

PhD School - Politecnico di Milano Manifesto of the PhD Program of:

Architectural Urban Interior Design - AUID

Cycle XXXVII

1. General information

Ph.D. School - Politecnico di Milano

Ph.D. Program: Architectural Urban Interior Design - AUID

Course start: November 2021

Location of the PhD Program: Milano, Campus Leonardo

Promoter Department: Department of Architecture and Urban Studies - DASTU

Scientific Disciplinary Sectors:

- ICAR/14 Architectural and Urban Design
- ICAR/16 Interior Design
- ICAR/17 Drawing and Representation
- ICAR/18 Architectural History
- ICAR/12 Architectural Technology
- ICAR/21 Urban Planning
- M-FIL/04 Aesthetics

PhD Program Website: <u>www.auid.polimi.it</u> PhD School Website: <u>http://www.dottorato.polimi.it/en/</u>

### 2. General presentation

The Ph.D. Program in Architectural Urban Interior Design (AUID) promotes research, studies and projects focused on design processes and techniques belonging to contemporary architecture.

The Program is part of the Polimi Ph.D. School, which with several cross-disciplinary courses, develops basic knowledge about scientific research's methodological and technical questions.

The Program is embedded into the Department of Architecture and Urban Studies (DAStU), one of Italy's most important research structures. It is inserted into a well-established international network of centers of excellence.

AUID Program is a founding member of the European Network CA2RE, which schedules recurrent milestones and research activities together with the following partners: Arkitektskolen i Aarhus, Katholieke Universiteit Leuven, Technische Universitat Berlin, Universidade Lusófona Do Porto – Cofac, Hafencity Universitaet Hamburg, Norges Teknisknaturvitenskapelige Universitet Ntnu, Technische Universiteit Delft, Eaae - Aeea (European Association For Architectural Education), European League Of Institutes Of The Arts Vereniging.

The Program is run by a Head, who coordinates all activities. Then, different actors cooperate in the program development. Deputy Heads have specific assignments related to foreign relations, interior relations, departmental research. The Faculty Board has the scientific responsibility of all researchers, together with a Group of Experts, composed of professors with bold academic research experience.

A Group of Researchers, actively participates in lecturing and tutoring the candidates; an international Advisory Board, connects AUID with an extensive European network.

The Program welcomes both foreign and Italian students. English is the official language; the specific research subjects will be assigned to each candidate, after an agreement with the Faculty Board, within the first year of the Ph.D. activity.

2.1. Research topics

The Program studies architectural, urban and interior design in all aspects. The methodological frame is the design-driven research, where design is the cultural environment to test and produce theoretical and technical knowledge.

Every year, the Program, in respect of its general directions, focuses on specific topics to be explored theoretically and designerly.

Within the 37th Cycle, starting in 2021-22, the preferential research lines are:

Emergency and crisis: experimental design related with processes of obsolescence and decay; vulnerable, fragile, catastrophic conditions;

Grey, blue and green infrastructures: exploring and testing the new architectural perspectives in highways, railways, ports, airports, and forests, rivers, rural environment;

Post-pandemic architecture: investigate and upgrade interiors in housing, workspaces, commercial and cultural spaces.

The candidates will develop a research methodology starting from the lectures and assignments of the AUID courses and the courses of the Polimi Ph.D. School.

Studying the different formats, methods, and expressions that can shape research in architectural design, the candidates will profile their methodologies considering the selected object's specificity, the target, and the attended results.

The Program considers that design is a relevant and necessary component of any research.

Educational objectives focus on the deep understanding of a well-selected and defined topic and developing specific research containing a comprehensive overview of the scientific question and an original track and output.

The candidate will acquire the skill to organize a consistent analysis of case studies, formulate a clear proposal for an original approach to a question, and elaborate innovative strategies and research methods.

