

PhD in URBAN PLANNING, DESIGN, AND POLICY -40th cycle

THEMATIC Research Field: NEW URBANIZATIONS PATTERNS, NEW SOIL SEALING: REFORMULATING METHODS OF EVALUATION, COMPENSATION AND MONITORING OF SOIL SEALING DUE TO INFRASTRUCTURES FOR MOBILITY AND TECHNOLOGY

Monthly net income of PhDscholarship (max 36 months)		
€ 1300.0		
In case of a change of the welfare rates during the three-year period, the amount could be modified.		
Context of the research activity		
	The realization of new logistics hubs data centers and	

	The realization of new logistics hubs, data centers and
	mobility infrastructures is determining huge
	transformations of the territory, some of which are still little
	studied and explored. These transformations produce
	important environmental impacts which can be defined as
	direct (observable within the limits of the specific
	transformation) and induced (generated by the specific
	transformations, but observable in a broader buffer zone).
	These are therefore transformations that have a driving
	and multiplying power, capable of changing the urban
	morphologies and the socio-spatial dynamics of the
	places in which they are inserted (often fragile and
Motivation and objectives of the research	marginal areas).
in this field	The research aims to identify the direct and induced
	impacts of these transformations on land use and
	consumption. The objective is the definition of
	environmental assessment, compensation and monitoring
	tools for land use and consumption for these major land
	This research is embedded into the Horizon program
	SPADES (Spatial Planning And DEsign with Soil), funded
	by the European Union (Grant Agreement No.
	101146122), which focuses on securing soils in spatial
	planning and developments, as part of the Mission A Soil
	Researchers are tackling this in seventeen locations in ten
	countries in Europe. SPADES will develop, test and



	implement soil-inclusive practices in spatial planning and design.
Methods and techniques that will be developed and used to carry out the research	The research is carried out using a formula in which we find traditional tools (case studies, comparing experiences, deepen references, etc.) together with some other tools (on-site experiences, video interviews, forum, involvement in a design experience of compensation practices, political debating). The research work will encourage planning decisions suggesting new forms, new scales, new actors to be involved and new scenario to refer. Ability in comparing planning tools and using data and geodata will be necessary as well as a proved ability in generating maps and reports and a deep availability in monitoring environmental impacts, especially on soil sealing.
Educational objectives	The research program aims at providing expertise in the field of environmental design and management of sustainable development at both regional and local scale. Such expertise can provide an innovation in actual design approaches by operationalising the integration of spatial planning and soil, useful to contribute to a healthy Soil-Sediment-Water system, which is of utmost importance for Europe's sustainable future (by including the eight Soil Mission's objectives of improving soil health (1-6), reducing global footprint on soils (7) and improving soil literacy (8), together with spatial concepts, approaches and solutions). Thus, the PhD program aims to train expert able to include the performance (ecosystem services) of soil to create more healthy, resilient and soil- aware (and naturebased) societies in urban, peri-urban and rural areas of Europe.
Job opportunities	According to its international orientation, the UPDP phd course intends to train highly qualified researchers and professionals in spatial planning, design and management of urban projects and policies, urban studies and urban



	governance. Phd graduate with such profile could be employed by Italian and International academic institutions, public bodies and research centres, public and private development agencies. In the particular case of the topic offered under this call, doctors with such a degree could be also employed by national and international organisations in the field of planning for local development, transport and mobility, health and mobility.
Composition of the research group	16 Full Professors 9 Associated Professors 1 Assistant Professors 54 PhD Students
Name of the research directors	Paolo Pileri

Contacts

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Further information is available in the PhD Handbook at: https://www.dastu.polimi.it/dottorato-urbanplanning/

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	650.0 €	
By number of months	6	

POLITECNICO DI MILANO



Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information

Funds for educational activities (purchase of books and material, funding for participation in courses, summer schools, workshops and conferences):

The total amount of the financial aid/research budget ("DOTE") per PhD candidate is **5.300,25** euro,

which will be assigned in 3 annual instalment of: 1st year: max 1.766,75 euro 2nd year: max 1.766,75 euro 3rd year: max 1.766,75 euro

Computer availability

In the PhD room workstations are available for stared use connected to a printer. PhD candidates can use their own laptops with a wireless connection. Workstations and other equipments are available in the various laboratories linked with the doctoral program.

Teaching assistantship

There are various forms of financial aid for teaching assistantship. PhD candidates are encouraged to take part in these activities within the limits allowed by the regulations.