

**Strategic Innovation for Sustainable and Smart Ecosystems**

**(Cod. 134R)**

<b>Department</b>	Economics, Management and Statistics (DEMS)		
<b>Coordinator</b>	Prof. Paul Matthyssens		
<b>Length of program</b>	3 years		
<b>Research topics</b>	The PhD program offers scholarship with a strong interdisciplinary emphasis in four areas of expertise: "Process innovation"; "Product innovation"; "Social & Organizational innovation"; and "Welfare innovation."		
<b>Places available</b>	University scholarships	n. 3	<p>n. 1 scholarship linked to the following research project: <i>"Unraveling the Impact of Plastic Pollution on Carbon Cycling and Ecosystem Metabolism in Freshwater Environments"</i> <b>(PROG.1)</b></p> <p>n. 1 scholarship linked to the following research project: <i>"Alliance between Education and Art for Social Innovation"</i></p> <p>n. 1 scholarship linked to the following research project: <i>"Novel Pharmacological Strategies for the Modulation of Voltage-Gated Channels: Development of New Drugs and Drug Repurposing for the Treatment of Channelopathies"</i></p>
	Scholarships funded by the Department	n. 4	<p>n. 1 scholarship funded by the Department of Physics "Giuseppe Occhialini" and linked to the following research project: <i>"Study of thermonuclear fusion plasmas by means of emitted radiation diagnostic techniques"</i> <b>(PROG.2)</b></p> <p>n. 1 scholarship funded by DEMS, Department of Excellence 2023-2027, linked to the following research project: <i>"Sustainable Artificial Intelligence and Machine Learning"</i> <b>(PROG.3)</b></p> <p>n. 1 scholarship funded by the Department of Law, linked to the following research project: <i>"Strategic Innovation for Justice: Sustainable Artificial Intelligence and Innovative Solutions for the Efficiency of Judicial Ecosystems"</i> <b>(PROG.4)</b></p> <p>n. 1 scholarship funded by the Department of Psychology - Department of Excellence 2023-2027 project, linked to the following research project: <i>"Psychological Science for Future Life: A Research Ecosystem to Address Future Life Challenges"</i> <b>(PROG.5)</b></p>
	Scholarships funded by companies which have an agreement with the University	n. 6	<p>n. 1 scholarship funded by Intesa San Paolo S.p.A., linked to the following research project: <i>"Human-Centred Approach to AI Innovation for social sustainability in technological development and regulation"</i> <b>(PROG.6)</b></p> <p>n. 1 scholarship funded by A2A S.p.A., linked to the following research project: <i>"Integrated approaches to assessing and analyzing strategies for planning, maintaining and restoring soil biodiversity and health"</i> <b>(PROG.7)</b></p>

			<p>n. 1 scholarship funded by Italfarmaco S.p.A., linked to the following research project: "<i>New Drug Hits and Chemical Probes Targeting Histone Deacetylase 10 (HDAC10)</i>" <b>(PROG.8)</b></p> <p>n. 1 scholarship funded by Fondazione AVSI, linked to the following research project: "<i>Contributions to Psychometrics: Optimizing the Number of Items per Construct for Enhanced Diagnostic Accuracy</i>" <b>(PROG.9)</b></p> <p>n. 2 scholarships funded by Eni S.p.A., linked to the following research projects:</p> <p>1) "<i>Innovative functional materials to accelerate nuclear fusion</i>" <b>(PROG.10)</b></p> <p>2) "<i>Advancing Nuclear Fusion: Research and Innovation within the Eni-UNIMIB Joint Center</i>" <b>(PROG.11)</b></p>
	Scholarships funded by external bodies	n. 1	<p>n. 1 scholarship funded by Corimav, linked to the following research project:</p> <p>"<i>New "Carbon-negative" Functional Fillers for Green Tyres: investigation of Biochar materials</i>" <b>(PROG.12)</b></p>
	Executive PhD positions	n. 3	<p>n. 2 positions reserved for employees of Intesa San Paolo, linked to the following research projects:</p> <p>1) "<i>Human rights as guardrails for the age of Artificial Intelligence</i>"</p> <p>2) "<i>Unveiling the AI Mind: Mechanistic Interpretability for Trustworthy Systems</i>"</p> <p>n. 1 position reserved for employee of Italfarmaco, linked to the following research project: "<i>Exploring the Functions of HDAC10: A biochemical and biological study</i>".</p>
	Total number of places available	n. 17	
<b>Selection procedures</b>	<ul style="list-style-type: none"> <li>• Assessment of qualifications and publications</li> <li>• Assessment of the research project</li> <li>• Oral examination (videoconference)</li> </ul>		
<b>Assessment of qualifications</b>	<ol style="list-style-type: none"> <li>1) Grade of bachelor degree: max 3 points</li> <li>2) Grade of master degree (second cycle): max 7 points</li> <li>2bis) Grade of old system degree or single-cycle second level degree: max 10 points</li> <li>3) Publications in extenso (already published or accepted by the publishers) and conference papers, of the last two years: max 4 points</li> <li>4) Participations in post-degree masters, training courses, advanced courses, specialization schools, any other second degrees: max 2 points</li> <li>5) Certification of joint researches and analysis: max 2 points</li> <li>6) Certification of training periods and/or research periods abroad of at least two months: max 2 points</li> </ol> <p>The Committee will evaluate periods less than 2 months only if the early come back has been due to documented force majeure for COVID-19.</p> <p>For those students who have not obtained their degree yet, the score of points 2 or 2bis will be replaced with the assessment of the average mark of the examinations:</p>		

