



POLITECNICO
MILANO 1863

PhD School - Politecnico di Milano
Regulations of the PhD Programme in:
Urban Planning, Design and Policy

Cycle XXXIII

Location: Milano Leonardo

1. General Information

PhD School - Politecnico di Milano

PhD Programme: Urban Planning, Design and Policy - UPDP

Location of the PhD Programme: Milano Leonardo

Promoter Department: Department of Architecture and Urban Studies (DASTU)

Scientific Disciplinary Sectors:

- Icar 20 - Urban and regional planning
- Icar 21 - Urban and landscape planning
- Icar 17 – Drawing
- SPS/04 - Political science
- SPS/09 - Economic sociology and sociology of work and organizations
- SECS-P/06 - Applied economics

PhD School Website: <http://www.polimi.it/phd>

PhD Programme Website:

<http://www.dastu.polimi.it/index.php?id=1146>

<http://www.dottorato.polimi.it/en/phd-programmes/active-phd-programmes/urban-planning-design-and-policy/>

https://beep.metid.polimi.it/web/85168196/home#p_29

2. General presentation

The PhD programme in Urban Planning, Design and Policy (UPDP) aims at exploring the significance and impact of contemporary urban changes and understanding the way these processes can be governed through planning, design and policy making activities. The programme pays specific attention to the transition towards new, more sustainable and equitable modes of urban development as well as to pro-active advancements in planning practices and to potential innovations in traditional urban studies, urban design and policy approaches.

The integration between different fields and disciplines of urban research on the one hand, and between theory and practice on the other, distinguishes the approach promoted by the PhD programme.

The objective of the UPDP programme is to provide PhD Students with the analytical and interpretative tools and skills together with research/planning/design methodologies to advance

research in the field of urban studies, spatial planning, urban design, urban policy and governance. PhD Students are encouraged to reflect upon traditional and innovative practices in these fields by participating in research activities concerning cities and regions in both Italy and abroad, paying particular attention to international comparison. This approach will be fostered through the organization of international seminars along with a period of internship to be carried out by the PhD Student at one of the research institutes, universities or public agencies that constitute the international reference network of the UPDP programme.

The new PhD programme takes advantage of the rich research milieu of the Department of Architecture and Urban Studies (DAStU) and of the cooperation with the two other PhD programmes offered by DAStU (“Architectural and Urban Design” and “Preservation of the Architectural Heritage”).

DAStU, as a structure of thematic and interdisciplinary research, operates in the fields of architectural and urban projects; spatial planning and territorial governance; urban policy, conservation and intervention on the built heritage and natural environment; historical and critical interpretation of architecture; and cities and territories. The Department carries out research and field work on the transformation, care and governance of historical and contemporary settlements and landscapes based on the principles of environmental, social and economic sustainability.

DAStU is one of the most important research structures in Italy for town and country planning, embedded in a well-established international network of centers of excellence, cooperating with institutional and social actors at the local, national and international level.

The basic research structure is represented by Laboratories that test new methods and techniques with teachers, researchers, staff and external collaborators aggregated into 4 Research Lines: architecture; urban planning; human sciences along with history, representation and preservation.

Thanks to its multidisciplinary approach, the department offers expertise and on-going projects in a plurality of subjects and organizations including European, national, regional and local authorities, social and economic based groups and research institutions.

The PhD Programme in Urban Planning, Design and Policy welcomes foreign and Italian students. English is the official language of the programme.

The PhD course is run by a Coordinator and a Faculty Board.

The Coordinator chairs the Faculty Board, coordinates the preparation of the annual Educational Programme and organises the general educational activities of the PhD course (see Attachment A1).

The Faculty Board is responsible for the Educational programme and for teaching and administrative activities related to the PhD course (see Attachment A2).

3. Objectives

The PHD programme focuses on territorial, social, economic and institutional transformations in contemporary cities, and aims at discussing them as a complex of intertwined phenomena, which calls for new governance, planning and design approaches.

By establishing a dialogue with the best European and International schools, this PHD programme is

the place for research and innovative approaches to urban studies, spatial planning and urban design.

Based on a multidisciplinary approach, the main objective of both the educational programme and the individual research activities is to offer PhD students a challenging environment with space for international debate, research, experimentation and innovation.

