



PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 38th cycle

Number of scholarship offered	14
Department	DIPARTIMENTO DI INGEGNERIA GESTIONALE

Description of the PhD Programme

The Ph.D. programme in Management Engineering (DRIG) offers students advanced training and orientation towards research in the field of management, economics and industrial engineering. It aims to develop professionals able to carry out high-profile research in these fields in universities and international research institutions, manufacturing and service companies, regulatory authorities and other public bodies. The programme allows the student to develop a sound methodological background, multidisciplinary knowledge by attending courses designed to provide a multiplicity of visions, theories and approaches, a broad cultural panorama and the ability to study problems in an innovative manner, combining various analysis perspectives. The commitment of the Department of Management, Economics and Industrial Engineering (DIG) in the field of research and scientific cooperation with other academic institutions and major industrial and service companies offers an ideal environment for students to acquire leading-edge knowledge and cultivate their own research interests in a broad spectrum of research subjects.

Research topics of the PhD Programme are aligned with the Research Areas of the Department:

- The Management Research Area is concerned with the study of management and innovation in companies, financial institutions and Public Administrations from a strategic and organizational point of view;
- Researchers in the area of Applied Economics make use of economic theory and models to study problems arising in the industrial, international, financial, innovation and entrepreneurship domains. Investigations into these realms are conducted at multiple levels of analysis, including firms, industries, countries, individuals, public administrations and non-profit organizations;
- The Industrial Engineering Research Area addresses the strategies, methodologies and techniques for planning, design, modelling, construction, operation, maintenance, processing and disposal of industrial plants, infrastructures and production systems of goods and services.

The knowledge developed within the three Research Areas is also used in a cross-disciplinary manner, under temporary Research Lines, in order to address significant emerging issues and challenges. More detailed descriptions - in terms of issues addressed, disciplinary research fields



and methodology used - are available at <https://www.som.polimi.it/en/research/>.

Selected candidates are enrolled with the basic departmental scholarships, and the specific research subject will be assigned, with the agreement of the candidate and the Board of Professors of the PhD Programme, within the first months of the PhD activity. For specific research topics, further increments can be defined by the proposing research group (see the additional subject forms in the following pages describing the topics and the scholarships offered for each topic). Please refer to the call for further information.



PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 38th cycle

**THEMATIC Research Field: DESIGN TO VALUE UNVEILING HIDDEN APPLICATIONS IN
EXISTING/EMERGING TECHNOLOGIES**

Monthly net income of PhDscholarship (max 36 months)

€ 1400.0

In case of a change of the welfare rates or of changes of the scholarship minimum amount from the Ministry of University and Research, during the three-year period, the amount could be modified.

Context of the research activity

Motivation and objectives of the research in this field

Studies of innovation management have often focused their investigations on two domains: technologies and markets. Technological innovation has been capturing most attention, especially as far as radical technological change is concerned. Indeed, in the past decades a rich stream of studies has explored the antecedents of technological breakthrough. Later, investigations have focused more on the applications of existing or new technologies and/or products to penetrate into new markets domains. However, design has recently gained much attention among practitioners and scholars as a source of innovation. Firms are increasingly investing in design and involving design firms in their innovation processes. Academic journals are publishing articles that explore the contribution of design to product development and business performance. And the practitioners' press has dived into the subject extensively. Still, the role of design in innovation and competition remains a rather young (preparadigmatic) area, with blurred boundaries and often unclear or contrasting perspectives. Design is related to the innovation of the meaning of products and services: it concerns the purpose, the 'why' people use things, rather than the functionality and performance of products (i.e. the 'what' and 'how'). Short sighted companies often focus on the search of new markets for a technology without taking in consideration its meanings. In this way when companies look for potential applications they just focus on technological substitutions: companies



