

PHD IN SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE

FUTURE IS GREEN, RESEARCH IS COLORFUL!

EARTH SYSTEM
AND ENVIRONMENT



SOCIO-ECONOMIC
RISK AND IMPACTS



TECHNOLOGY
AND TERRITORY



HEALTH AND
ECOSYSTEMS



AGRICULTURE
AND FORESTRY



THEORIES
INSTITUTIONS
AND CULTURES



A JUST AND INNOVATIVE SOCIETY IN HARMONY WITH THE PLANET.



PHD IN SUSTAINABLE DEVELOPMENT
AND CLIMATE CHANGE

PHD IN SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE: FOR A TRANSITION TOWARDS A DE-CARBONIZED AND GREEN FUTURE

VISION

A just and innovative society in harmony with the planet.

MISSION

To offer an inter-university educational roadmap, promote the ability of future generations to orient the change through transdisciplinary reflection, understand the evolving climate, design and implement a de-carbonized, just and sustainable society.

IDEAL CANDIDATES

Ambitious and specialized doctoral candidates who want to integrate and advance their knowledge and skills in a multidisciplinary scientific ecosystem and thus become the pioneers of a green societal paradigm.

THE PROJECT

A project of the School for Advanced Studies IUSS of Pavia and the Center for Climate Change studies and Sustainable Actions (3CSA) of the Federation of the Italian Schools of Advanced Studies, co-funded by the Italian Ministry of the University and the Research (MUR).

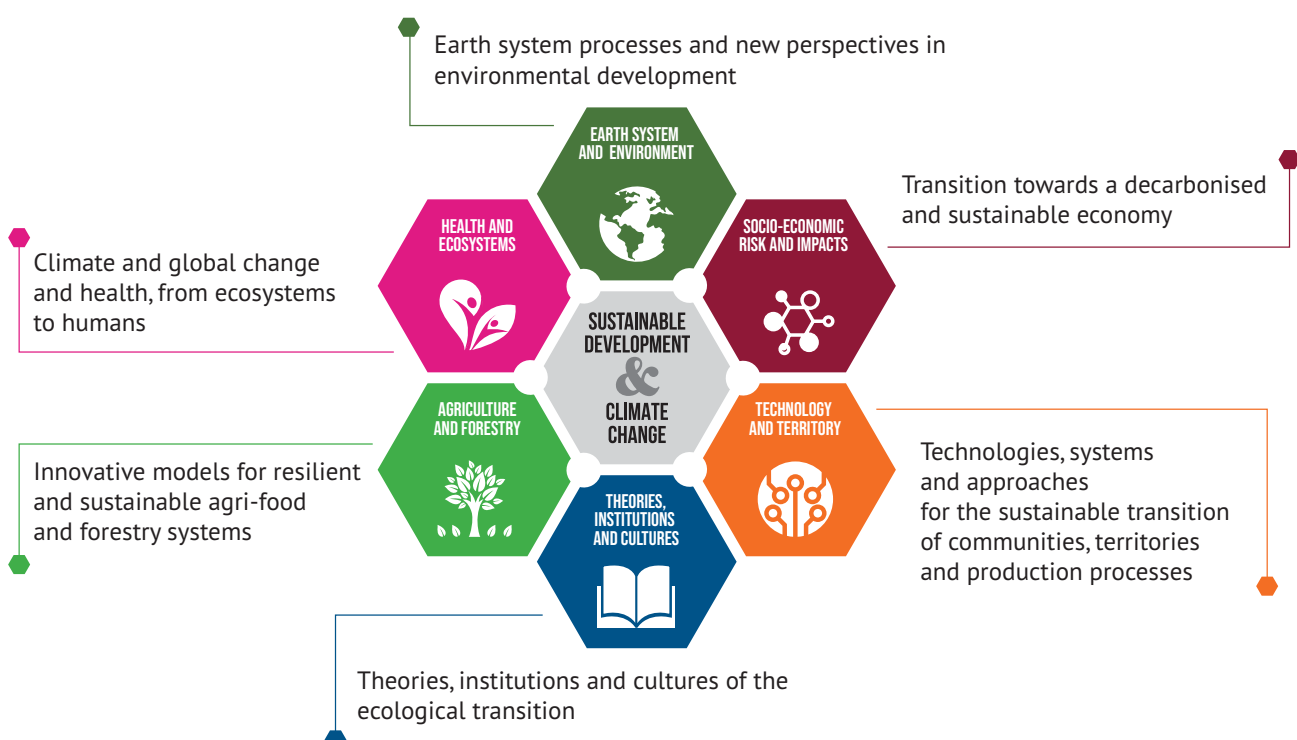
A multi- and inter-disciplinary programme with the partnership of 30+ Italian University and Research Centers. A key contributor to the work required to achieve the Sustainable Development Goals.