Starting from this perspective, the main courses and workshops focus on the following research areas:

- **Planning theories and practices.** Urban planning is not a unitary or self-contained discipline and planning knowledge and activities can be improved by delving into (and jointly considering) both theoretical and practical issues. First, the cultures, ethics, traditions and paradigms of planning are varied and have been evolving differently according to their geographical, institutional and political context. Similarly, planning practice is multiform and can be understood from several perspectives (i.e. through sectorial planning; different analytical and operative techniques; the relationships between planning and its impact on urban and regional change). Studying the characteristics, the peculiar interpretations and the effects of planning practices constitutes a second relevant research field. Thirdly, the selection and discussion of the crossroads between planning and other disciplines (e.g. architecture, environmental sciences, policy studies, philosophy and others) can dramatically innovate planning theories and practices, going beyond traditional approaches and perspectives, such as growth-centered urban development, commoditization of the urban environment and others.
- **Design topics, forms and tools.** In a scenario of changing socio-economic, environmental and territorial conditions, theoretical and technical issues for the construction of urban projects and the implementation of governance policies are being experimented with as a way to improve the quality of life. Specific research themes are: the role and form of urban projects in leading territorial transformations; innovation in the description and representation of urban environments and landscapes; tools for the evaluation and management of urban projects and policies aimed at mastering the feasibility and equity of land development, as well as the sustainability and the design quality of the physical outcomes and strategies for land and biodiversity preservation and energy conservation.
- **Urban studies.** Contemporary cities worldwide are confronted with increasing challenges regarding local democracy, sustainable development, management of environmental resources and landscape, social cohesion and cultural diversity. Looking at recent cross-scalar urban changes, the main issues addressed are the following: social, economic, environmental and territorial transformations; governance problems and technological innovations. The main research topics are: forms and processes of the spatialization of social and economic inequalities; urban segregation; differentiation of urban populations; processes and institutions of urban governance; spatial impact of social innovation; forms and processes of regionalization and processes of social, economic and territorial development in local contexts.

The three research areas reflect the contents and themes of the ongoing research at DASTU and represent the framework of future proposals. They will be the backbone for PhD Students' educational and research activities.

4. Professional opportunities and job market

According to its international orientation, the UPDP PhD programme intends to train highly qualified researchers and professionals and expects them to work in academic institutions, research centers, public administrations and the private sector in the following fields: spatial planning, design and management of urban projects and policy, urban studies and urban governance.

PhD Doctors with such a profile are qualified to be employed by Italian and International academic institutions, public bodies and research centers, as well as public and private development agencies.

5. Enrolment

5.1 Admission requirements

Italian and International citizens can apply. They are requested to have graduated in accordance with the pre-existing laws D.M. 3.11.1999 n. 509, or to have a Master of Science degree in accordance with D.M. 3.11.1999 n. 509, or a Master of Science in accordance with D.M. 22.10.2004 n. 270, or similar academic title obtained abroad, equivalent for duration and content to the Italian title, with an overall duration of university studies of at least five years.

The certified knowledge of the English language is a requirement for admission. Please refer to the PhD School website for details.

The admission to the programmes will be established according to the evaluation of the candidates' curricula, motivation letters, and an illustrative report about the development of a possible PhD research, which candidates will send contextually with their application to the admission announcement.

Particular attention will be given to research proposals dealing with the following themes, suggested by the three research areas:

Planning theory and practices

- From post metropolis to planetary urbanisation;
- Policies, projects and planning for inland areas in Italy;
- Policies and practices for the reuse of abandoned and disused urban spaces and buildings.

Design topics, forms and tools

- Digital devices and new technical tools for improving feasibility and inclusiveness as well as sustainability and design quality of the urban projects (Sharing city; Infrastructures for resilience and sustainability);
- Identity and urbanity: review of conceptual and design issues for the contemporary city (Urban development without urban growth; Building in the built environment; Nodes and centralities in low-density environment);
- Landscape design and competitive land uses in the contemporary city (Productive landscape design; Slow tourism and new forms of territorial accessibility).

Urban Studies

- New structures of spatial and socio-economic inequalities and territorial cohesion, consequences on economic growth, spatial justice and democratic capacities;

- Who governs the urban? new forms of agency, transcalarity of governance questioning the right to the city and the idea of citizenship;
- Local welfare policies and housing systems within multi-level governance frames: social justice, re-distribution, contrast of inequalities, promotion of well-being and social cohesion, appropriateness, effectiveness, accountability, affordability, sustainability.

5.2 Admission deadlines and number of vacancies

The number of vacancies is indicated in the Call for admission to the 33° PhD cycle programmes: <http://www.polimi.it/phd>

Scholarships both on general and on specific theme are available, in accordance with what is specified in the call for admission.

