

## PhD Programme in “Mechanical Engineering”

The PhD programme in “Mechanical Engineering” offers 24 positions (of which 19 fully funded with scholarships) for the 38<sup>th</sup> PhD cycle at Politecnico di Milano. All scholarships cover three years of study and research.

The table below summarizes the scholarships issued in the present call.

Please notice that, in order to be eligible for any of the scholarships, you must (in the registration process) declare that you intend to compete for a scholarship (see also sections 6.4 and 7.6 of the [Quickstart](#) manual).

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](#)

#	Type	Research Topic	Granting Institution
1	Open Subject	<i>“Mechanical Engineering”</i> Area 1: <i>Advanced Materials and Smart Structures</i>	Italian Ministry of University and Research Politecnico di Milano
2	Open Subject	<i>“Mechanical Engineering”</i> Area 2: <i>Sustainable Mobility</i>	Italian Ministry of University and Research Politecnico di Milano
3	Open Subject	<i>“Mechanical Engineering”</i> Area 3: <i>Engineering and Manufacturing for the Industry of the Future</i>	Italian Ministry of University and Research Politecnico di Milano
4	Thematic	<i>“Actively Controlled System to Test Bridge Decks in Wind Tunnel”</i> Area 1 - <i>Advanced Materials And Smart Structures</i>	Italian Ministry of University and Research Politecnico di Milano
5	Thematic	<i>“Metamaterials for Cloaking and Acoustic Stealth”</i> Area 1 - <i>Advanced Materials And Smart Structures</i>	Italian Ministry of University and Research Politecnico di Milano
6	Thematic	<i>“Innovative Materials and Advanced Processes”</i> Area 1 - <i>Advanced Materials And Smart Structures</i>	Italian Ministry of University and Research Politecnico di Milano
7	Thematic	<i>“Optimal Routing and Rebalancing of Mobility-On-Demand Systems In Mixed Traffic”</i> Area 2 - <i>Sustainable Mobility</i>	Department of Mechanical Engineering
8	Thematic	<i>“Reduction of Vibration and Noise Emissions of an Electric Axle for a High-Performance Vehicle”</i>	FERRARI SPA



		Area 2 - Sustainable Mobility	
9	Thematic	<i>"Experimental Data, Driving Simulator, Digital Twins for Automotive Product Design"</i> Area 2 - Sustainable Mobility	Department of Mechanical Engineering
10	Thematic	<i>"Novel Temporal and Spatial Laser Beam Shaping Approaches for Defect-Free, Flexible, and Automatized Welding"</i> Area 3 - Engineering Design and Manufacturing for the Industry of the Future	BLM Group - Adige
11	Thematic	<i>"Advanced, Smart, And Sustainable Manufacturing"</i> Area 3 - Engineering Design and Manufacturing for the Industry of the Future	Italian Ministry of University and Research Politecnico di Milano
12	Thematic	<i>"Advanced, Smart, and Sustainable Manufacturing"</i> Area 3 - Engineering Design and Manufacturing for the Industry of the Future	Italian Ministry of University and Research Politecnico di Milano
13	Thematic	<i>"Advanced, Smart, and Sustainable Manufacturing"</i> Area 3 - Engineering Design and Manufacturing for the Industry of the Future	Italian Ministry of University and Research Politecnico di Milano
14	Thematic	<i>"Solid State Metal Powder Deposition for New Additive Design Solutions"</i> Area 3 - Engineering Design and Manufacturing for the Industry of the Future	Italian Ministry of University and Research Politecnico di Milano
15	Thematic	<i>"Development of Advanced Monitoring Systems"</i> Area 3 - Engineering Design and Manufacturing for the Industry of the Future	Department of Mechanical Engineering
16	Thematic	<i>"Development of Advanced Monitoring Systems"</i> Area 3 - Engineering Design and Manufacturing for the Industry of the Future	Italian Ministry of University and Research Politecnico di Milano
17	Interdisciplinary	Smart Cities: <i>"Real-Time Optimal Control and Monitoring of Mechanical Structures by Pde Constrained Optimization And Reduced Order Modeling"</i> Area 1 - Advanced Materials and Smart Structures In collaboration with the PhD programme in "Mathematical Models and Methods In Engineering"	Politecnico di Milano
18	Interdisciplinary	Industry 4.0: <i>"Tailored Piezoelectric Materials and Optimally Designed Metamaterials for Enhanced Mechanical Energy Harvesting"</i> Area 1 - Advanced Materials and Smart Structures In collaboration with the PhD programme in "Structural Seismic and Geotechnical Engineering"	Politecnico di Milano
19	Interdisciplinary	Smart Cities: <i>"SMART TECHNOLOGIES FOR VERTICAL AND PRECISION FARMING"</i> Area 1 - Advanced Materials and Smart Structures In collaboration with the PhD programme in "Materials Engineering"	Department of Mechanical Engineering