	<p>add more effective and powerful functionality or improve performance, leaving the existing meaning untouched. The myopic part of the industry embraces the new technology for utilitarian reasons - until a firm invests on design driven-innovation, finds out the disruptive quiet meaning and realizes its full potential. Especially in technology-intensive companies, design has got a minor role: in this companies design is eventually useful for creating a user friendly interface, thus making technology more accessible, and for wrapping the technology core in a nice box, but nothing more. Instead, design can play a major role at a technology's inception, especially when a breakthrough technology arises. When a breakthrough technology emerges, it embeds many potential meanings. Some are immediate and promoted by those who have initially guided technological development. Other meanings are quiescent, but sooner or later they become manifest. More precisely each technology is considered to embed a set of disruptive new meanings that are waiting to be uncovered. If a company reveals those quiescent meanings it will seize the technology's full value, celebrating a technology epiphany.</p>
<p>Methods and techniques that will be developed and used to carry out the research</p>	<p>The research project will be developed in Fedrigoni (https://fedrigoni.com/); Fedrigoni is a leading player in specialty papers (for packaging, quality prints, security and fine arts) and self-adhesive solutions. Today Fedrigoni is the third global player in self-adhesive materials and the European leader in specialty papers. Fedrigoni is currently engaged in a deep review of its product portfolio, aiming not only at completing and improving the product range but also at identifying market opportunities in adjacent businesses. An example of this is the 'plastic to paper' transition, where "unconventional applications" of paper properties have been leveraged to replace plastic materials. Fedrigoni has developed in the last years several research collaborations with the Alta Scuola Politecnica (ASP), creating the appropriate settings to welcome a PhD research project. The research project will rely on three main research methodologies:</p> <ul style="list-style-type: none"> - Case Study Research, aimed at investigating the



	<p>required capabilities and practices in the development of Technology Epiphanies;</p> <ul style="list-style-type: none"> - Ethnographic Research, aimed at observing the development process of Technology Epiphanies; - Action Research, aimed at experimenting the contribution of Technologies Epiphanies in valuing the portfolio of existing/emerging technologies.
Educational objectives	<p>Industrial PhD candidate will develop competences and attitudes aimed at applying Technology Epiphanies practices in dealing with existing/emerging technologies:</p> <ul style="list-style-type: none"> - Analyzing the potential of existing/emerging technologies; - Identifying original application field where to adopt existing/emerging technologies; - Harmonizing the portfolio of existing/emerging technologies with the aim of optimizing the product portfolio.
Job opportunities	<ul style="list-style-type: none"> - R&D Manager in Industrial and High-Tech Manufacturers - Product Manager and Business Developer Industrial and High-Tech Manufacturers - Procurement Manager in Industrial and High-Tech Manufacturers
Composition of the research group	<p>2 Full Professors 1 Associated Professors 3 Assistant Professors 5 PhD Students</p>
Name of the research directors	Claudio Dell'Era e Stefano Magistretti

Contacts
<p>Claudio Dell'Era (claudio.dellera@polimi.it) Stefano Magistretti (stefano.magistretti@polimi.it)</p>

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	700.0 €
By number of months	6

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

Funding for educational activities: 5.700,00 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



PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 38th cycle

**INTERDISCIPLINARY Research Field: DESIGNING THE SUPPLY CHAINS OF THE FUTURE:
SCALING-UP THE USE OF NEW SUSTAINABLE MATERIALS IN THE CONSTRUCTION
INDUSTRY**

Monthly net income of PhDscholarship (max 36 months)

€ 1400.0

In case of a change of the welfare rates or of changes of the scholarship minimum amount from the Ministry of University and Research, during the three-year period, the amount could be modified.

Context of the research activity

Motivation and objectives of the research in this field

Interdisciplinary PhD Grant

The PhD research will be carried out in collaboration with research groups of the PhD programme in **"ARCHITECTURE, BUILT ENVIRONMENT AND CONSTRUCTION ENGINEERING"**.

See <https://www.dottorato.polimi.it/?id=422&L=1> for further information.