6. Contents

6.1 Requirements for the PhD title achievement

The achievement of the PhD title in Urban Planning, Design and Policy requires a study and research activity of at least three years equivalent of full time study, research and development of PhD thesis. PhD candidates in Urban Planning, Design and Policy must earn a minimum of 25 course credits (see paragraph 6.3 below), and to continuously conduct studies and research.

At the beginning of the course, the Faculty Board assigns a tutor to each PhD candidate to supervise and assist him/her in the overall training programme. The tutor shall be a professor belonging to the Faculty Board. The tutors assist the candidates in the choice of courses to be included in the study plan, which is eventually submitted for approval to the Coordinator of the PhD programme (see also section 6.4 below).

The Faculty Board may assign extra course credits to one or more candidates, in case they need to complete their preparation in specific topics, relevant for their research projects.

6.2 Research development

The main aim of all Politecnico di Milano PhD programmes is the development in the candidates of a research-oriented mind-set, with expertise and skills in a specific research topic. To this end, candidates develop a problem-solving capability in complex contexts, including the capacity of performing deep problem analysis, identifying original solutions, and evaluating their applicability in practical contexts.

These skills provide the PhD candidates with major opportunities of development in their research both in the academic field, and in public and private organisations.

PhD candidates are requested to develop an original research contribution. The PhD thesis must thus contribute to increase the knowledge in the candidate's research field. Besides, it has to be coherent with the research topics developed in the Department where the PhD Programme is carried out.

The original research results are collected in the PhD thesis, where the candidate's contribution is put in perspective with respect to the research state of the art in the specific research field.

The PhD research is developed under the guidance of a supervisor, who supports the candidate in the setting-out and in the everyday activities related to the thesis development. The supervisor is not

necessarily a member of the Faculty Board, and may also belong to an institution different from Politecnico di Milano. The supervisor can be supported by one or more co-supervisors.

Further activities intended to develop the candidate's personal skills and research expertise are encouraged during the PhD path.

Candidates must acquire the capability to present and discuss their work in their research community. Consequently, both the participation to international conferences and the publication of the research results in peer-reviewed journals are encouraged.

The PhD programme favors the candidates' research interactions with other groups in their research field, preferably abroad. Research visits of at least three months are strongly encouraged, as through them the candidates may acquire further skills to develop their research work and thesis.

The duration of the programme is normally three years.

6.3 Objectives and general framework of the teaching activities

The PhD programmes and the PhD School activate teaching forms of different kind and credit value, including courses, seminars, project workshops, laboratories. Teaching activities both cover the basic research issues (problems, theories, methods), which represent the founding element of the PhD programme and identify clearly its cultural position, and deepening in a specialist way some research issues connected with the problems developed in the theses.

Lessons are usually held in English, except when indicated otherwise. The PhD programme includes at least one complete path delivered in English language.

Structured teaching activities allow to earn ECTS credits. Other activities, typically specialised and for which it is difficult to evaluate the learning and its quantification, fall within the scientific activities of which the Board of Professors takes into account in the overall evaluation, but they do not allow to earn ECTS.

The PhD School of Politecnico di Milano proposes a set of courses aiming to train the PhD candidates in soft and transferable skills. The skills and abilities provided by these courses are expected to help candidates across different areas of their careers in order to respond to the rapidly evolving needs of the global economy and society at large. The PhD School courses activated for the 2017-2018 Academic Year are summarized in the following table.

| Course name | Professor |
|--|--------------------|
| Ethics in Research | Andrea Aliverti |
| Ethics, Technology, and Society | Viola Schiaffonati |
| From Knowledge to Decision | Simona Chiodo |
| Public Engagement and Communication for Science and Research | Paolo Ciuccarelli |
| Sulla Responsabilità della Tecnica | Paolo Maria Ossi |
| Sociology of research | Paolo Volontè |
| Design thinking - management and production of ideas | Nicola Crea |
| Methods and models for the decision making | Alberto Colorni |
| Collaborative Research Methodologies | Rami Shani |
| Scientific Communication in English | Timothy J Sluckin |

| | |
|--|---------------------|
| Advanced Interaction Skills for Academic Professionals | Michela Arnaboldi |
| Professional Communication | Nicoletta Di Blas |
| Science, Technology, Society and Wikipedia | Guido Raos |
| Disseminating Research | Anna Maria Paganoni |
| Research Skills | Donatella Sciuto |
| Research Planning | Tullio Tolio |
| Innovative Teaching Skills | Giulio Magli |
| Industrial Skills | Paolo Biscari |
| Project Management Basics | Alfonso Fuggetta |
| Project Management (in Action) | Mauro Mancini |
| Project Management PMI-CAPM Certification Preparation | Alfonso Fuggetta |

At least 10 of the 25 course credits that each candidate is required to earn shall be obtained through soft and transferable skills courses organized by the PhD School.

