded by the Italian Funds of the PNRR, pursuant to the Min. Decree no. 352/2022 and the Company GUIDO BERLUCCHI & C. SPA, having a specific research topic about *"Development of integrated assessment systems for sustainability in viticulture"*

The Candidate should identify research methodologies aimed at developing integrated assessment systems of sustainability in viticulture that allow the comparison between different vineyard management systems and the optimization of business strategies from a sustainable perspective. The results of the research project, through the preparation of a review of the state of the art on this topic and the creation of a digital structure for the systematic collection and processing of data, must allow the identification of additional monitoring plans in order to complete the business investigation. The integrated processing of the data resulting from this survey will be aimed at developing a sustainable management model based on the business context and the preparation of an internal and external communication strategy for the company.

**

n. 1 ordinary post for EU and non-EU candidates benefiting of a three-year scholarship co-funded by the Italian Funds of the PNRR, pursuant to the Min. Decree no. 352/2022 and the Company ECO CENTER SPA, having a specific research topic about *"Full scale experimentation of granular UASB technology for pre-treatment and energetic valorization of high strength wastewaters"*

The candidate should discuss the issue of the treatment of industrial and liquid waste, with particular reference to the use of

unconventional technologies. He should develop a research project concerning the integration of an innovative technology in a municipal wastewater treatment plant for the pre-treatment of industrial wastewater and liquid waste.

**

n. 1 ordinary post for EU and non-EU candidates benefiting of a three-year scholarship co-funded by the Italian Funds of the PNRR, pursuant to the Min. Decree no. 352/2022 and the Company LABORATORIO TECNOLOGICO LOMBARDO SRL, having a specific research topic about "*Assessments of existing structural elements, with special focus on bridge components, by means of advances diagnosis techniques*"

The candidate should discuss a research proposal concerning the assessments of structural elements, with special focus on bridge girders and bridge components, by means of advances diagnosis techniques

**

n. 1 ordinary post for EU and non-EU candidates benefiting of a three-year scholarship co-funded by the Italian Funds of the PNRR, pursuant to the Min. Decree no. 352/2022 and the Company SISTEMI AMBIENTALI SRL, having a specific research topic about "*Development of innovative processes and criteria for the recovery as an end of waste of contaminated soil and/or sediment aimed at the production of agronomic substrates*"

The candidate must illustrate the processes that can be used for the treatment of soils/sediments slightly contaminated by hydrocarbons, highlighting any critical issues from the application point of view in relation to their recovery for agronomic purposes. The candidate then must write a research project aimed at overcoming those issues, clarifying the objectives pursued, the methodology adopted, and the expected results.

**

n. 1 ordinary post for EU and non-EU candidates benefiting of a three-year scholarship co-funded by the Italian Funds of the PNRR, pursuant to the Min. Decree no. 352/2022 and the Company AZICHEM SRL, having a specific research topic about "*High performance cementitious materials for the repairing and/or rehabilitation of structural elements and infrastructural components*"

The candidate should discuss a research proposal concerning the utilization of high performance cementitious or non-cementitious materials for the rehabilitation of structural or infrastructural elements/components

**

n. 1 ordinary post for EU and non-EU candidates benefiting of a three-year scholarship co-funded by the Italian Funds of the PNRR, pursuant to the Min. Decree no. 352/2022 and the Company FASTERNET SRL, having a specific research topic about

"Mining and using Floating Car Data (FCD) to enhance the mobility in rural contexts"

The proposed research project stems from the growing need for advanced Intelligent Transport Systems (ITS) tools and technologies to improve the performance of road transport systems. These tools are aimed at finding Specific, Measurable, Addable, Realistic and Actual (SMART) solutions to reduce the negative externalities produced by traffic such as congestion, environmental pollution and safety. As a 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 road transport systems. This system will consist of the integration of tools, algorithms and innovative technologies for performance diagnosis, powered by a network of mobile sensors (Floating Car Data - FCD). Specifically, the following will be of particular interest: big data analyses in the field of mobility, monitoring of road infrastructures, as well as the creation of models for predictive diagnostics and improvement of road safety. Further in-depth topics will concern the comparison between databases from heterogeneous sources (sensors, data collected from sensor-vehicles, ...) as well as data mining and data fusion techniques for a better use of mobility data.

