

Doctoral course in "Sustainability and ESG agenda"

Coordinator: Prof. Alessandra Micozzi - SSD SECS-P/06

Administrative Office: Piazza Mattei, no. 10 - Rome (RM) 00186

Expected course start date: 01 December 2024

Duration: 3 years

CUN Areas: 07 - Agricultural and Veterinary Sciences, 08 - Civil Engineering and Architecture, 09 - Industrial and Information Engineering, 11 - Historical, Philosophical, Pedagogical and Psychological Sciences, 12 - Legal Sciences, 13 - Economics and Statistics, 14 - Political and social sciences.

Curricula:

- ESG strategies and reporting
- Circular economy and technological innovation
- Territorial systems and ESG

Places: n. 12 Total places, of which: 9 with scholarship, 3 without scholarship.

DETAILS OF COMPETITIVE PLACES:

No. 4 scholarships funded by *Universitas Mercatorum*

- **Project theme 1: Greenwashing in Companies: Mechanisms, Impacts and Strategies of Contrast**
The research project aims to explore greenwashing in various aspects, analyzing its dynamics, consequences and possible strategies to mitigate the effect. Key objectives of the project are: to analyze the dynamics of greenwashing, trying to understand how and why companies adopt greenwashing practices; assess the impact of greenwashing, examining its impact on consumers, the environment and the market; develop contrast strategies and propose effective methods to reduce or eliminate greenwashing in businesses.
- **Project theme 2: Circular Economy and Technological Innovation - Smart and sustainable cities**
The research project, linked to the objective of the 2030 Agenda "Sustainable Cities and Communities", will cover: security, sustainability and energy transition of structures and infrastructures, innovative materials and smart manufacturing, development of new models of building and redevelopment of the building stock, decarbonisation of transport and sustainable mobility. In its declination, the objective of the research will be aimed at minimizing the environmental impact inspired by the principles of the circular economy.
- **Project theme 3: Sustainability reporting and the protection of fundamental labour rights (FLS) - Rendicontazione di sostenibilità e tutela dei diritti fondamentali del lavoro (FLS)**
The research project aims to analyse the reporting of the main companies that will be affected by the FLS directives and the ways in which companies will report on their performance in the field of fundamental labour rights, whether the information they provide will be meaningful, whether trade unions will be involved in the information collection process or any other stage of reporting, and what will happen if there have been serious cases of FLS violations that have not been reported. The main objective will be to determine whether companies are ready for the application of the directives and whether the proven violations of the FLR, if not reported, can be grounds for legal liability under these directives.
- **Project theme 4: Trajectories of Sustainability: EsI Analysis, Circular Economy and Innovation for the Ecological Transition**
The research project aims to focus on sustainability in its economic, social and environmental aspects. Specifically it concerns the analysis of esI impacts and sustainable communication; the circular economy with its different declinations (reuse and recycling of materials, sharing economy, the enhancement of the end of life of products); food sustainability; energy efficiency; the design and innovative recovery of



structures; the preservation of terrestrial and marine ecosystems; public policies for sustainable development.

Research activities: periods of study and research at the University/ Company/ Public Body/ Research Centers, etc... (divided into the 3 years of the course) ; study and research periods abroad (6 months).

No. 1 scholarship for the resources of the PNRR, pursuant to D.M. 629/2024, M4C1 - Inv. 4.1 in "Public administration"

- **Project theme: Sustainability and public administrations**

The aim of the research is to revisit the processes that define the cycle of public policies, from conception to evaluation and implementation, considering the perspective of the actors involved in the promotion of sustainability at national level, european and international. The relationship between the P.A. and the ESG paradigm will be addressed through: the sustainable and ecological transformation of P.A.; the transformation that the P.A. demands in the comparison with the world of the enterprises and the organizations that operate to the various scales of government; the role of driving cultural change to develop models, good practices, training activities aimed at achieving sustainability goals; the ability to govern the processes of monitoring, monitoring and evaluating the policies adopted.

Research activities: periods of study and research at public administrations, companies or research centers (min. 6 max. 12 months in 3 years); study and research periods abroad (6 months).

No. 4 scholarship for the resources of the PNRR, pursuant to D.M. 630/2024, M4C2 - Inv. 3.3

- **No. 1 scholarship co-financed by the Company "ERREGI S.r.l."**

Project theme: Requalification sustainable of infrastructures of transport: a model BIM for the enterprises of the construction field.

The Research Project concerns the recovery of transport structures and infrastructures through integrated multidisciplinary approaches oriented towards sustainability through innovative technologies favored by the digital transition (BIM) for the optimization of the design-construction-construction management processes.

