

Strategic Innovation for Sustainable and Smart Ecosystems

(Cod. 134R)

Department	Economics, Management and Statistics (DEMS)		
Coordinator	Prof. Paul Matthyssens		
Length of program	3 years		
Research topics	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."		
Places available	University scholarships	n. 3	of which 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> (PROG.1)
	Scholarships funded by the Department	n. 4	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> (PROG.2) 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> (PROG.3) 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> (PROG.4) 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> (PROG.5)
	Scholarships funded by companies which have an agreement with the University	n. 6	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> (PROG.6) 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> (PROG.7) 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> (PROG.8) n. 1 scholarship funded by Fondazione AVSI, linked to the following research project: <i>"Contributions to</i>

			<p><i>Psychometrics: Optimizing the Number of Items per Construct for Enhanced Diagnostic Accuracy” (PROG.9)</i></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” (PROG.10)</i></p> <p>2) <i>”Advancing Nuclear Fusion: Research and Innovation within the Eni-UNIMIB Joint Center” (PROG.11)</i></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” (PROG.12)</i></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	
Selection procedures	<ul style="list-style-type: none"> • Assessment of qualifications and publications • Assessment of the research project • Oral examination (videoconference) 		
Assessment of qualifications	<p>1) Grade of bachelor degree: max 3 points</p> <p>2) Grade of master degree (second cycle): max 7 points</p> <p>2bis) Grade of old system degree or single-cycle second level degree: max 10 points</p> <p>3) Publications in extenso (already published or accepted by the publishers) and conference papers, of the last two years: max 4 points</p> <p>4) Participations in post-degree masters, training courses, advanced courses, specialization schools, any other second degrees: max 2 points</p> <p>5) Certification of joint researches and analysis: max 2 points</p> <p>6) Certification of training periods and/or research periods abroad of at least two months: max 2 points</p> <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"> • Students of Master grade (second cycle): max 7 points • Students of old system degree or single-cycle second level degree: max 10 points <p>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.</p>		

<p>Research project</p>	<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>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.</p>
<p>Information about examinations</p>	<p>Oral examination: 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>
<p>Results of the assessment of qualifications and research project</p>	<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 May 30th 2025 on the University website at the following link: https://www.unimib.it/studiare/dottorato-ricerca/accedere-al-dottorato/informazioni-concorsi</p>
<p>Oral examinations</p>	<p>Oral examinations will be held on June 4th, 5th, 6th, 9th, 10th, 11th, 12th, 13th, 16th, 17th, 18th, 19th and 20th 2025 from 10:00 a.m. (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>
<p>Rankings</p>	<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: https://www.unimib.it/studiare/dottorato-ricerca/accedere-al-dottorato/graduatorie-rankings</p>
<p>Contact for academic information</p>	<p>https://en.unimib.it/study/doctoral-research-phd-programmes/phd-programmes/strategic-innovation-sustainable-and-smart-ecosystems-sis2e</p>
<p>Further information</p>	<p>All PhD students are requested to conduct research at a scientific institution abroad for at least 3 months.</p>