Construction is an industry with big impact on the environment and on society. From an environmental perspective, material research has generated, during the last years, innovative and promising materials that can allow sustainable buildings, thus supporting smart cities. Among others ¿Bio-based materials¿, i.e. materials delivered by living organisms, e.g. as fungi or plants, seem promising in their use in buildings. They have good properties in terms of insulation, soundproofing, and environmental impact. These materials are less polluting in production and disposal. In spite of consumers¿ interest in these materials, as well as the fact that there are companies already selling these products, there are still hurdles to mass production and use of these materials. For instance, resistance to innovation, absence of scalable business models, the need to design new supply chains, and the need of performing intensive testing activities, permissions from governmental institutions, and standardization efforts, are among the



	<p>reasons why these materials are not produced and used at mass scale. To address the above-mentioned problems, this research project aims to answer the following main research questions:</p> <ul style="list-style-type: none"> • What are the requirements on innovative materials that fit best our future living and working? And what are the potential (bio-based) materials that satisfy these requirements? • What innovative business models and supply chains can best leverage bio-based materials in construction? • What are the drivers and barriers to accommodate the bio-based material in the construction industry?
Methods and techniques that will be developed and used to carry out the research	<p>To provide an answer to the research questions, the following methodologies are adequate:</p> <ul style="list-style-type: none"> - Focus groups/industry workshops involving bio-based materials researchers and supply chain experts to identify the requirements on bio-based materials - Expert interviews for the investigation of potential barriers to sustainable innovation in construction and for the identification of possible solutions to overcome these barriers, while taking technical, supply chain and business models perspectives - Conceptual development of methods and tools for supply chain and business model innovation to accommodate bio-based materials in construction - Case studies/action research to apply and improve the proposed methods
Educational objectives	<p>The Ph.D. candidate at the end of the program will possess adequate research skills in the field of supply chain management and a specific knowledge of innovative materials for the construction industry. In particular, the Ph.D. candidate will:</p> <ul style="list-style-type: none"> - be able to perform a structured literature review - be able to perform qualitative research methods - be able to analyse qualitative data to develop insights and methods/tools - be able to present and publish her/his research results



Job opportunities	Academia, international institutions, construction companies, multinational organizations, consulting firms.
Composition of the research group	0 Full Professors 3 Associated Professors 0 Assistant Professors 2 PhD Students
Name of the research directors	Margherita Pero, Nizar Abdelkafi, Ingrid Paoletti

Contacts
Margherita.pero@polimi.it; Nizar.abdelkafi@polimi.it

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	700.0 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
<p>Candidates with a background in Management Engineering, Mechanical Engineering, Built Environment Engineering, Supply Chain Management Studies, Architecture. The candidate might be involved as research associate in additional research projects and as teaching assistant in courses in the area of Operations and Supply Chain Management. A desk will be provided in the Department of Management, Economics and Industrial Engineering.</p> <p><i>Funding for educational activities: 5.700,00 Euros for three years.</i></p> <p><i>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.</i></p> <p><i>Desk availability: shared use</i></p> <p><i>Computer availability: individual use</i></p>



PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 38th cycle

OPEN SUBJECT Research Field: ELECTIVE RESEARCH IN MANAGEMENT ENGINEERING

Monthly net income of PhDscholarship (max 36 months)	
€ 1195.0	
In case of a change of the welfare rates or of changes of the scholarship minimum amount from the Ministry of University and Research, during the three-year period, the amount could be modified.	
Context of the research activity	
Motivation and objectives of the research in this field	<p>Making use of theories and methodologies within the fields of management, economics, and industrial engineering to address leading-edge research issues, which contribute to both scholars' and practitioners' debate. PhD students are free to propose a specific research project, clearly showing how it fits with the research objectives of the Department's research lines: https://www.som.polimi.it/en/research/</p> <p>Admitted PhD students will conduct their research under the guidance of a supervisor.</p>
Methods and techniques that will be developed and used to carry out the research	<p>PhD students are encouraged to apply multiple methodologies (e.g., qualitative, quantitative, experimental methods) and research designs to develop and test their solutions, methodologies, models and theories.</p>
Educational objectives	<p>The DRIG doctoral program (Dottorato di Ricerca in Ingegneria Gestionale) offers advanced training in leading-edge areas at the core of the scientific community's debate and of practitioners and policymakers' interests. The doctoral school requests each student to spend a minimum of six months at a foreign research institution. During this period, students receive additional financial support.</p> <p>See here for further details: https://www.som.polimi.it/en/course/phd/</p>
Job opportunities	Thanks to competences and skills developed during their



	doctoral training, candidates often achieve high-ranking job positions in the realm of research, innovation and general management. The DRIG program paves the way to careers in universities, research organizations, firms, start-ups and regulatory bodies. The candidates often receive invitations for post-doc positions from Italian and foreign universities. The strong connections the Department has with other universities, research institutions, firms and regulatory bodies boost the employability of DRIG PhDs laureates.
Composition of the research group	49 Full Professors 27 Associated Professors 39 Assistant Professors 120 PhD Students
Name of the research directors	Michela Arnaboldi, Cristina Rossi, Marco Macchi

Contacts
For additional information, please contact Mr. Claudio Duran, PhD-GES@polimi.it, ph.: +390223994846.