### 3. Professional opportunities and job market

The Program is aimed to train highly qualified researchers and professionals who will work in academic institutions, research centers, public administration, as well as in the private sector, in the fields of architectural, urban, and interior design:

- University researchers and lecturers in the scientific fields of the Ph.D. Program;

- Researchers with an excellent scientific profile in the area of complex architectural developments and interventions of recovering and transformation;

- Independent professionals qualified in the management of highly complex design processes;

- Designers with high responsibility tasks in institutions and professional structures and leading manufacturers, engaged in traditional residential and special utilities, cultural institutions (museums, libraries, universities, schools, cultural centers), public and private services, commercial networks, accommodation, and leisure.

#### 4. Enrollment

### 4.1. Admission requirements

Italian and International citizens are requested to have graduated according to the pre-existing laws D.M. 3.11.1999 n. 509, or to have a Master of Science degree following D.M. 3.11.1999 n. 509, or a Master of Science following 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 period of university studies of at least five years.

A Master of Science degree in Architecture is highly recommended; candidates who graduated in disciplines as Landscape, Design, Art, Media, and Communications are allowed to enroll in the Program.

A certified knowledge of the English language is a requirement for admission. Please refer to the Ph.D. School website for details.

The admission to the Program will be established according to the evaluation of the candidates' curricula, motivation letters, and an illustrative report about developing a possible Ph.D. research, which candidates

will send contextually with their application to the admission announcement. A shortlist of applicants may be requested to meet the Head's of the Program's Head and Faculty Board's members.

## 4.2 Admission deadlines and number of vacancies

The number of positions is indicated in the Call for admission to the 37th Ph.D. cycle Program: http://www.dottorato.polimi.it/en.

Scholarships are available following what is specified in the call for admission.

### 5. Contents

5.1 Requirements for the Ph.D. title achievement

The achievement of the Ph.D. title in "Architectural Urban Interior Design" requires a study and research activity of at least three years equivalent of full-time study, focused on the development of a Ph.D. thesis.

Ph.D. candidates must earn a minimum of 30-course credits (see paragraph 5.3 below) and regularly conduct studies and research.

At the beginning of the course, the Faculty Board can assign a tutor to supervise and assist the Ph.D. candidate. The tutor shall be a professor belonging to the Faculty Board or the Groups of Experts or Researchers.

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

### 5.2 Research development

The main aim of all Polimi Ph.D. Programs is the development, for the candidates, of a research-oriented mindset, with expertise and skills in a specific research topic.

Ph.D. candidates are requested to develop an original research contribution. The Ph.D. thesis must thus contribute to increasing the knowledge in the architectural design research field. Besides, it has to be coherent with the general research lines of the Ph.D. Program.

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

The research develops under the guidance of a supervisor, who supports the candidate in the setting-out and 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 that is not Politecnico di Milano. The supervisor can be supported by one or more co-supervisors.

Further activities are encouraged during the Ph.D. path to enhance the candidate's personal skills and research expertise. Candidates must acquire the capability to present and discuss their work in the research local and global communities. Consequently, both the participation in international conferences and the publication of the research results in peer-reviewed journals are supported.

The Program encourages the candidates' research interactions with other groups in their research field, in national and international areas. Research visits of at least three months are strongly fostered, as through them, the candidates may acquire different skills to develop their research work and thesis.

The minimum duration of the Program is three years.

### 5.3 Objectives and framework of the teaching activities

The Ph.D. Polimi Programs and the Ph.D. Polimi School activate teaching forms of different kind and credit value, including courses, seminars, project workshops, laboratories. Teaching activities cover the fundamental research issues (problems, theories, methods), representing the founding element of the Ph.D. Program. Lessons are usually held in English, except when indicated otherwise. Structured teaching activities allow earning ECTS credits. Other activities, typically specialized and for which it is difficult to evaluate the learning and its quantification, fall within the scientific activities of which the Faculty Board takes into account in the overall evaluation. Still, they do not allow to earn ECTS.

The Ph.D. School of Politecnico di Milano proposes courses aiming to train the Ph.D. candidates in soft and

transferable skills. These courses' skills and abilities are expected to help candidates across different areas of their careers to respond to the rapidly evolving needs of the global economy and society at large.

The Ph.D. School courses activated for the 2020-2021 academic year will be visible at this link: http://www.dottorato.polimi.it/en/during-your-phd/phd-level-courses/. At least 10 of the 30 credits (ECTS) that each candidate is required to earn shall be obtained through soft and transferable skills courses organized by the Ph.D. School.

