



**POLITECNICO**  
MILANO 1863

**MILANO**  
**LEONARDO**  
**CAMPUS**

# SCIENCE, TECHNOLOGY, AND POLICY FOR SUSTAINABLE CHANGE (STEP-CHANGE)

# PHD PROGRAMS

## Programme

The PhD programme in Science, Technology, and Policy for Sustainable Change (STEP-CHANGE) prepares the future generation of scientific experts for addressing the challenge of global change and steering society toward a sustainable and inclusive transition, including accelerating the penetration of green technologies, fostering industry decarbonization, and designing sustainable policies from cross-sectoral perspectives.

The program offers a multicultural and trans-disciplinary research environment with faculty from all the departments. Students will acquire research capacity and skills and in-depth knowledge about the complexity of Earth's natural and artificial systems; they will learn advanced methodologies to understand and model physical, industrial, societal, and digital processes impacting our planet ecosystem; and will develop projections of technological, ecological, and social trends to envision new sustainable solutions and systems, assessing their global environmental and societal impacts as well as related philosophical and ethical issues.

## Mission and goals

The program aims to train the next generation of scientific experts to design feasible and effective pathways to ensure the planet's prosperity and preservation through state-of-art scientific methods. At the end of the program, PhD candidates are expected to possess the competencies and capacities required to support and inform the process of policy and strategy design for innovation-driven responses toward sustainable development.

The program lasts three years, is taught in English, and is composed of three pillars:

- Basic Research, which includes methodological courses related to key aspects of theoretical and applied research in science, policy, and technology of sustainable change;
- Specific Research, designed to strengthen candidates' knowledge on specific topics aligned with their research interests and increase their presence in the international scientific community through participation in conferences and presentation of their scientific work in academic contexts.
- Development of the Doctoral Thesis, which allows candidates to develop leading-edge research competencies and produce original scientific work on a topic that contributes to scientific debate and has societal impacts.

Students are encouraged to spend at least one semester in a foreign research institution where they can take advantage of the network of international collaborations of the different departments involved in the program.

### **Career Opportunities**

STEP-CHANGE graduates are equipped with distinctive skills and advanced trans-disciplinary knowledge that open up career opportunities as analysts, researchers, or planners at universities, international research centres, public and international institutions, R&D departments, regulatory authorities, policy institutions, and other public bodies.

### **Eligible students**

Prospective students must hold a University degree equivalent to a Master of Science, obtained either in Italy or a foreign University. Specific information on admission requirements is available in the call for applications, published on the Polimi PhD School web pages.

### **Scholarships**

Full scholarships are available each year for elective (self-selected) research topics and for oriented research topics. Financial support for oriented topics is provided under EU projects by private companies and research institutions. Limited support is also available for research periods abroad and to attend conferences.

### **Contacts**

For further information, please visit [www.dottorato.polimi.it/en/phd/](http://www.dottorato.polimi.it/en/phd/) or contact either the School of Doctoral Programmes at [phdschool@polimi.it](mailto:phdschool@polimi.it) or the PhD secretary at [phd-step@polimi.it](mailto:phd-step@polimi.it)