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	597.50 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
<p><i>Funding for educational activities: 5.700,00 Euros for three years.</i></p> <p><i>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.</i></p> <p><i>Desk availability: shared use</i></p>



PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 38th cycle

**THEMATIC Research Field: OPEN SYSTEM ARCHITECTURES, PROJECT ORGANIZING
AND THE INDUSTRIAL DYNAMICS OF THE NEW SPACE ECONOMY**

Monthly net income of PhDscholarship (max 36 months)	
€ 1400.0	
In case of a change of the welfare rates or of changes of the scholarship minimum amount from the Ministry of University and Research, during the three-year period, the amount could be modified.	
Context of the research activity	
Motivation and objectives of the research in this field	<p>The strategic use of modularization and standardization of system design along with co-innovation and open innovation practices are radically changing complex project businesses. This transition is one of the key enablers of the New Space Economy. The concept of Open system Architectures is enabling a large variety of missions, while assuring compatibility with a wide range of launchers, by customizing the same tech platform. The benefits of Open system Architectures include reducing manufacturing time and costs, enhancing reusability of HW and SW modules, and creating additional revenue streams along the system life cycle. How to address the new opportunities and challenges in the governance and management of such complex projects and programmes is still largely unknown and underinvestigated.</p>
Methods and techniques that will be developed and used to carry out the research	<p>The candidate will develop her/his research in tight collaboration with a leading European company in the Space Industry and research partners involved in the joint research initiative.</p> <p>The research project will leverage the literature on system engineering and value creation in complex projects. The research approach will mixed qualitative and quantitative methods, such as case study methodology and economic and financial assessment of capital investments.</p>
Educational objectives	



	The research is multidisciplinary in nature: the candidate will develop advanced research skills in the areas of complex projects and programme management, system engineering, and business model innovation. She/he will learn how to design and conduct a research project, adopting the proper methodologies for data collection and analysis, and to present and publish results in both academic and practitioner outlets.
Job opportunities	The successful completion of the programme will open several job opportunities in both academia and companies, in research, consulting and managerial roles.
Composition of the research group	4 Full Professors 0 Associated Professors 2 Assistant Professors 0 PhD Students
Name of the research directors	Proff. Paolo Trucco and Giorgio Locatelli

Contacts
paolo.trucco@polimi.it

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	700.0 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
<p><i>Funding for educational activities: 5.700,00 Euros for three years.</i></p> <p><i>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.</i></p> <p><i>Desk availability: shared use</i></p> <p><i>Computer availability: individual use</i></p>



PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 38th cycle

THEMATIC Research Field: OPERATIONS IMPROVEMENT AND DIGITALISATION

Monthly net income of PhDscholarship (max 36 months)

€ 1400.0

In case of a change of the welfare rates or of changes of the scholarship minimum amount from the Ministry of University and Research, during the three-year period, the amount could be modified.

Context of the research activity

Motivation and objectives of the research in this field

In the last years, industrial production systems are being transformed due to a higher level of digitalisation, which leads to intelligent and connected solutions. Digitalisation is affecting a bigger and bigger part of daily operations of manufacturing and service companies whilst it has not affected in the same way the improvement process, where activities are almost entirely performed by human being. The research aims, thus, to define frameworks and tools to:

- Better understand the improvement/problem solving process
- Identify possible ways to structure such process
- Identify possible digital solutions to support humans in carrying out the structured problem solving process

Methods and techniques that will be developed and used to carry out the research

The following methodologies will be applied in the research project:

- Literature analysis in order to map the situation of research at international level;
- Case studies, in order to analyse the best practices of problem solving and innovation management of companies that have already developed new good practices;
- Action research projects to work on tools for data analysis in order to empower human's ability to analyse data and find the root causes of the problems