- **No. 1 scholarship co-financed by the Company "Società Federpesca Ricerca & Sviluppo S.r.l."**

Project theme: Sustainable Fisheries 2.0: Innovation, Circular Economy and Challenges for the Fisheries Supply Chain in Agenda 2030

The research project aims to investigate the sustainability of fishing enterprises and the fishing supply chain from environmental, social and economic perspectives. In particular, the research will investigate projects aimed at identifying process and product innovations from a circular economy perspective as well as solutions to accompany the sector in the challenges of fleet modernization, business sustainability and generational turnover, in line with the goals of Agenda 2030. The research is aimed at understanding how maritime fisheries and seafood supply chain companies can recover production space in an innovative and sustainable form in compliance with the best standards of European fisheries.

Research activities: periods of study and research at the Company (18 months in 3 years); study and research periods abroad (6 months).

- **No. 2 scholarships co-financed by the Company "Genesis S.r.l."**

Project theme 1: Energy transformation and environmental impact.

The research project aims to reduce the environmental impact of production activities and consumption in the territory, through the promotion of an energy transformation towards renewable sources. Specifically: (i) promote the installation of renewable energy systems on public and private buildings, encouraging self-production of energy by citizens and businesses; (ii) invest in the energy efficiency of buildings, through energy requalification interventions and the adoption of innovative technologies; (iii) develop smart grids to optimize the management of the electricity network and promote the integration of renewable sources. Particular attention will be paid to the measurement and evaluation of environmental impacts and implemented policies.



Project theme 2: Sustainable mobility and environmental impact

The research project aims to reduce the environmental impact of production activities and consumption in the territory, through the promotion of sustainable mobility.

Specifically: (i) strengthening local public transport, creating a network of efficient and accessible buses and trains; (ii) encouraging the use of bicycles and electric micromobility vehicles, through the creation of cycle paths and dedicated infrastructures; (iii) promoting car sharing and car pooling to reduce the number of cars in circulation. Particular attention will be paid to the measurement and evaluation of environmental impacts and implemented policies.

Research activities: periods of study and research at the Company (18 months in 3 years); study and research periods abroad (6 months).

No. 3 places without scholarship

- **Project theme:** free.

Research activities: periods of study and research at the University/ Company/ Public Body/ Research Centers, etc... (divided into the 3 years of the course) ; study and research periods abroad (6 months).

REQUIREMENTS FOR ADMISSION:

Possession, by 31.10.2024, of one of the following master's degrees or corresponding degree obtained according to the previous legislation:

- LMG/01 Class of master's degrees in law
- LM-1 Cultural Anthropology and Ethnology
- LM-2 Archaeology
- LM-3 Architecture of the landscape
- LM-4 Architecture and Building Engineering-Architecture
- LM-4 c.u. Architecture and construction engineering-architecture (five years)
- LM-6 Biology
- LM-7 Agricultural Biotechnology
- LM-8 Industrial biotechnology
- LM-9 Medical, Veterinary and Pharmaceutical Biotechnology
- LM-10 Conservation of architectural and environmental heritage
- LM-11 Sciences for the conservation of cultural heritage
- LM-12 Design
- LM-13 Pharmacy and industrial pharmacy
- LM-16 Finance
- LM-17 Physics
- LM-18 Informatics
- LM-20 Aerospace and Astronautical Engineering
- LM-21 Biomedical Engineering
- LM-22 Chemical Engineering
- LM-23 Civil Engineering
- LM-24 Building Systems Engineering
- LM-25 Engineering of Automation
- LM-26 Safety Engineering
- LM-27 Engineering of Telecommunications
- LM-28 Electrical Engineering
- LM-29 Electronic Engineering



LM-30 Energy and Nuclear Engineering
LM-31 Management Engineering
LM-32 Computer Engineering
LM-33 Mechanical Engineering
LM-34 Marine Engineering
LM-35 Engineering for the environment and the territory
LM-44 Mathematical-physical modelling for engineering
LM-48 Urban and environmental spatial planning
LM-49 Design and management of tourist systems
LM-51 Psychology
LM-52 International Relations
LM-53 Materials Science and Engineering
LM-54 Chemical Sciences
LM-56 Sciences of Economics
LM-58 Sciences of the Universe
LM-59 Public, Business and Advertising Communication Sciences
LM-60 Sciences of Nature
LM-61 Sciences of Human Nutrition
LM-62 Science of Politics
LM-63 Public Administration Sciences
LM-69 Agricultural Sciences and Technologies
LM-70 Food Science and Technology
LM-71 Science and Technology of Industrial Chemistry
LM-72 Navigation Science and Technology
LM-73 Forest and Environmental Science and Technology
LM-74 Geological Sciences and Technologies
LM-75 Sciences and technologies for the environment and the territory
LM-76 Economics for the Environment and Culture
LM-77 Economics and Business Sciences
LM-79 Geophysical sciences
LM-80 Geographical Sciences
LM-81 Sciences for Development Cooperation
LM-82 Statistical Sciences
LM-83 Actuarial and Financial Statistics
LM-88 Sociology and Social Research
LM-91 Techniques and methods for the information society
LM-92 Theories of Communication
MRL/02 Conservation and restoration of cultural heritage
LM/GASTR Economic and social sciences of gastronomy
LM/SC-GIUR Legal Sciences
LM Sc. Mat. Materials Science
LM Data science
LM-53 Engineering of materials
1/S (specializing in cultural anthropology and ethnology)
2/S (specialised in archaeology)
3/S (specialist in landscape architecture)
4/S (specialized in architecture and building engineering)
5/S (specializing in archiving and librarianship)
6/S (specialized in biology)
7/S (specialists in agricultural biotechnology)
8/S (specialists in industrial biotechnology)
9/S (specialists in medical, veterinary and pharmaceutical biotechnology)
10/S (specialized in architectural and environmental conservation)
11/S (specialized in conservation of scientific assets and industrial civilization)
12/S (specialized in conservation and restoration of the historical-artistic heritage)
13/S (specialized in publishing, multimedia communication and journalism)