The educational structure includes:

- Lectures, training sessions, guided tours, and seminar cycles given by Faculty and visiting professors;

- Workshops of design-driven research;

- Seminar activities and individual stages/internships particularly important for enhancing the students' curriculum;

- Individual research aided by tutors with the contribution of the entire teaching staff.

Each learning activity is subject to grading through oral examination and/or the submission of written papers. Detailed programs are available on the Program's website. Within the end of the first semester, Ph.D. students will be required to submit a Ph.D. dissertation project. Programs and bibliographies of courses are available online and will be communicated at the beginning of each activity. The table below summarizes the candidate's path (as regards coursework activities). At the same time, the Program foresees that the candidates are devoted to research activity in a continuous way, following their supervisors and the Faculty Board's lead.

First/Second Year (courses and workshops to be followed within the first 24 months):

Courses	Possible details or reference to following tables	Number of credits (min)	Note
PhD School Courses	Every PhD candidate has to follow two courses of the PhD School of Polimi	5 + 5	
PhD AUID Program Courses	Every PhD candidate has to follow 3 courses + 1 architectural design workshop	5 + 5 +5 +5	

Third year

In the third year, the candidate should be devoted entirely to the research and developing the Ph.D. thesis.

A) The Ph.D. Program organizes the Characterizing Courses listed in table A. For admission to the final exam, at least 20 credits in this list are mandatory. These credits must be acquired via the "characterizing Ph.D. courses" offered by the Ph.D. Program. For admission to the third year, the credits of workshops, seminars, and the Ph.D. School course must be fulfilled (30 credits minimum).

B) The Ph.D. School organizes general and Inter-doctoral courses. The acquisition of at least 10 credits is mandatory among the courses of B type. The list of the courses organized by the Ph.D. School is also available on the website <u>http://www.dottorato.polimi.it/en/during-your-phd/phd-school-courses</u>.

## Table A: PHD COURSES CHARACTERISING THE PHD PROGRAM

Name of the Course	Professors	Credits
Architecture Research	Alessandro Rocca, Andrea Gritti, Stamatina Kousidi	5
Agenda		
Theories and Techniques	Gennaro Postiglione, Fabrizia Berlingieri, Francesca Lanz	5
of Funded Research		
Architectural Research	Marco Bovati, Jacopo Leveratto, Andrea Oldani	5

Workshop		
Architectural Workshop	Design	5

# Table B: POLIMI PHD SCHOOL COURSES

Professor	Course title
Aliverti Andrea	Ethics in Research
Armondi Simonetta	Strengthening Critical Spatial Thinking
Arnaboldi Michela	Advanced Interaction Skills for Academic Professionals
Balducci Alessandro	Approaches to Resilience: Social, Economic, Environmental and Technological Challenges of Contemporary Human Settlements
Biscari Paolo	English for Academic Communication
Cardilli Lorenzo	European Culture
Chiodo Simona	Epistemology of Scientific and Technological Research (Technologies Reshaping Humans)
Di Blas Nicoletta	Professional Communication
Gianinetto Marco	The Copernicus Green Revolution for Sustainable Development
larossi Maria Pompeiana	Power of Images and Visual Communication for Research Dissemination
Jacchetti Emanuela	Communication Strategies that Score in Worldwide Academia
Lavagna Monica	Sustainability Metrics, Life Cycle Assessment and Environmental Footprint
Mancini Mauro	Project Management (in Action)
Masarati Pierangelo	Ethical Aspects of Research on Dual-Use Technologies
Ossi Paolo Maria	Sulla responsabilità della Tecnica
Paganoni Anna Maria	La comunicazione nella Scienza
Pizzocaro Silvia Luisa	Practicing Research Collaboration / La pratica della collaborazione nella ricerca
Raos Guido	Science, Technology, Society and Wikipedia
Sancassani Susanna	Teaching Methodologies, Strategies and Styles
Valente Giovanni	Scientific Reasoning: Philosophy, Logic and Applications
Volonte' Paolo Gaetano	Introduction to Academic Research
Zani Maurizio	Laboratorio di insegnamento a classi numerose

## PREPARATORY COURSES

If the supervisor and the tutor think that it is useful, or necessary, that the candidate attends preparatory courses (chosen among the activated courses at the Politecnico di Milano), the Faculty Board of the PhD Program may assign some extra-credits to be acquired to complete the training path. The credits earned in this way will be considered additional to the mandatory credits to be achieved with the Ph.D. 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 to the modalities established by the Faculty Board 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 2021-22 follows. If other courses are activated during the year, the candidates will be promptly informed and allowed to make changes in their study plan.