The candidate should illustrate a research proposal concerning the use of Floating Car Data (FCD) to enhance the mobility in rural contexts.

**

n. 1 ordinary post for EU and non-EU candidates benefiting of a three-year scholarship co-funded by the Company ISLE SRL:
The candidate describes physical principles and technologies that make it possible to identify leakages in water distribution networks and systems for verifying the operation and management of networks, in a digitized environment, which make it possible to reduce losses.

*****

The project should be clearly related to one of the above-mentioned curricula. The project should be no more than 25.000 characters long, and structured 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.

*****

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

	***** The research project proposal must be uploaded on-line upon submission of the application.
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, paragraph. 4 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/38/comptrasv https://permalink.unibs.it/phd/38/langskprj https://permalink.unibs.it/phd/38/formric https://permalink.unibs.it/phd/38/general-en https://permalink.unibs.it/phd/38/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	December 1st, 2022
Proponent Structure	Department of Mechanical and Industrial Engineering
Coordinator	Prof. Marialuisa Volta (advocate)
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. 12 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.
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.
Posts linked to a research topic (among those already available)	**See the provisions of Annex B**

Selection procedure for ordinary and reserved posts

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, 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, paragraph. 4 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, e-mail: marialuisa.volta@unibs.it
Teaching and research PhD activity	https://permalink.unibs.it/phd/38/comptrasv https://permalink.unibs.it/phd/38/langskprj https://permalink.unibs.it/phd/38/formric https://permalink.unibs.it/phd/38/general-en https://permalink.unibs.it/phd/38/transizione-energetica/en

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/B Inorganic, Technological 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	December 1st, 2022
Proponent Structure	University of Brescia, Department of Information Engineering
Coordinator	Prof. Costantino De Angelis

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	LM-17 Physics; LM-18 Computer Science; LM-20 Aerospatiale and Astronautic Engineering; LM-21 Biomedical Engineering; LM-22 Chemical Engineering; LM-23 Civil Engineering LM-25 Automation Engineering; LM-26 Safety Engineering; LM-27 Telecommunications Engineering; LM-28 Electrical Engineering; LM-29 Electronic Engineering; LM-30 Energy and Nuclear Engineering; LM-31 Management Engineering; LM-32 Computer Systems Engineering; LM-33 Mechanical Engineering; LM-34 Naval Engineering; LM-35 Environmental Engineering; LM-40 Mathematics; LM-44 Mathematical Modelling for Engineering; LM-48 Urban and environmental territorial planning LM-53 Materials science and engineering; LM-54 Chemical Sciences; LM-55 Cognitive Sciences; LM-56 Scienze of Economics; LM-58 Sciences of the Universe; LM-66 Computer Security; LM-70 Food Sciences and Technologies; LM-71 Sciences and Technologies of Industrial Chemistry; LM-72 Navigation Sciences and Technologies; LM-75 Environmental and Land Sciences; LM-79 Geophysical Sciences LM-82 Statistics LM-86 Zootechnical sciences and animal technologies LM-91 Techniques and methods for the information society LM-92 Theories of communication LM-93 Theories and methodologies of e-learning and media education LM / SC Criminological sciences applied to investigation and security 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. 16 in total: - n. 12 posts benefiting of a scholarship / other forms of financial support and - n. 4 posts without scholarship / other forms of financial support
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)	**See the provisions of Annex B**
Selection procedure for ordinary / reserved posts	
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 - 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, paragraph. 4 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. Costantino De Angelis: costantino.deangelis@unibs.it; Mrs. Rosaria Nardo – Secretariat Department of Information Engineering: rosaria.nardo@unibs.it
PhD Teaching and research activity	https://permalink.unibs.it/phd/38/comptrasv https://permalink.unibs.it/phd/38/langskprj https://permalink.unibs.it/phd/38/formric https://permalink.unibs.it/phd/38/general-en https://permalink.unibs.it/phd/38/drii/site https://permalink.unibs.it/phd/38/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 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	December 1st, 2022
Proponent Structure	Department of Mechanical and Industrial Engineering