- 19/S (specialized in finance)
- 20/S (specialist in physics)
- 21/S (specialist in geography)
- 22/S (specialist in jurisprudence)
- 23/S (specialists in computer science)
- 25/S (specialist in aerospace and aeronautical engineering)
- 26/S (specialist in biomedical engineering)
- 27/S (specialized in chemical engineering)
- 28/S (specialised in civil engineering)
- 29/S (specialists in automation engineering)
- 30/S (specialist in telecommunications engineering)
- 31/S (specialist in electrical engineering)
- 32/S (specialist in electronic engineering)
- 33/S (specialists in energy and nuclear engineering)
- 34/S (specialized in management engineering)
- 35/S (specialist in computer engineering)
- 36/S (mechanical engineering specialists)
- 37/S (specialist in naval engineering)
- 38/S (specialized in engineering for the environment and the territory)
- 48/S (specialized in methods for evaluating complex systems)
- 49/S (specializing in methods for empirical research in the social sciences)
- 50/S (specialized in mathematical-physical modelling for engineering)
- 54/S (specialised in urban and environmental spatial planning)
- 55/S (specialists in tourism system design and management)
- 58/S (specialized in psychology)
- 59/S (specialized in advertising and business communication)
- 60/S (specialist in international relations)
- 61/S (specialist in materials science and engineering)
- 62/S (specialist in chemical sciences)
- 63/S (specialist in cognitive sciences)
- 64/S (specializing in economics)
- 66/S (specializing in universe sciences)
- 67/S (specializing in social and institutional communication sciences)
- 68/S (specialist in nature sciences)
- 69/S (specialist in the sciences of human nutrition)
- 70/S (specializing in political science)
- 71/S (specialist in public administration sciences)
- 74/S (specialist in science and management of rural and forest resources)
- 77/S (specializing in agricultural sciences and technologies)
- 78/S (specializing in agro-food sciences and technologies)
- 79/S (specialized in agricultural sciences and technologies)
- 80/S (specializing in science and technology of navigation systems)
- 81/S (specializing in sciences and technologies of industrial chemistry)
- 82/S (specialized in sciences and technologies for the environment and the territory)
- 83/S (specializing in economics for the environment and culture)
- 84/S (specializing in business studies)
- 85/S (specialist in geophysical sciences)
- 86/S (specialist in geological sciences)
- 88/S (specialist in science for development cooperation)
- 89/S (specializing in sociology)
- 90/S (specialized in demographic and social statistics)
- 91/S (specialists in economic, financial and actuarial statistics)
- 92/S (specialized in statistics for experimental research)
- 100/S (specialists in techniques and methods for the information society)
- 101/S (specialized in communication theory)
- 102/S (specialized in theory and techniques of standardization and legal information)

103/S (specialized in industrial design theories and methods)
LMG/01 CASE LAW
MRL/02 Conservation and restoration of cultural heritage

In the case of a qualification obtained abroad, the assessment of the requirement will be carried out by the Selection Board.

Other requirements for foreign students:

- qualification obtained abroad recognized as equivalent to the Italian title for the purposes of enrolling in the doctorate;
- certified knowledge of the Italian language (level B1).

PROCEDURE FOR CONDUCTING THE TESTS:

How to select:

- **Evaluation of qualifications**, including the compulsory submission of a research project prepared according to the indications of the competition;
- **Interview** that will be carried out in the manner indicated by art. 6 of the notice of competition;
- **Language proficiency**: English language. For foreign candidates will also be evaluated the knowledge of the Italian language.

The test calendar will be published on the dedicated web page:

<https://www.unimercatorum.it/ricerca/isciversi-a-un-dottorato-40>

Web page of the PhD:

<https://www.unimercatorum.it/ricerca/dottorato-di-ricerca-in-sostenibilita-e-agenda-esg-24>

Useful contacts: dottorati@unimercatorum.it