## 5.4 Presentation of the study plan

Ph.D. candidates must submit a study plan, which may be later revised and changed because of needs motivated by their Ph.D. career development. The study plans must be approved by the Program's Head.

### 5.5 Yearly evaluations

Candidates present their work to the Faculty Board at least once a year. In particular, the candidates must pass an annual evaluation to be admitted to the following Ph.D. year.

After the end of the third year, the Board of Professors establishes the candidate's admission to the final defense. As a result of each successful annual evaluation, the candidates receive an assessment (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 Ph.D. (Ei)."

After the final year, candidates who have achieved good results but need more time to draw up their thesis may obtain a prorogation of up to 12 months.

### 5.6 Ph.D. thesis preparation

The main objective of the Ph.D. career is the development of an original contribution in the candidate's research field.

The Ph.D. study and research work are carried out full time during the three years of the Ph.D. course. Stages of study periods in (Italian or International) companies or external institutions may complete the candidate's preparation. The resulting thesis needs to be coherent with the research issues indicated in the Call of the AUID Ph.D. Program.

The candidate must present an original thesis and discuss its contribution to the research field.

The Ph.D. research follows the lead of a supervisor, who supports the candidate in the setting out and everyday activities regarding the thesis development.

At the conclusion of the Ph.D. studies, the Faculty Board evaluates the candidates. Candidates who receive a positive evaluation submit their theses to two external reviewers for refereeing. If the reviewers' assessments are positive, the candidates defend their thesis in front of a committee composed of at least three members (at least two are external experts).

Phase 1 – During the first year, while attending Program and School courses, the candidate chooses the thesis topic and focuses on its theoretical and methodological implications; defines a preliminary table of contents and the primary bibliography. At the end of the first semester, Ph.D. Students present the "Research project" document to the Faculty Board (1st milestone).

Phase 2 – At the end of the second semester, the PhD Students present to the Faculty Board the development of essential elements and documentation of the research thesis: annotated tables of contents, bibliographical documentation, graphic and iconographic material (2nd milestone).

Phase 3 – The second and the third year are devoted to detailed thematic, experimental, design issues and the final thesis draft (3rd, 4th, 5th, and 6th milestones).

At the end of each year (2nd and 4th milestones), the Faculty Board determines the admission of the Ph.D. student to the following year.

At the end of the third year, the thesis is presented during a final public seminar (6th milestone), and the Faculty Board determines the admission to the final defense or the need of and extra time, up to 12 months.

6. Laboratories, PhD Secretary Services
The PhD has a workspace in Building 12, campus Leonardo.
Administrative manager: Marina Bonaventura
Department of Urban Studies (DASTU)
via Bonardi 3 - I-20133 Milano
Contact: Tel. +39-02-23995165, marina.bonaventura@polimi.it, phd-auid@polimi.it

# 7. Internationalization

Politecnico di Milano supports joint PhD paths with international institutions, as well as Joint and Double PhD Programs. Further information is available on the PhD School website http://www.dottorato.polimi.it/en/ and on the PhD Program website (http://www.auid.polimi.it).

