

# PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 38th cycle

PNRR\_352 Research Field: DEVELOPING MODELS FOR ASSESSING THE ECOLOGICAL, ENVIRONMENTAL AND SOCIAL IMPACT OF THE CONSORTIUM'S INCLUSION AND COHESION SERVICES AND ACTIVITIES

# Monthly net income of PhDscholarship (max 36 months)

€ 1450.0

In case of a change of the welfare rates during the three-year period, the amount could be modified.

### Context of the research activity

This doctoral proposal is developed according to the DM n.352/2022 that sets out the criteria for the creation of innovative PhD courses aiming to satisfy corporates' reseach and innovation needs as ghighlighted in Mission 4, Component 2 of the Italian National Recovery and Resilience Plan.

This proposal sets out to investigate integrated impact measurement and management models capable of evaluating the ecological, environmental and social value generated by a company. Wellbeing, health, social exclusion, equality, climate change, research and education are not only posing a challenge for governments and public bodies, but also for corporations. Promoting a shift in the economic paradigm through the centrality of environmental and social impact requires investments and a continuous management of synergies and trade-offs between different social, environmental, economic and governance objectives; thus requiring companies to have sound models to measure and manage their impact that can facilitate innovation at both the products or services and the organizational levels. Those impact measurement and management infrastructures, if combined with Artificial Intelligence, are capable of re-engineering and digitalizing evaluation processes, enhancing the flow of information related to

financial and non-financial performances in a way to facilitate decision-making at the company level and

Motivation and objectives of the research in this field



	improving the quality of data shared throughout the value chain. Infrastructures as such can enable learning and know-how transfer opportunities and promotes a transition towards a more sustainable economic paradigm, thus improving the capacity of corporations to access impact-oriented investment funds and to develop new purpose-driven public-private partnerships (PPPs). This research will focus on the development of an integrated ecological, environmental and social impact measurement and management framework to be applied to CNS?s services and inclusion activities.
Methods and techniques that will be developed and used to carry out the research	According to the objectives of investigating the challenges related to the transformation of the economic paradigm and the development of integrated and highly-technological impact measurement and management frameworks, the project will integrate qualitative and quantitative approaches. Different methodologies coherent with their objiectives will be applied by the researcher.  The overall output of the research will be a framework that will:  (a) support the development of an impact-oriented business model  (b) provide guidelines on the role of financial resources, PPPs, impact evaluation processes and artificial intelligence  (c) enable the management of risks and trade-offs between different economic, environmental and social objectives  (d) provide opportunities for knowledge and know-how transfer throughout the value chains to enhance economic growth and scale social impact in the long term.
Educational objectives	The educational objective is to provide the candidate with a perspective on the purpose-driven economy. Given the importance of preserving impact integrity as key factor to unleashing the impact economy's transformative power, special attention will be paid to strengthen the awareness about the enabling role technology and proximity can play. Furthermore, the knowledge generated and the framework developed will contribute to knowledge and

# POLITECNICO DI MILANO



	practice by providing guidelines to measure and manage ecological, environmental and social impact with the support of AI.  Finally the complexity and holistic nature of the project will provide the candidate with a skill set to design, implement and evaluate solutions to complex problems.
Job opportunities	The candidate may achieve high-ranking job positions in the realm of research, innovation and general management. The project paves the way for a career in research organisations, firms and start-ups.
Composition of the research group	1 Full Professors 1 Associated Professors 1 Assistant Professors 6 PhD Students
Name of the research directors	Irene Bengo, Mario Calderini

# **Contacts**

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Additional support - Financial aid per PhD student per year (gross amount)	
Housing - Foreign Students	
Housing - Out-of-town residents (more than 80Km out of Milano)	

Scholarship Increase for a period abroad		
Amount monthly	725.0 €	
By number of months	6	

National Operational Bro	agram for Decearch and Innovation
National Operational Pro	ogram for Research and Innovation

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Company where the candidate will attend the stage (name and brief description)	Consorzio Nazionale Servizi (CNS)
By number of months at the company	6
Institution or company where the candidate will spend the period abroad (name and brief description)	The PhD student will spend a period of at least 6 months abroad to interact with researchers and participate in joint activities potentially foreseen in the project, according to specific needs. Indeed, the project is highly interdisciplinary, and this favors the collaboration with foreign research centers where the candidate can acquire in-depth knowledge on the theme.
By number of months abroad	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information

Funding for educational activities: 4.900,00 Euros for three years.

Teaching assistantship: There are various forms of financial aid for activities of support to the teaching practice. The PhD student is encouraged to take part in these activities, within the limits allowed by the regulations.

Desk availability: shared use Computer availability: individual use