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**DIPARTIMENTO DI ARCHITETTURA
E STUDI URBANI**

PhD Programme in

Urban Planning Design and Policy

37th Cycle (2021)

3 Open Topic Scholarships

+

1 Thematic & Interdisciplinary Scholarship

OPEN CALL | Deadline: 20th May 2021

DAStU - Politecnico di Milano
PhD programme in Urban Planning, Design and Policy

Call for applications 2021 now open!

The PhD programme in **Urban Planning, Design and Policy** grants **five PhD positions (four fully paid)** to start in November 2021.

The **four scholarships** are organised as follows:

▶ **Three positions** allow candidates to freely choose their own research topic.
▶ **One position** is based on predefined research topic "Study of Smart Working and population relocation after the Covid_19 pandemic through social and internet traffic patterns".

PhD scholarships include a full tuition and fees waiver.

How to Apply

The official call for applications, along with procedures and requirements, is available on: http://www.dottorato.polimi.it/en/looking-for-a-phd/call-for-positions-and-scholarships/calls/37th-cycle-phdcall-20212022/index.html

▶ **Deadline: 20th May 2021 (2pm, Italian time)**

▶ **For administrative inquiries, contact:**
Marina Bonaventura (marina.bonaventura@polimi.it)

▶ **Information about the PhD programme in Urban Planning, Design and Policy is available on:** www.dottorato.polimi.it/en/phd-programmes/active-phd-programmes/urban-planning-design-and-policy/index.html

Three Open Topic Scholarships

Motivation and objectives of the research

The UPDP PhD programme aims to explore the significance and impact of contemporary urban changes and understand how they can be governed through planning, design, and policy-making activities.

By establishing a dialogue with the best European and International schools, the UPDP PhD programme is the place for research and innovative approaches to urban studies, spatial planning and urban design. Based on a multi-disciplinary approach, the main objective of educational activity and the individual research training is to offer PhD students a challenging environment, a space for international debate and research, experimentation and innovation.

The PhD programme is based in the Department of Architecture and Urban Studies, taking advantage of its rich research milieu and resources.

Applicants are requested to submit a research proposal concerning topics of their interest. Proposals covering the following topics are encouraged:

- Multiple institutional levels and planning rules;
- After implementation: retrospective research on plans and policies and their effects
- Planning in the face of transnational finance, networks and projects;
- Architects, Engineers, Planners: how do the changing urban conditions require re-designing research and professional profiles?

- Architects, Engineers, Planners: spatial thinking, new urban imaginaries and tools;
- Spatial planning in a green deal perspective for human well-being, tourism and the sustainability of the contemporary cities and landscapes;
- Towards a context-sensitive post-car transition. Policies and project to support equity and sustainable mobility;
- New structures of spatial and socio-economic inequalities, local welfare policies and labour market, new working spaces, social inclusion and spatial regeneration: social justice, social cohesion, redistribution, social investment, sustainability, transformations in the labour market and space implications;
- Ageing in different urban/rural contexts, between autonomy and support: housing, care, accessibility, mobility and social relations;
- Beyond city-ism and metropolitan-ism: new spatial imaginaries, emerging forms of agencies and the necessity of interrelated and trans-scalar approaches to governance problems in large urban regions.

According to its international orientation, the programme intends to train highly qualified researchers and professionals and expects them to work in academic institutions, research centres, public administrations and the private sector in spatial planning, design and management of urban projects and policy, urban studies and urban governance. PhD graduates with such a profile are qualified to be employed by Italian and International academic institutions, public bodies and research centres as well as public and private development agencies.

For further information:

UPDP Programme Coordinator
Prof. Luca Gaeta, DAStU, Politecnico di Milano.
E-mail: luca.gaeta@polimi.it

The PhD supervisor will be selected among members of the board of professors after enrolment.