The AUID PhD Program collaborates with many foreign universities and institutions:

- > TU Berlin, Institute for Architecture
- > TU Delft, School of Architecture
- > KU Leuven, Faculty of Architecture, Campus Sint-Lucas, Ghent
- > Aarhus School of Architecture
- > University of Ljubljana, Faculty of Architecture
- > Universidade Lusófona do Porto
- > Hafencity Universität Hamburg
- > Norwegian University of Science and Technology Trondheim
- > Université Paris-Saclay

#### Attachment A1 –Head of the PhD AUID Program

Alessandro Rocca is an architect MSc – Ph.D., full professor of Architectural and Urban Design at the Department of Architecture and Urban Studies (Dastu) of Politecnico di Milano (Polimi), head of the Ph.D. Program of Architectural Urban Interior Design (AUID <u>http://www.auid.polimi.it</u>), member of the Board of the Polimi School of Doctoral Programs, member of the ASN (National Scientific Qualification) Committee for Architectural Design. He teaches Architectural Design courses at the Master of Architecture at Polimi School of Architecture Urban Planning Construction Engineering (AUIC). He was visiting professor at the University of Clemson (SC, USA), the School of Architecture of Ferrara, Brera Academy of Fine Arts (Milan), and he lectured in foreign and Italian universities (Bucea Beijing, Polytech Saint Petersburg, Higher School of Economics Saint Petersburg, ENSA Paris-Belleville, ENSA Lyon, ENSP Versailles, TU Delft, University of Jordan, ENAU Tunis, and in Italian universities; he was panelist at several European PhD programs (KU Leuven, TU Berlin, University of Ljubljana, University of Lisbon, Aarhus School of Architecture, Hafencity University Hamburg).

He is author and curator of several books on architecture and landscape (as "Lo spazio smontabile" "Architecture low cost low tech", "Natural Architecture", "Nine Planetary Gardens"), he published essays and articles on Italian and international architectural reviews and magazines, such as "Lotus", "Interni", "Domus", "Abitare", "Parametro", "Archis", "Bauwelt", "Territorio" "Fuoco amico", "Viceversa".

From 1990 to 2003, he was editor of the reviews "Lotus international" "Lotus Documents" and "Navigator". He is a regular contributor of the magazine "Interni" (2008-14) and, since 2015, he is the founder and editor in chief of the architectural review "Fuoco amico" <u>https://issuu.com/mmxiipress</u>. He co-designed the Cereals Cluster at Milan (built, at Expo 2015) and led the design team for the Bovisa campus masterplan (2016).

He directed the Polimi Design Summer School 2018. He co-curated some international workshops, such as the yearly Miaw (Milan Architectural International Workshop, Polimi, since 2014 to 2019), "Landscape in Art and Science" (Polimi, 2016), "Plaine de France" (Ecole Nationale Supérieure du Paysage de Versailles – Polimi, 2015), "Mines Landscape Design" (Iglesias – Milan, Polimi, 2013), "The Garden of the Righteous" (Milan, Polimi, 2012), "Costruire Naturale" (Piedmont, Polimi, 2010), "Picnic al Tempio" (Sicily, 2007, 2008, 2009).

His publications, with downloadable files, are reported at https://orcid.org/0000-0002-5667-4579.

Attachment A2 - PhD AUID Faculty Board

Prof. Alessandro Rocca, Polimi-DAStU, PO ICAR 14 (head) Prof. Simona Chiodo, Polimi-DAStU, PO MFIL04 (deputy head) Prof. Emilia Corradi, Polimi-DAStU, PA ICAR 14 (deputy head) Prof. Gennaro Postiglione, Polimi-DAStU, PO ICAR 16 (deputy head) Prof. Guya Bertelli, Polimi-DAStU, PO ICAR 14 Prof. Marco Biraghi, Polimi-DAStU, PO ICAR 18 Prof. Marco Borsotti, Polimi-DAStU, PA ICAR 16 Prof. Marco Bovati, Polimi-DAStU, PA ICAR 14 Prof. Margitta Buchert, Leibniz Universität Hannover Prof. Pier Federico Caliari, Polito, PO ICAR 16 Prof. Luigi Cocchiarella, Polimi-DAStU, PA ICAR 17 Prof. Pierre-Alain Croset, Polimi-DAStU, PO ICAR 14 Prof. Valentina Dessì, Polimi-DAStU, PA ICAR 12 Prof. Andrea Di Franco, Polimi-DAStU, PA ICAR 14 Prof. Immacolata C. Forino, Polimi-DAStU, PO ICAR 16 Prof. Roberto Gigliotti, Unibz, PA ICAR 16 Prof. Matthias Graf von Ballestrem, HafenCity Universität Hamburg Prof. Andrea Gritti, Polimi-DAStU, PA ICAR 14 Prof. Laura Montedoro, Polimi-DAStU, PA ICAR 21 Prof. Carles Muro, Polimi-DAStU, PA ICAR 14 Prof. Marco Navarra, Università di Catania, PA ICAR 14 Prof. Filippo Orsini, Polimi-DAStU, PA, ICAR 14 Prof. Orsina Simona Pierini, Polimi-DAStU, PO ICAR 14 Prof. Alessandro Rogora, Polimi-DAStU PO ICAR/12 Prof. Pierluigi Salvadeo, Polimi-DAStU, PA ICAR 16 Prof. Luigi Spinelli, Polimi-DAStU, PA ICAR 14 Prof. Ilaria Valente, Polimi-DAStU, PO ICAR 14