	<ul style="list-style-type: none"> <li>• Students of Master grade (second cycle): max 7 points</li> <li>• Students of old system degree or single-cycle second level degree: max 10 points</li> </ul> <p><b>To access the assessment of research project a minimum score of 4 in the assessment of qualifications is requested, otherwise candidates will not be admitted and will be excluded from the competition.</b></p>
<b>Research project</b>	<p>During the application process, in addition to their qualifications, candidates must also upload a research project.</p> <p>Supplement with any information regarding the writing of the project such as type, structure, language, etc. The research project, written exclusively in English, should not exceed 4 pages (including any graphs, figures, tables and bibliographical references) and should be relevant to the topic (for project-based scholarships) chosen by the applicant.</p> <p><b>To access the oral examination a minimum score of 4 in the assessment of the research project is requested, otherwise candidates will not be admitted and will be excluded from the competition.</b></p>
<b>Information about examinations</b>	<p><b>Oral examination:</b> the oral examination comprises a discussion of the research project proposed by the candidate and its relevance to the field of study identified by the PhD. The examination will be held in English.</p>
<b>Results of the assessment of qualifications and research project</b>	<p>The results of the assessment of qualifications and research project, together with a breakdown of candidates in the examination days, that has notification value for all legal purpose, will be published on <b>May 30<sup>th</sup> 2025</b> on the University website at the following link: <a href="https://www.unimib.it/studiare/dottorato-ricerca/accedere-al-dottorato/informazioni-concorsi">https://www.unimib.it/studiare/dottorato-ricerca/accedere-al-dottorato/informazioni-concorsi</a></p>
<b>Oral examinations</b>	<p>Oral examinations will be held on <b>June 4th, 5th, 6th, 9th, 10th, 11th, 12th, 13th, 16th, 17th, 18th, 19th and 20th 2025</b> from <b>10:00 a.m.</b> (Italian time)</p> <p>The oral examination procedures will be published at the same time of the publication of the results of the assesment of qualifications and research project.</p>
<b>Rankings</b>	<p>Only candidates with a total final score of at least 50/100 (given by the sum of the assessment of qualifications, research project and oral examination) will be eligible for the rankings.</p> <p>Rankings will be published at the following link: <a href="https://www.unimib.it/studiare/dottorato-ricerca/accedere-al-dottorato/graduatorie-rankings">https://www.unimib.it/studiare/dottorato-ricerca/accedere-al-dottorato/graduatorie-rankings</a></p>
<b>Contact for academic information</b>	<p><a href="https://en.unimib.it/study/doctoral-research-phd-programmes/phd-programmes/strategic-innovation-sustainable-and-smart-ecosystems-sis2e">https://en.unimib.it/study/doctoral-research-phd-programmes/phd-programmes/strategic-innovation-sustainable-and-smart-ecosystems-sis2e</a></p>
<b>Further information</b>	<p>All PhD students are requested to conduct research at a scientific institution abroad for at least 3 months.</p> <p><b>Start of the studies:</b> 01.11.2025</p>