

PhD Programme in “Energy and Nuclear Science and Technology”

The PhD programme in “Energy and Nuclear Science and Technology” offers 14 positions (of which 11 fully funded with scholarships) for the 38th PhD cycle at Politecnico di Milano. All scholarships cover three years of study and research.

The STEN PhD graduate is specifically trained for leading, organizing, planning, managing and controlling research activities at the highest levels of international competitiveness in the all the fields of Energy and Nuclear Science and Technology. The STEN PhD Programme is strictly related to the research activities and laboratories of the Department of Energy. Internships or visiting periods to international research institutes, private companies and qualified laboratories, as well as participation to conferences, seminars, etc. are warmly encouraged. The STEN PhD programme is organized in two tracks. The “Energy” track allows to develop scientific and research competencies in all aspects related to production, conversion and rational and sustainable use of energy in fixed or mobile plants as well as in all the fundamental aspects related to energy saving for civil applications, comfort and environment quality control. The “Nuclear” track allows the PhD candidate to develop competences in the pioneering research necessary to design build and operate a nuclear system, including: reactor physics, radiochemistry, radioactive waste management, radioprotection, decommissioning, radiation measurements and applications of ionizing radiations to energy-related issues in other fields.

The present call includes the following scholarships:

#	Type	Research Topic	Granting Institution
1	Open Subject	<i>“Energy and Nuclear Science and Technology”</i>	Italian Ministry of University and Research Politecnico di Milano
2	Open Subject	<i>“Energy and Nuclear Science and Technology”</i>	Italian Ministry of University and Research Politecnico di Milano
3	Open Subject	<i>“Energy and Nuclear Science and Technology”</i>	Italian Ministry of University and Research Politecnico di Milano
4	Open Subject	<i>“Energy and Nuclear Science and Technology”</i>	Italian Ministry of University and Research Politecnico di Milano



7	Thematic	<i>“Development of Co2 Capture Process with Thermochemical Energy Storage”</i>	Department of Energy
8	Thematic	<i>“Modelling of Cement Plants with Alternative Fuels and Co2 Capture”</i>	Department of Energy
9	Thematic	<i>“Development of an Air Humidification System For Polymer Electrolyte Membrane Fuel Cell for Heavy Duty Vehicles”</i>	Department of Energy
10	Thematic	<i>“Investigation and Mitigation of Full Scale Polymer Electrolyte Membrane Fuel Cell Degradation Mimicking Realistic Heavy Duty Transport Applications”</i>	Department of Energy
11	Thematic	<i>Carbon Dioxide - Hydrocarbons Blends for Medium-High Temperature Vapour Compression Heat Pumps</i>	Department of Energy
12	Thematic	<i>Advance Modelling of Boundary Plasmas in Magnetic Fusion Devices</i>	Department of Energy
23	Interdisciplinary	Smart Cities: “High-Fidelity Cfd Methods for Integration of Distributed Energy Generation in Urban Environment” In collaboration with the PhD programme in “Aerospace Engineering”	Politecnico di Milano

Please notice that, in order to be eligible for the scholarships, you must (in the registration process) declare that you intend to compete for a scholarship (see section 6.4 of the [Quickstart](#)).

For further information about the Open Subject scholarships please visit the [Open Subject Scholarships webpage](#)

For further information about the Thematic scholarships please visit the [Thematic Scholarships webpage](#)

For further information about the Interdisciplinary scholarships please visit the [Interdisciplinary Scholarships webpage](#)