Educational objectives

The main educational objectives of the research project are the followings:



	<ul style="list-style-type: none"> - Understand how digitalisation can support the problem solving and innovation management processes - Developing frameworks and tools to facilitate the development and adoption of digital tools to improve problem solving approach. - Evaluating the impact of digital tools on improving the problem solving capabilities of humans.
Job opportunities	<p>The opportunities for a PhD graduate in this research area are:</p> <ul style="list-style-type: none"> - Academic career in the fields of industrial, automation department and operations department; - Industrial career: <ul style="list-style-type: none"> - in a consulting company; - in the OPEX area of manufacturing and service companies
Composition of the research group	<p>1 Full Professors 0 Associated Professors 2 Assistant Professors 0 PhD Students</p>
Name of the research directors	Alberto Portioli (POLIMI) Victor Gomez Frias (UPM)

Contacts	
<p>Alberto Portioli Staudacher Alberto.portioli@polimi.it, +39 02 2399 2733 Victor Gomez Frias victor.gomez.frias@upm.es</p>	

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	700.0 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
<p>The candidate will work at the Department of Management, Economics and Industrial Engineering and UPM and attend the PhD Courses and all the educational activities of the PhD Program in</p>



both the institutions.

Increase in the scholarship for stays abroad:

Euro 700,00 per month, for up to 6 + 6 months

Funding for educational activities: 5.700,00 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



PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 38th cycle

OPEN SUBJECT Research Field: ORIENTED RESEARCH IN MANAGEMENT ENGINEERING

Monthly net income of PhDscholarship (max 36 months)	
€ 1400.0	
In case of a change of the welfare rates or of changes of the scholarship minimum amount from the Ministry of University and Research, during the three-year period, the amount could be modified.	
Context of the research activity	
Motivation and objectives of the research in this field	<p>Making use of theories and methodologies to address specific research themes, which contribute to both scholars' and practitioners' debate.</p> <p>A list of specific research themes is available here: https://www.som.polimi.it/phd-scholarships.</p> <p>Selected PhD students will conduct research along these research themes under the guidance of one (or more) supervisor(s).</p>
Methods and techniques that will be developed and used to carry out the research	<p>PhD students are encouraged to apply multiple methodologies (e.g., qualitative, quantitative, experimental methods) and research designs to develop and test solutions, methodologies, models and theories within the aforementioned specific research themes.</p>
Educational objectives	<p>The DRIG doctoral program (Dottorato di Ricerca in Ingegneria Gestionale) offers advanced training in leading -edge areas at the core of the scientific community's debate and of practitioners and policymakers' interests.</p> <p>The doctoral school requests each student to spend a minimum of six months at a foreign research institution.</p> <p>During this period, students receive additional financial support. See for further details: https://www.som.polimi.it/en/course/phd/</p>
Job opportunities	<p>Thanks to competences and skills developed during their doctoral training, candidates often achieve high-ranking job positions in the realm of research, innovation and</p>



	general management. The DRIG program paves the way to careers in universities, research organizations, firms, start-ups and regulatory bodies. The candidates often receive invitations for post-doc positions from Italian and foreign universities. The strong connections the Department has with other universities, research institutions, firms and regulatory bodies boost the employability of DRIG PhDs laureates.
Composition of the research group	49 Full Professors 27 Associated Professors 39 Assistant Professors 120 PhD Students
Name of the research directors	Michela Arnaboldi, Cristina Rossi e Marco Macchi

Contacts
For additional information, please contact Mr. Claudio Duran, PhD-GES@polimi.it, ph.: +390223994846.

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	700.0 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
<p><i>Funding for educational activities: 5.700,00 Euros for three years.</i></p> <p><i>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.</i></p> <p><i>Desk availability: shared use</i></p> <p><i>Computer availability: individual use</i></p>



PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 38th cycle

**INTERDISCIPLINARY Research Field: WOMAN MOBILITIES IN THE PANDEMIC ERA.
TOWARDS A MORE INCLUSIVE MOBILITY**

Monthly net income of PhDscholarship (max 36 months)

€ 1400.0

In case of a change of the welfare rates or of changes of the scholarship minimum amount from the Ministry of University and Research, during the three-year period, the amount could be modified.