Members of the Board of Experts accredited to participate in teaching and research activities

Prof. Luca Basso Peressut, Polimi-DAStU, PO ICAR 16 Prof. Carlo Berizzi, Unipv, PA ICAR 14 Prof. Antonella Contin, Polimi-DAStU, RU ICAR 14 Prof. Giovanni Corbellini, Polito, PO ICAR 14 Prof. Carlotta Fontana, Polimi-DAStU, PO ICAR 12 Prof. Pierfranco Galliani, Polimi-DAStU, PO ICAR 14 Prof. Stefano Guidarini, Polimi-DAStU, PO ICAR 14 Prof. Marco Lucchini, Polimi-DAStU, PA ICAR 14 Prof. Matteo Poli, Polimi-DAStU, RU ICAR 15 Prof. Roberto Rizzi, Polimi-DAStU, PA ICAR 16 Prof. Michele Sbacchi Unipa, PA ICAR 14 Prof. Michele Ugolini, Polimi-DAStU, PA ICAR 16 Prof. Fabrizio Zanni, Polimi-DAStU, PA ICAR 14 Researchers accredited to participate in teaching and research activities

Prof. Fabrizia Berlingieri, Polimi-DAStU, Rtd-B ICAR 14 Prof. Barbara Coppetti, Polimi-DAStU, Rtd-B ICAR 14 Prof. Cassandra Cozza, Polimi-DAStU, Rtd-A ICAR 14 Prof. Carlo Gandolfi, Università di Parma, Rtd-B ICAR 14 Prof. Stamatina Kousidi, Polimi-DAStU, Rtd-B ICAR 14 Prof. Francesca Lanz, Polimi-DAStU, Rtd-A ICAR 16 Prof. Jacopo Leveratto, Polimi-DAStU, Rtd-A ICAR 16 Prof. Camillo Magni, Polimi-DAStU, Rtd-A ICAR 14 Prof. Pasquale Mei, Polimi-DAStU, Rtd-A ICAR 14 Prof. Andrea Oldani, Polimi-DAStU, Rtd-B ICAR 15 Prof. Giulia Setti, Polimi-DAStU, Rtd-A ICAR 14

Attachment A3 – PhD AUID Advisory Board

Prof. Najla Allani, Ecole Nationale d'Architecture, Tunis (Enaut)
Prof. Tom Avermaete, ETH Zurich
Prof. Jo van den Berghe, KU Leuven, Ghent
Prof. Carmen Diez Medina, EINA Zaragoza
Prof. Carlos Garcia Vázquez, Universidad de Sevilla
Prof. Oya Atalay Frank, ZHAW, Wintherthur
Prof. Carmen Espegel, ETSAM Madrid
Prof. Joerg Gleiter, TU Berlin
Prof. Joao Gomes da Silva, Accademia di Architettura di Mendrisio
Prof. Christoph Grafe, Universitaet Wuppertal
Prof. Marco Hemmerling, Technische Hochschule Köln
Prof. Claus Peder Pedersen, Aarhus School of Architecture
Prof. Annalisa Viati Navone, ENS Architecture Versailles
Prof. Tadeja Zupancic, University of Ljubljana