Study of Smart Working and population relocation after the Covid_19 pandemic through social and internet traffic patterns

Motivation and objectives of the research

The reorganisation of work patterns, which was an emerging trend before the Covid-19 pandemic, has been on the one hand unveiled and on the other one accelerated by the pandemic and the related restriction measures. In particular, the restrictions to personal mobility due to forced social distancing and rigid health protocols have led to a massive resort to forms of remote working (mainly from home), that have in turn implied patterns of population redistribution, in Italy and elsewhere, due to the declining need to live in proximity, or at a reasonable distance, from the workplace (according to a Eurofound Survey done in 2020, there has been a shift from 20% to around 40% of employees in Europe teleworking before and during the Covid-19 pandemic).

The changes in work patterns are leading, in turn, to some first forms of population redistribution within the country, in some cases concerning just the work sphere, in others also the residential one, across different areas and concerning different social groups: cases range from companies relocating employees to workplaces different from the main headquarters and changing their labour contracts to enable forms of smart- or at least remote working, to freelancers and digital nomads moving to peripheral locations to experience a higher quality of life (a phenomenon connected for instance to what in Italy has been called 'South working'), to local authorities using spaces devoted to services, such as schools, to relocate employees and students. The examples are certainly many and quite diverse, and they concern at the same time dense metropolitan cores, lower density suburban areas, marginal and rural areas, tourist resorts, etc.

The post-lockdown situation will evolve in ways difficult to predict, producing multiple and diverse solutions in terms of living and working.

The evolution trends will be influenced by existing urban services and digital infrastructures, but they will at the same time stimulate changes in the services and infrastructures themselves to meet the new needs.

In order to move from anecdotal evidence to a structured and sound understanding of these phenomena, the research proposal aims at:

- identifying trends of relocation of different segments of the population, using digital connectivity data (including mobile networks indicators, internet traffic parameters, online services data like maps and social networks)
- identifying types of socio-spatial configurations, in different areas of the country, using different data sources (socio-demographic, economic and real estate data, urbanisation patterns and evolution maps, local governance networks maps)
- proposing some first typologies of new combinations between territories and relocated populations, able to take into account different rhythms and cycles of use
- studying predictive models for guiding public authorities and service companies to identify how investments in infrastructure and services can influence relocation trends.

Interdisciplinary research methods

The research will test innovative interdisciplinary research methods aiming at building an interface between territorial analysis and the analysis of internet traffic data. In particular, moving from recent research on the transformations of the Italian territory in a post-metropolitan perspective, the PhD candidate will identify socio-spatial configurations that have been transformed and, in turn, have the ability to influence the ongoing selective patterns of population redistribution.

In order to do so, the approach will take into account urbanisation patterns and territorial densities, as well as mobility networks and accessibility, endowment in terms of public and private services, local governance models. Such analytical categories will interact with the analysis of internet traffic that are gaining interest in research for their ability, through machine learning and artificial intelligence techniques, to identify patterns and evolution trends in different domains associated to life habits and access to services.

Innovative elements of the research

The critical understanding, in perspective, of the patterns of selective concentration of different populations across different territories is an emerging research theme, which will have significant impacts on forms of reorganisation of territories in Italy and in the EU more in general, and relevant effects in terms of urban planning, but also in terms of service and infrastructure planning in the next years (quality of education, healthcare, mobility, connectivity, ...).

The research proposal aims at identifying rationales and criteria for the build up of possible models for the analysis of such relocation trends, by interweaving an approach based on the analysis of large amounts of data from telecommunications operators and IT companies on the one hand, and conceptual models of territorial development and evolution (able to take into account both the characters of different spatial configurations and of different populations) on the other.

In the age of digital data, the information that can be extracted from the online activities of people has already a huge value and represents the main source of revenues for most of the technology companies. Most of the investments and market strategies of the private sector are already today based on the analysis of these data, from the strategies for launching a new product to the decision where to locate a new shopping mall. Public local institutions at different levels are starting to use them also for their policies, like for instance for urban mobility plans or commerce regulation. We do believe that the potential of combining territorial analysis instruments with internet data tools is largely unexplored and can greatly improve the results that can be extracted and the impact on public policies and market applications. Interest towards the development and potential innovation of the project has been expressed by Vodafone and Google.

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