Coordinator	Prof. Pietro Poesio (advocate)
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. 18 in total: - n. 14 posts benefiting of a scholarship / other forms of financial support and - n. 4 posts without scholarship / other forms of financial support
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)	**See the provisions of Annex B**
Selection procedure for ordinary and reserved posts	
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, - 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, paragraph. 4 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. Pietro Poesio, email: pietro.poesio@unibs.it
PhD Teaching and research activity	https://permalink.unibs.it/phd/38/comptrasv https://permalink.unibs.it/phd/38/langskprj https://permalink.unibs.it/phd/38/formric https://permalink.unibs.it/phd/38/general-en https://permalink.unibs.it/phd/38/drimi/site-courses https://permalink.unibs.it/phd/38/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	December 1st, 2022
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-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. 5 in total - n. 4 posts benefiting of a scholarship / other forms of financial support and - n. 1 post without scholarship / other forms of financial support
Out of which: Reserved posts	n. 1 reserved to candidates having an eligible academic degree achieved in foreign Universities.
Additional Reserved posts	- n. 1 post benefiting of a scholarship, reserved to candidates eligible under the European Call HORIZON-MSCA-2021-DN-01 - Project: 101071886 CISSE. Candidate in the process of being identified through a separate EU evaluation procedure.

	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)	None

Selection procedure for ordinary and reserved posts

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, paragraph. 4 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, e-mail: eugenio.monti@unibs.it
PhD Teaching and research activity	https://permalink.unibs.it/phd/38/comptrasv https://permalink.unibs.it/phd/38/langskprj https://permalink.unibs.it/phd/38/formric https://permalink.unibs.it/phd/38/general-en https://permalink.unibs.it/phd/38/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	December 1st, 2022
Proponent Structure	Department of Law
Coordinator	Prof. Luca Mario Masera (advocate)
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. 5 in total - n. 4 posts benefiting of a scholarship / other forms of financial support and - n. 1 posts without scholarship / other forms of financial support
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)	**See the provisions of Annex B**

Selection procedure for ordinary and reserved posts

Admission requirements	Maximum score applied to candidates' qualifications: 40/100 Eligible qualifications: - Master's thesis 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, paragraph. 4 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/38/general-en https://permalink.unibs.it/phd/38/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	December 1st, 2022
Proponent Structure	Department of Molecular and Translational Medicine
Coordinator	Prof. Marco Presta
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-41 Medicine and Surgery
	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. 5 in total
	- n. 4 posts benefiting of a scholarship / other forms of financial support and
	- n. 1 posts without scholarship / other forms of financial support
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)	**See the provisions of Annex B**
Selection procedure for ordinary and reserved posts	
Evaluation of Curriculum Vitae/Publications, etc.	Maximum score: 30/100
	- Undergraduate University degree final score: maximum score 10/100

	- 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 10/100 - 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 - One letter of recommendation must be provided jointly with the other documents required for application.
Evaluation of a project proposal	Maximum score: 10/100 A proposal for a research project on a topic related to Precision Medicine area of study must be enclosed to the application. The proposal, having a length of max. 1.500 words, to be drafted in English language, has the sole purpose of evaluating the candidate's aptitude for research and will be subject of discussion during the interview. The proposal will not necessarily represent the topic of the research activity that will be carried out by the PhD candidate within the PhD Programme.
Interview	Maximum score: 60/100 Interview on one of the thematic areas of the curriculum indicated by the candidate, and on the research proposal included in the application; 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 includes a maximum of 30 points) added to the one achieved in the Research project proposal (which includes a maximum of 10 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, paragraph. 4 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/38/comptrasv https://permalink.unibs.it/phd/38/langskprj https://permalink.unibs.it/phd/38/formric https://permalink.unibs.it/phd/38/general-en https://permalink.unibs.it/phd/38/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	December 1st, 2022
Proposing Structure	Department of Information Engineering
Coordinator	Prof.ssa Alessandra Flammini
Curricula	Not envisaged
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-17 Fisica; LM-18 Informatica; 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. 13 in total - n. 10 posts benefiting of a scholarship / other forms of financial support and - n. 3 posts without scholarship / other forms of financial support
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)	**See the provisions of Annex B**

Selection procedure for ordinary and reserved posts

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.
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). • 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. The Interview may be envisaged to take place remotely for all candidates, also due to the emergency represented by COVID-19.
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/38/comptrasv https://permalink.unibs.it/phd/38/langskprj https://permalink.unibs.it/phd/38/formric https://permalink.unibs.it/phd/38/general-en https://permalink.unibs.it/phd/38/t4h/en https://permalink.unibs.it/phd/38/t4h/site