



PhD in INGEGNERIA MECCANICA / MECHANICAL ENGINEERING - 40th cycle

**INTERDISCIPLINARY Research Field: DEVELOPMENT PERFORMANCE THROUGH DESIGN
AUTOMATION**

Monthly net income of PhDscholarship (max 36 months)

€ 1500.0

In case of a change of the welfare rates during the three-year period, the amount could be modified.

Context of the research activity

<p>Motivation and objectives of the research in this field</p>	<p>Interdisciplinary PhD Grant The PhD research will be carried out in collaboration with research groups of the PhD programme in "MANAGEMENT ENGINEERING". See https://www.dottorato.polimi.it/?id=422&L=1 for further information.</p>
<p>Methods and techniques that will be developed and used to carry out the research</p>	<p>Through Design Research Methodology empirically built on a B2B mechanical company producing compressors and constantly engaged in new product development initiatives (both Engineering to Order and Make to Order), this study will adopt MDP models as Decision Support System Models, that will be initialized using data-driven fitted parameters from previous developed projects in the company historical database.</p>
<p>Educational objectives</p>	<p>Operational competencies on up-to-date approaches to new product development and concurrent engineering. Capability to apply design automation in real contexts and to model complex processes based on machine learning. Ability to interpret the dynamics of decision making within R&D skills for scientific and industrial applications. Soft skills in the delivery of scientific talks, drafting project reports and writing scientific papers, delivery of presentations and professionally interfacing with industry.</p>
<p>Job opportunities</p>	<p>Employment statistics of PhDs can be found at</p>



	<p>https://cm.careerservice.polimi.it/en/employment-statistics/.</p> <p>The PhD candidate will develop the PhD thesis within an international environment. The research group has multiple ongoing collaborations with companies, Institutions and universities in Europe and world wide.</p>
Composition of the research group	<p>2 Full Professors 2 Associated Professors 2 Assistant Professors 7 PhD Students</p>
Name of the research directors	<p>Proff. Gaetano Cascini, Andrea Matta, Monica Rossi</p>

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<p>For questions about scholarship/support please contact phd-dmec@polimi.it</p>	

Additional support - Financial aid per PhD student per year (gross amount)	
Housing - Foreign Students	--
Housing - Out-of-town residents (more than 80Km out of Milano)	--

Scholarship Increase for a period abroad	
Amount monthly	750.0 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
<p>Financial aid is available for all PhD candidates (purchase of study books and materials, funding for participation in courses, summer schools, workshops and conferences) for a total amount of € 6.114,50.</p> <p>Our candidates are strongly encouraged to spend a research period abroad, joining high-level research groups in the specific PhD research topic, selected in agreement with the Supervisor. An increase in the scholarship will be applied for periods up to 6 months (approx. 750 euro/month- net amount).</p>



Teaching assistantship: availability of funding in recognition of supporting teaching activities by the PhD candidate. There are various forms of financial aid for activities of support to the teaching practice. The PhD student is encouraged to take part in these activities, within the limits allowed by the regulations.