The main courses and workshops provided by UPDP programme in the first year are the following:

- **specialized courses on Research Methods**, providing a methodological introduction to the doctoral dissertation (literature review, drafting of a research project), as well as research tools in the fields of urban planning, policy and design;
- **a planning and design research workshop**, in which different experiences and skills are combined in order to explore themes and methods of urban planning, policy making and project design. The workshop, organized in an intensive period of work, will be anticipated by introductory seminars offered by the three research areas of Urban studies; Planning theories and practices; Design topics, forms and tools;
- **intensive and interactive seminars**, focusing on specific sets of topics in the three research areas of Urban studies; Planning theories and practices; Design topics, forms and tools, emphasizing a comparative approach among relevant Italian and international experiences.

Each learning activity is subject to grading through oral examination and the submission of written papers and essays. Detailed programmes are available on the PhD programme's website.

Within the end of the first year, PhD students will be required to submit a project proposal for their PhD dissertation.

The core activities of the second year are:

- a bibliographic essay related to the PhD dissertation, to be presented and reviewed within the first month of the first semester;
- an internship of six months in a foreign university or agency working in the field of urban planning and policy; a written report is due to the Board;
- at least one paper presented to an international journal and the participation in an international conference as a speaker.

During the third year the PhD candidate should devote his/her time to research and development of the PhD thesis. For each candidate, one member of the Board will be appointed as a Tutor responsible for supervising and supporting the candidate's work.

The Tutor and the whole Board will follow the preparation of the Thesis, and will hold regular

meetings with the candidates.

In particular, two moments of in-depth discussion of the contents of the Thesis are foreseen:

- Before the end of the second year, each PhD student will be required to organize a seminar at Politecnico di Milano in order to discuss the ongoing work of research and initial outcomes – position paper, methodology and contents – with researchers to be invited from outside the Department;
- By the end of September of the third year, each student will be required to present the draft of the PhD thesis, and to discuss it with the Supervisor and the Board of Professors.

The tables below summarize the candidate's path (as regards coursework activities). At the same time, the programme foresees that the candidates are devoted to research activity in a continuous way, following the lead of their supervisors, and of the Board of Professors.

First Year

| <i>Courses</i> | <i>Possible details or reference to following tables</i> | <i>Number of credits</i> | <i>Note</i> |
|---|---|--------------------------|---|
| <i>PhD School Courses</i> | <i>Two courses to be chosen by the PhD Candidate</i> | <i>10</i> | The list of the courses is available in http://www.dottorato.polimi.it/en/during-your-phd/phd-school-courses |
| <i>Courses characterizing the PhD programme</i> | Introduction to Research Methods in Urban planning, policy and design | 5 | |
| | Planning and Design Research workshop | 10 | |
| <i>Other activities</i> | First mile-stone: review of the content and approach to the thesis | 5 | |

Second year

| <i>Courses</i> | <i>Possible details or reference to following tables</i> | <i>Number of credits (min-max)</i> |
|---|--|------------------------------------|
| <i>Other activities</i> Activities connected to the thesis drafts | Bibliographic research paper on the thesis project | 5 |

| | | |
|--|---|---|
| | Submission of article(s) to a peer-reviewed international journal and/or participation in an international seminar as a speaker | 5 |
| | Internship abroad in a foreign university or agency with the production of papers | 5 |
| | Second milestone: evaluation of the content of the thesis with a seminar | 5 |

Third year

In the third year the candidate should be devoted entirely to the research and to the development of the PhD thesis. Two instances of reviews of the thesis with the Phd Board are foreseen:

- By the end of July, the Drafting of the thesis will be presented in a seminar with the participation of expert discussants;
- By the end of October, the final writing draft of the thesis will be discussed in a seminar with the Supervisor and the Board of Professors.

PhD Course List

A) The PhD programme in Urban Planning, Design and Policy organises the **Characterising Courses** listed in table A.

For the admission to the final exam the acquisition of at least 15 credits in this list is **mandatory**. These credits must be acquired through the “characterizing” PhD courses offered by the UPDP PhD programme.