The education and research programme is organized in 6 curricula which share two common goals:

- to propose new sustainable models to address climate change and its impacts, and
- to build a learning and research community able to promote innovative and operational solutions to the complex problems of our society.

A programme where ideas and methods concerned with Environment, Society, Technology, Economics and Health themes are integrated in a global vision.

A network of public and private of research centres fully interconnected



PHD-SDC: THE NEW INTERDISCIPLINARY PHD WITH 6 CURRICULA ON SUSTAINABILITY AND CLIMATE CHANGE

EARTH SYSTEM PROCESSES AND NEW PERSPECTIVES IN ENVIRONMENTAL DEVELOPMENT



The PhD candidates will study different biological, chemical, physical, mathematical and environmental aspects of climate change and sustainability. The impacts and risks of climate change, including extreme events, will be investigated. The candidates will study key processes and scale interactions of the atmosphere, ocean, land surface and sub-surface, and cryosphere that determine the Earth's climate.

MEASURING THE TRANSITION TO A DECARBONISED AND SUSTAINABLE ECONOMY



This curriculum focuses on analysis of the complex relationships between the phenomenon of climate change and the socio-economic system, defined based on market relationships and/or other types of interactions among economic actors (public and / or private companies, financial markets, international markets) and other stakeholders (institutions, civil society, workers, communities, consumers, etc.) that characterize these systems.

TECHNOLOGIES, SYSTEMS AND APPROACHES FOR THE SUSTAINABLE TRANSITION OF COMMUNITIES, TERRITORIES AND PRODUCTION PROCESSES



The research of the PhD candidates in this “curriculum” is focused on resilience, sustainable development paradigms, circularity and actions against climate change to be implemented in territories, communities and in production processes and consumption of resources and energy. Ambitious goals that involve a variety of technological and sectoral challenges.

THEORIES, INSTITUTIONS AND CULTURES OF THE ECOLOGICAL TRANSITION



This curriculum promotes educational and research activities related to the theories, institutions and cultures of sustainability and climate change, favouring a transdisciplinary methodological perspective based on different approaches in the humanities and social sciences, especially in philosophy, literary studies, law and sociology. Particular attention will be devoted to issues related to ontology and ethics; national, European and international juridical regulations; climate, environmental and intergenerational justice; global politics; asymmetries and inequalities in distribution criteria; the ecological humanities and ecocriticism; environmental semiotics and aesthetics; and the interactions between the environment and living beings, also including non-human beings.

