



# PhD in INGEGNERIA AMBIENTALE E DELLE INFRASTRUTTURE / ENVIRONMENTAL AND INFRASTRUCTURE ENGINEERING - 39th cycle

Research Area n. 3 - Environmental and Hydraulic Engineering and Geomatics

**OPEN SUBJECT Research Field: ENVIRONMENTAL AND HYDRAULIC ENGINEERING AND  
GEOMATICS**

Monthly net income of PhDscholarship (max 36 months)
<b>€ 1195.5</b>
In case of a change of the welfare rates during the three-year period, the amount could be modified.

Context of the research activity	
<b>Motivation and objectives of the research in this field</b>	<p>Key research areas are keyed to environmental, civil and industrial engineering applications and include:</p> <ul style="list-style-type: none"> <li>- Air/Soil/Water quality management and treatment/remediation technologies;</li> <li>- Waste management;</li> <li>- Environmental impact, risk assessment and management;</li> <li>- Computational and experimental fluid dynamics;</li> <li>- River hydraulic and sediments mechanics, flooding;</li> <li>- Flow and transport processes in porous systems;</li> <li>- Theoretical and mathematical geodesy;</li> <li>- Statistical data analysis and management;</li> <li>- Remote sensing, satellite positioning, surveying technologies, geographic information systems.</li> </ul>
<b>Methods and techniques that will be developed and used to carry out the research</b>	<p>Research is performed upon integrating (a) methodological and basic theoretical aspects, (b) field- and laboratory-based experiments/observations, and (c) conceptual and numerical model development and implementation strategies within a unified framework.</p>
<b>Educational objectives</b>	<p>The main objective is the education of professionals and scientists who can design and develop autonomous</p>



	research plans and activities with critical expertise in environmental and hydraulic engineering and geomatics.
<b>Job opportunities</b>	Main opportunities in the job market include Universities, Research Centers, top level management in Authorities involved in environmental policy, senior consultants for engineering companies, high level personnel for the industry, instruments and geographic information management.
<b>Composition of the research group</b>	10 Full Professors 14 Associated Professors 12 Assistant Professors 25 PhD Students
<b>Name of the research directors</b>	R. Canziani-M. Riva-R. Barzaghi

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

<b>Scholarship Increase for a period abroad</b>	
<b>Amount monthly</b>	597.75 €
<b>By number of months</b>	6

<b>Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information</b>
<p><u>Educational activities</u> (purchase of study books and material, funding for participation to courses, summer schools, workshops and conferences): financial aid per PhD student per year: max 1620.00 euros per student on average.</p> <p><u>Teaching assistanship</u> (availability of funding in recognition of support to teaching activities by the PhD student) :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</p>



by the regulations.

Computer availability and desk availability: 1<sup>st</sup> year +2<sup>nd</sup> year +3<sup>rd</sup> year: individual use.