B) The PhD School organises every year general and Interdoctoral courses. The acquisition of **at least 10 credits** is **mandatory** among the courses of B. The list of PhD courses organized by the PhD School is available at the website

<http://www.dottorato.polimi.it/en/during-your-phd/phd-school-courses>

C) Other PhD courses

Credits can be obtained by choosing from among other courses provided by other PhD programmes of Politecnico di Milano and/or external entities. In this case, the prior approval of the Supervisor, the tutor and of the coordinator is mandatory.

PREPARATORY COURSES

If the supervisor and the tutor find it useful or necessary that the candidate attends preparatory courses (chosen among the activated courses at the Politecnico di Milano) the Board of Professors of the PhD programme may assign some extra-credits to be acquired to complete the training path. The

credits acquired in this way will be considered as additional, in relation to the mandatory credits to be acquired with the PhD courses.

SPECIALISTIC COURSES, LONG-TRAINING SEMINARS

The attendance of Specialist Courses, Workshops, Schools, Seminars cycles is strongly encouraged and (if these seminars, workshops are certified and evaluated) may permit to acquire credits according the modalities established by the Board of Professors and previous approval of the study plan submitted by the candidate. These courses and workshops can be inserted in the study plan, even if they are not evaluated (and therefore not qualified as credits), as optional “additional teaching”.

The scheduled course planning for the academic year 2017-2018 follows. Other courses may be activated during the year. In this case the candidates will be promptly informed, and will be allowed to insert these new courses in their study plan.

Table A: PHD COURSES CHARACTERISING THE PHD PROGRAMME

| SSD | Name of the Course | Professor | A.A./Semester | Language | Credits |
|--------------------------------|---|--|---------------|----------|---------|
| Icar 20 | Introduction to Research Methods in Urban planning, policy and design | Stefano Moroni Valeria Fedeli | 2017/18, 1st | English | 5 |
| Icar 21; Icar 20; SPS/09 | Planning and Design Research workshop | Marialessandra Secchi; Davide Ponzini, Ilaria Mariotti, Antonio Longo | 2017/18, 2st | English | 10 |

Table B SUGGESTED CROSS –SECTORAL COURSES

| SSD | Name of the Course | Professor | Semester | Language | Credits |
|-----|---|-----------|----------|----------|---------|
| | Courses offered to the 33th cycle candidates by the Phd School (liste available in http://www.dottorato.polimi.it/en/during-your-phd/phd-school-courses) | | 2017/18 | English | 10 |

Table C OTHER PhD COURSES

| SSD | Name of the Course | Professor (optional) | Semester | Credits |
|---------|--|--|----------|---------|
| Icar 20 | Course "Jean Monnet: Eu Regional and Urban Policy" | Valeria Fedeli, Paola Briata, Camilla Lenzi, Luisa Pedrazzini, | 2017/18 | 5 |

6.4 Presentation of the study plan

PhD candidates must submit a study plan, which may be revised periodically (approximately every three months), in order to adequate them to possible changes in the course list, or to needs motivated by the development of their PhD career. The study plans must be approved by the PhD programme Coordinator, according to the modalities established by the Board of Professors of the PhD programme itself.

6.5 Yearly evaluations

Candidates present their work to the Board of Professors at least once a year. In particular, the candidates must pass an annual evaluation in order to be admitted to the following PhD year.

The third year evaluation establishes the candidate's admission to the final PhD defense. As a results of each successful annual evaluation, the candidates receive an evaluation (A/B/C/D). Candidates who do not pass the exam will be qualified as "Repeating candidate"(Er) or "not able to carry on with the PhD (Ei)".

6.6 PhD thesis preparation

The main objective of the PhD career is the development of an original research contribute. The PhD thesis is expected to contribute to the advance of the knowledge in the candidate's research field.

The PhD study and research work is carried out, full time, during the three years of the PhD course. Stages or study periods in (Italian or International) companies or external Institutions may complete the candidate's preparation.

The resulting theses need to be coherent with the research issues developed in the Department where the PhD programme is developed.

The candidate must present an original thesis, discuss its contribution to the state of the art in the research field in the research community.

The PhD research is developed following the lead of a supervisor, who supports the candidate in the setting out and in the everyday activities regarding the thesis development.

At the conclusion of the studies, admission of the candidate to the final exam will be evaluated by the Board of Professors. Afterwards, candidates defend their theses in a final exam, during which the research work carried out and the thesis will be evaluated by an examination Committee composed by three members, of which at least two external evaluation members.