INNOVATIVE MODELS FOR RESILIENT AND SUSTAINABLE AGRI-FOOD AND FORESTRY SYSTEMS



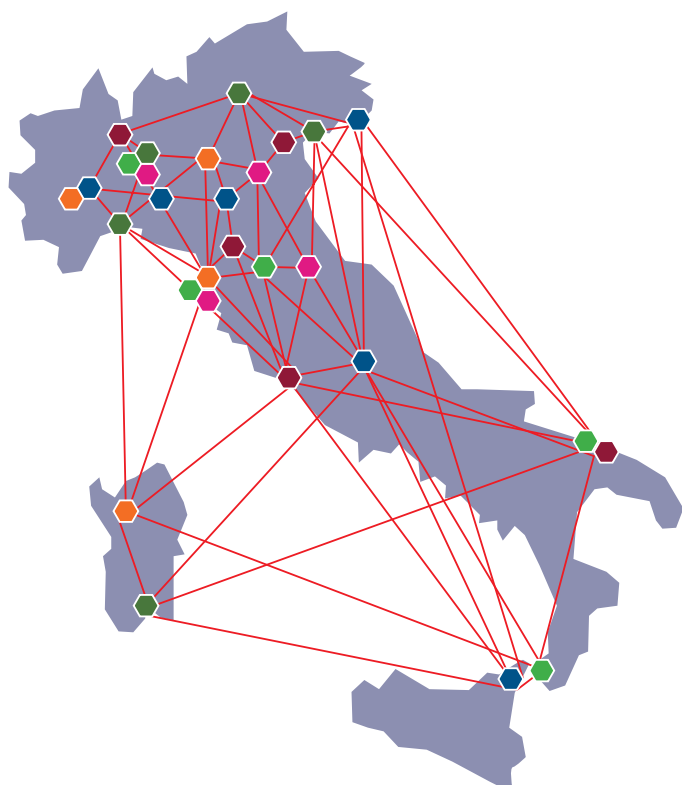
The Agriculture & Forestry curriculum focuses on environmental, economic and social sustainability, and climate change in the various key topics (agriculture, livestock and forestry), also from a life cycle and supply chain perspective, with a special attention to the Mediterranean agricultural and forestry systems. The Mediterranean region is a mosaic of hotspots of agricultural and forestry systems that are threatened by climate change impacts. The course aims to train PhD's with a solid, updated, and interdisciplinary cultural and scientific background, with a deep understanding of the systemic implications of their activity and the awareness of the importance of the relationship with businesses, administrations, and civil society, in an international contest.

CLIMATE AND GLOBAL CHANGE AND HEALTH – FROM ECOSYSTEMS TO HUMANS



The students who will follow this curriculum will be able to tackle research questions regarding the impacts of climate and global change on ecosystems and man, with a view to climate change adaptation and mitigation, contributing to the identification of novel sustainable development models and to the understanding of the interactions between the environment and health.

A NETWORK OF PUBLIC AND PRIVATE RESEARCH CENTRES FULLY INTERCONNECTED



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|---|--|
| Politecnico di Bari | Università di Firenze |
| Politecnico di Milano | Università di Genova |
| Politecnico di Torino | Università di Messina |
| Scuola IUSS di Pavia | Università di Milano |
| Scuola Normale Superiore | Università di Modena e Reggio Emilia |
| Scuola Superiore Sant'Anna | Università di Padova |
| Università Ca' Foscari di Venezia | Università di Pavia |
| Università Cattolica del Sacro Cuore | Università di Pisa |
| Università dell'Aquila | Università di Sassari |
| Università dell'Insubria | Università di Siena |
| Università di Bari | Università di Torino |
| Università di Brescia | Università di Trento |
| Università di Cagliari | Università di Trieste |
| Università di Cassino e del Lazio Meridionale | Università di Urbino Carlo Bo |
| Università di Ferrara | Università Mediterranea di Reggio Calabria |

KEY FACTS

- 3 year research programme
- 6 months of research abroad
- 100+ fully funded positions
- 30+ Universities in partnership
- 100+ researchers and professors
- 160+ hours of training and seminars

GOVERNANCE

- IUSS Pavia headquarter
- 1 PhD board with representatives from the 30 Universities and 3CSA
- 1 Advisory board with members of the knowledge partners
- RUS – University network for the sustainable development
- ASVIS – Italian Alliance for Sustainable Development
- EPR – Public Research Entities



In partnership with



TIMELINE



FOR FURTHER INFORMATION

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