Context of the research activity

Motivation and objectives of the research in this field

Interdisciplinary PhD Grant

The PhD research will be carried out in collaboration with research groups of the PhD programme in "**URBAN PLANNING, DESIGN, AND POLICY**".

See <https://www.dottorato.polimi.it/?id=422&L=1> for further information.

A rich body of work on mobility has shown that gender ζ together with other socio-economic, cultural, and demographic features ζ influences individuals' travel behaviors and mobility patterns and practices and should, therefore, be considered when planning transport (Marolda, 2019; Law, 2016; Scholten & Joelsson, 2019; Uteng et al., 2020; Uteng & Cresswell, 2008; Walsh, 2002). Compared to man mobility, woman mobility, at all ages, is characterized by (i) more complex daily trip chains, resulting from woman need to balance professional life greater family care responsibilities, and (ii) greater dependence on local public transport and forms of active mobility (Gilow, 2020; McGuckin & Murakami, 1999; Sánchez de Madariaga & Zucchini, 2019). Such mobility patterns may have changed due to the Covid-19 pandemic and the related policy measures (e.g., distributing, digitalizing, de-synchronizing), which have transformed the organization of social life and work-related conditions. This research proposal investigates the impact of the pandemic and the recovery phase on woman mobility patterns considering different living



	<p>settlements, socio-economic and family conditions, individual attitudes (e.g., attitude towards sustainability, safety concerns), and skills. Specifically, the proposal addresses the following research questions: 1) Has the Covid-19 pandemic affected woman mobility patterns? If so, to what extent? 2) Which mobility policies and accessibility by proximity measures have been proposed to deal with the Covid-19 pandemic constraints in the several living settlements? What are their effects on woman mobility?</p>
<p>Methods and techniques that will be developed and used to carry out the research</p>	<p>A mixed-method approach will be adopted to address the research questions. A critical literature review will be combined with a qualitative and quantitative approach to define place-based mobility habits and needs affecting woman mobilities in selected contexts (the baseline scenario). Then, the following data will be collected: (i) data about urban settlements and transport supply features; (ii) digital data on individuals' daily mobility practices during the pandemic. In addition, surveys to samples of women in the chosen contexts will be conducted. These data will be used to profile woman daily mobility patterns during the pandemic, relying on methodologies taught at UPDP, and to perform quantitative analyses on the impact of the pandemic on woman mobility patterns, exploiting the competencies in econometrics developed at DRIG.</p> <p>The competencies in policy analyses, developed in the two doctoral programs, will then be combined to analyze - in the chosen contexts - opportunities and barriers for woman mobility practices, which have arisen during the policy measures' implementation in the pandemic period. This will also allow designing future place-based and gender-balanced policy measures. Additional interdisciplinary methods and techniques to be adopted concern spatial analysis and data mapping on morpho-functional settings, transport supplies, services impacting mobility practices, and ethnographical analysis.</p>
<p>Educational objectives</p>	<p>At the end of the program, the Ph.D. candidate should: possess adequate research skills in the fields of management and transportation; be able to realize</p>



	literature reviews; build and analyze large dataset using statistical and econometric techniques, but also conduct qualitative analyses; be able to analyse the impact of specific policy measures.
Job opportunities	Academia, public administrations, public and private research centers, consulting firms.
Composition of the research group	5 Full Professors 2 Associated Professors 4 Assistant Professors 11 PhD Students
Name of the research directors	Evila Piva, Paola Pucci

Contacts
evila.piva@polimi.it

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	700.0 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
<p>Candidates with a background in Economics, Management Engineering, Mobility Engineering or Urban Planning and Policy Design, and quantitative skills are encouraged to apply.</p> <p>The candidate might be involved as research associate in additional research projects and as teaching assistant in courses of Business Economics and Organization or in courses offered at the MSc in Management Economics and Industrial Engineering.</p> <p>The candidate will have the right to use the shared workstations at the department of Management Economics and Industrial Engineering and will get a laptop from the research group.</p> <p><i>Funding for educational activities: 5.700,00 Euros for three years.</i></p> <p><i>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.</i></p>