7. Laboratories, PhD Secretary Services

Marina Bonaventura and Marilena Mastalli
 Department of Architecture and Urban Studies
 3 Bonardi Street, First floor
 Telephone: +39-02-2399.5165 / 5405
 Fax: +39-02-2399 5435
 E-mail: marina.bonaventura@polimi.it; marilena.mastalli@polimi.it

8. Internationalisation and other activities

Carrying out study and research activities at external laboratories is strongly recommended. Politecnico di Milano supports joint PhD paths with International Institutions, as well as Joint and Double PhD programmes. Further information are available on the PhD School website and on the PhD programme website.

More specifically, the PhD programme in Urban Planning, Design, Policy collaborates with:

| <i>Affiliated foreign universities</i> | <i>Kind of collaboration</i> |
|---|--|
| <i>Universiteit van Amsterdam, Faculty of Social and Behavioural Sciences</i> | <i>Training activities – seminars and Participation in the Advisory board (Luca Bertolini)</i> |
| <i>HafenCity Universitaet Hamburg</i> | <i>Erasmus exchange. Participation in the Advisory board (Ingrid Breckner). Trening and teaching activities (Research Methods)</i> |
| <i>TU Berlin</i> | <i>Agreement on joint research and teaching activities signed with DASTU</i> |
| <i>Bauhaus-Universität Weimar (lead project)</i> | <i>Innovative Training Networks (ITN); UrbanHist Call: H2020-MSCA-ITN-2016</i> |
| <i>Institut d’urbanisme de Paris – Université Paris-Est</i> | <i>Joint Phd (Co-tutela); participation in the Advisory Board of LabEx.</i> |
| <i>Katholieke Universiteit Leuven</i> | <i>Institution Partner of European Module Spatial Development Planning (EMSDP), intensive study program in spatial planning</i> |
| <i>TU Delft</i> | <i>IdeaLeague (ETH-Zurich, TU-Delft, RWTH Aachen, Chalmers University)</i> |
| <i>Bartlett School of Planning, UCL</i> | <i>Training activities – seminars</i> |
| <i>Qatar University, Department of Architecture and Urban Planning</i> | <i>Double PhD</i> |

Interaction with and exposure to non-academic sectors provides significant benefits to doctoral candidates as well as to research and innovation intensive employment sectors. Direct exposure to the challenges and opportunities in non-academic sectors of the economy and society at large is fostered by networking, connectivity, inter-sectoral mobility and wide access to knowledge. In particular, the PhD programme in Urban Planning, Design, Policy collaborates with the following Research Agencies and Public institutions.

| <i>Inter-sectorial collaborations</i> | <i>Kind of collaboration</i> |
|--|---|
| Eupolis Lombardia. Istituto superior per la ricerca, la statistica e la formazione | <i>Scholarship for a PhD student (30 cycle)</i> |
| <i>JRC_Joint Research Centre of the European Commission</i> | <i>Visiting scientist agreement (29 cycle)</i> |

Attachment A1 – PhD Programme Coordinator

Paola Pucci is Full Professor in Urban planning and Research Director of the PhD course in Urban Planning Design and Policy (UPDP) at the Politecnico di Milano.

EDUCATION > Architect (Degree cum laude a.y. 1989-90), Paola Pucci obtained her PhD in Territorial Planning (IUAV, Venice) in 1994 with a PhD thesis on the place-making approach to transport junctions and infrastructure. She holds an Advanced Master Degree in Regional Planning and Property Market at Corep - Politecnico di Torino (1991, with scholarship). She has been Post-doc research fellow at the Politecnico di Milano (1995-1997) and Research Fellow (“Assegnista di ricerca”, 1998), with a research on the "Evoluzione delle politiche di settore verso visioni e politiche complesse (territoriali, ambientali, sociali)" (Sectoral policies evolving towards integrated and complex visions). As certified Architect since 1990, she became a member of the Ordine degli Architetti (National Board of Architects).

RESEARCH ACTIVITIES > Since 1995, as research fellow, then Assistant Professor and Associate Professor, she has taken part, also with roles of team coordinator, in national and international research projects, dealing with the following research topics:

- **Mobility policy and transport planning.** Among the major researches:
 - «Développement de TCSP sur rail et maîtrise de l'étalement urbain. Possibilités de densification des secteurs à proximité des lignes ferroviaires dans les franges de quatre régions urbaines», PREDIT (GO3) (2010-13);
 - Mobility analysis for Sustainable Mobility Plan (financed by Provincia di Monza e Brianza 2011)
 - Mobility trends in Lombardia and Emilia Romagna Regions in Piano Nazionale della Mobilità (funded by Ministero dei Trasporti; 2008-09);
 - Mobile Phone data analysis in Lombardia Region (financed by Telecom Italia, 2008 and 2011)
 - Public Debate on Gronda Intermedia motorway project in Geova (2008-09) funded by Comune
 - ESPON (European Spatial Planning Observation Network) project 1.2.1. “Transport services and networks: territorial trends and basic supply of infrastructure for territorial cohesion”(2004);
 - «Multipolarités urbaines et nouvelles organisations intermodales» (tr Urban multipolarities and new intermodal organizations), financed by INRETS 2005;
 - «Mobilité urbaine durable: les politiques publiques à l’aune des indicateurs? Comparaison européenne sur le rôle des indicateurs de mobilité» Université Lumière Lyon 2 (financed by PUCA, 2005-2007) (tr Sustainable urban mobility: public policies through indicators),
 - PRUSST of Seregno “ Infrastructure and urban projects for the railway station in Seregno (coordinated by prof A. Balducci, 2001-03);
 - Guidelines for road project in Province of Bergamo (2002-04), and Rehabilitation of Marecchiese national road in Rimini (coordinated by Prof. A. Moretti; 1999-2000),
 - Gares et quartiers des gares (tr Railway stations and their districts) (financed by Ministère de l’Équipement, des Transports du Logement 1999);
 - Murst 40% «Trasporti scienza e tecnica» (1999) (tr Transport, science and technology) Murst 40% «Valutazione degli effetti delle infrastrutture di trasporto sul sistema territoriale” (1992), (tr Assessment of the effects of transport infrastructure on territorial system), funded by Ministry of University.
- **Processes of territorial transformations and challenges to the field of urban and territorial policies.** Among the major researches:
 - PRIN/2010-11 “Post-metropolitan territories as emergent forms of urban space: the challenges of sustainability, livability and governance”, national coordinator Prof. A. Balducci;

- “Articulation des différents échelles de planification. Approche comparative» IUG, Université Pierre Mendés (financed by Agence Rhone Alpes, 1998-2000) (coordinated by Gilles Novarina);
- “Explociòn de la ciudad. Miradas Y Mociones sobre las transformaciones territoriales recientes en las regiones urbanas de la Europa meridional» (tr The explosion of the city) COAC-CUIMB (Consorci Universitat Internacional de Barcelona) Forum de la Cultura UNESCO 2004 de Barcelone, coordinated by Antonio Font (2003-04);
- Itaten Research "Indagine sulle trasformazioni degli assetti del territorio nazionale" (tr Study of the urban transformations in the national territory) financed by Ministero dei Lavori Pubblici (coordinated by Profs. Palermo, Dematteis, Clementi, 1995-96);
- Strategies for the reorganization of production spaces in province of Vicenza financed by Provincia di Vicenza (coordinated by Prof. Balducci, 2004-05);
- Murst 40% “Conoscenza e azione in urbanistica” (tr Knowledge and action in urban planning) (national coordinator F. Karrer, 1997); and Murst 40% “Fattori di successo di grandi progetti urbanistici” (tr Conditions of success in large urban projects; national coordinator Erba, 1994).
- **Strategic spatial planning.** Among the major researches:
 - Strategic project “Città di Città” financed by Provincia di Milano (coordinated by Prof. A. Balducci, 2005-09);
 - Studies for the preliminary document in Province of Vicenza (PTP), financed by Provincia di Vicenza (coordinated by Prof. A. Balducci, 2004-05);
 - Strategic Agenda and Strategic Plan Dalmine-Zingonia (BG) (coordinated by Prof. A. Balducci, 2002-04).

TEACHING ACTIVITIES > She has been Lecturer in Planning at the Università di Genova (1998-99) and at the Politecnico di Milano where, since 1999, she has taught at Bachelor Level in Architecture and at Master Level in Urban Planning courses in Italian and in English (from 2011), in both thematic courses and Workshop integrated courses related to Urban Planning and Infrastructure design. Among the PhD level activities and high qualification teaching activities, she has been tutor in the Alta Scuola Politecnica in two Multidisciplinary Projects and she has taught in PhD courses for GPT (Governo e progettazione del territorio) and Urban Planning Design and Policy PhD Course, following as supervisor and tutor several PhD theses. From October 2010 to August 2011 she taught at the Institut d’Urbanisme de Grenoble, Université Pierre Méndes France at Bachelor, Master and PhD levels.

INTERNATIONAL ACTIVITIES > She has activated, through promotion of various international networking activities presenting papers at international conferences, a series of collaboration projects and exchanges with colleagues in Europe, interested in developing research programs in the field of mobility and transport issues as well as urban transformations. Visiting professor in Socrates teaching exchanges in several European Universities (Universidad Politécnica de Valencia, Université Lyon_2, Universitet van Amsterdam, Université Pierre Mendes-France, Ecole d’Architecture de Paris Belleville) she has taught spatial planning and mobility projects (workshop and courses) at the Institut d’Urbanisme de Grenoble, Université Pierre Méndes France (from October 2010 to August 2011) at Bachelor, Master and PhD levels). She participates in international research projects funded on the basis of a competitive call, including EU Espon Project, PUCA (Plan, urbanisme, architecture) and PREDIT projects financed by the Ministère de l’Ecologie, du Développement et de l’Aménagement durable (France), H2020-SC6-CO-CREATION-2016-2017, Project 769608 — PoliVisu (Policy Development based on Advanced Geospatial Data Analytics and Visualisation, as Team member of DASTu Politecnico di Milano research partner.

Attachment A2 – PhD Extended Faculty Board

Description of the composition of the Extended Faculty Board

| <i>Name</i> | <i>Affiliation</i> | <i>Scientific Disciplinary Sector</i> |
|----------------------------------|--------------------------------------|---|
| <i>Paola Pucci (coordinator)</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 21</i> |
| <i>Andrea Arcidiacono</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 21</i> |
| <i>Alessandro Balducci</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 20</i> |
| <i>Bertrando Bonfantini</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 21</i> |
| <i>Massimo Bricocoli</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 20</i> |
| <i>Antonella Bruzzese</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 21</i> |
| <i>Grazia Concilio</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 20</i> |
| <i>Bruno Dente</i> | <i>Politecnico di Milano (Dig)</i> | <i>SPS/04</i> |
| <i>Valeria Fedeli</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 20</i> |
| <i>Luca Gaeta</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 20</i> |
| <i>Matteo Goldstein Bolocan</i> | <i>Politecnico di Milano (Dastu)</i> | <i>M-GGR/02</i> |
| <i>Antonio Longo</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 21</i> |
| <i>Corinna Morandi</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 21</i> |
| <i>Ilaria Mariotti</i> | <i>Politecnico di Milano (Dastu)</i> | <i>SECS-P/06</i> |
| <i>Scira Menoni</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 20</i> |
| <i>Eugenio Morello</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 20</i> |
| <i>Stefano Moroni</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 20</i> |
| <i>Carolina Pacchi</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 20</i> |
| <i>Paolo Pileri</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 20</i> |
| <i>Davide Ponzini</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 20</i> |
| <i>Costanzo Ranci</i> | <i>Politecnico di Milano (Dastu)</i> | <i>SPS/09</i> |
| <i>Rossella Salerno</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 17</i> |
| <i>Andrea Rolando</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 17</i> |
| <i>Maria Alessandra Secchi</i> | <i>Politecnico di Milano (Dastu)</i> | <i>Icar 21</i> |
| <i>Stefania Sabatinelli</i> | <i>Politecnico di Milano (Dastu)</i> | <i>SPS/09</i> |

Attachment A3 – PhD Advisory Board

Description of the composition of the Advisory Board

| <i>Name</i> | <i>Affiliation</i> |
|-------------------------------|---|
| <i>Prof. Luca Bertolini</i> | <i>Universiteit van Amsterdam</i> |
| <i>Prof. Ingrid Breckner</i> | <i>HafenCity Universitaet Hamburg</i> |
| <i>Prof. Sandro Cattacin</i> | <i>Département de Sociologie de l'Université de Genève</i> |
| <i>Prof. Olivier Coutard</i> | <i>Laboratoire Techniques, Territoires, Sociétés, Université Paris-Est</i> |
| <i>Prof. Frank Eckardt</i> | <i>Bauhaus-Universität Weimar</i> |
| <i>Prof. Klaus Kunzmann</i> | <i>Universität Dortmund</i> |
| <i>Prof. Luigi Mazza</i> | <i>Politecnico di Milano</i> |
| <i>Prof. Stefan Siedentop</i> | <i>Institute of Regional Development Planning, Universität Stuttgart</i> |
| <i>Prof. Antonio Font</i> | <i>Universitat Politecnica de Catalunya, Esc. Tecn. Sup. d'Arquitectura</i> |