



POLITECNICO
MILANO 1863

PhD School - Politecnico di Milano
Regulations of the PhD Programme in:

Design

Cycle

XXXVI

1. General Information

PhD School - Politecnico di Milano

PhD Programme: Design

Course start: November 2020

Location of the PhD Programme: Bovisa

Promoter Department: Design

Scientific Disciplinary Sectors

Subject (SDS): ICAR/13 Design (main);

Other Subjects: ICAR/16 Interior and Exhibit Design; L-ART/02 History of Modern Art; ICAR/18 History of Architecture; SPS/08 Sociology of Cultural and Communicative Processes.

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

PhD Programme Website: <http://phd.design.polimi.it>

2. General presentation

Politecnico di Milano was among the first universities in Italy to start a PhD Programme in the field of design in 1990.

The Programme is run by a Coordinator and a Faculty Board.

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

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

The Programme aims at teaching PhD candidates how to carry out high quality design research. In this respect, candidates are invited to: reflect on the nature of design, with its aesthetic, of use and meaning values, as well as its capability of being an agent of social change towards more sustainable systems; develop and share original design knowledge and methodologies.

The PhD Programme hosts a number of research projects that address the specific issues on which research is carried out in the Design Department.

3. Objectives

Main goal of the PhD Programme is to train designer-researchers who, addressing the problems and opportunities of contemporary society, are able to apply research methods in order to produce

original design knowledge. The curriculum lasts three years, during which both educational and research activities are provided.

The Programme develops analytical and design abilities and promotes a collaborative disposition. Each year, a list of suggested topics to be addressed during the three-year training is made available on the PhD website (<http://phd.design.polimi.it>). In January 2018 the Design Department was awarded by the Italian Ministry of University with a five-year co-financing (Dipartimenti d'Eccellenza) for carrying out research activities in the following four areas: i) design for advanced manufacturing; ii) design for new business and entrepreneurship; iii) design for social and public sectors innovation; iii) design for cultural and creative industries. Therefore, the current topics are mainly focused on one of the above-mentioned areas.

Once enrolled, each candidate becomes an effective member of a research group, within which she/he develops an original research project. This research activity is the fundamental core of the learning process. Parallel to this, each candidate is involved in other educational activities, divided into general and specialised ones.

General activities are courses and seminars related to the design discipline and its research methodologies and practices. They are aimed at consolidating the cultural and operational background common to all the areas of design research. For this reason, the general activities are compulsory for all the PhD candidates.

Specialised activities are courses and seminars related to the specific research topic addressed by each PhD candidate. For this reason, the specialised activities are optional.

In brief, the Programme offers PhD candidates with the following opportunities:

- To develop a PhD thesis, working on a specific research topic as member of a research team;
- To participate in courses and seminars on design, on design research and on research in general, developing competences concerning the discipline of design and the researcher profession;
- To participate in workshops, developing specialist competences and acquiring knowledge and tools for the development of their research topic;
- To engage in an internship in an international research centre to verify assumptions, methodologies and results of their work and to consolidate their international network of relationships.

Finally, the activities of the PhD Programme in Design include the writing of academic papers and the participation in international conferences.

4. Professional opportunities and job market

The designer-researcher educated by the PhD Programme in Design is a flexible figure: a designer who knows how to carry out research and a researcher who uses design tools. At the same time, he/she is also an expert in knowledge management, in constructive interaction among different stakeholders and in the communication of visions and proposals.

The combination of these skills is useful in a variety of work environments, which increasingly are faced with complex challenges that the designer-researcher can effectively address and contribute to solve. More specifically: universities and research centres expressly dedicated to carrying out design research; design agencies and design-oriented companies; public bodies and service companies; organisations for territorial development.

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. The topic of this research proposal should be chosen from a list of suggested topics available on the website of the PhD Programme in Design.

5.2 Admission deadlines and number of vacancies

The number of positions is indicated in the Call for admission to the 36th PhD cycle Programmes:
<http://www.polimi.it/phd>

Scholarships both on general and on specific themes are available, in accordance with the call for admission.

6. Contents

6.1 Requirements for the PhD title achievement

The achievement of the PhD title in Design 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 Design must earn a minimum of 25 course credits (see section 6.3 below), and to continuously conduct studies and research.

Upon enrollment in the Programme, to each PhD candidate both a tutor and a supervisor will be assigned by the Faculty Board. The tutor shall be a professor belonging to the Faculty Board. Tutors assist the candidates in the choice of courses to be included in the study plan that is submitted for approval to the Programme Coordinator (see also section 6.4 below). The supervisor should be a professor expert in the specific research topic addressed by the candidate. Their role is to guide candidates in the development of their research activity (see also section 6.2 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.

Other requirements to obtain the PhD title are:

- Carrying out a 6-months internship in universities or research centers abroad. This requirement can also be matched attending two courses related to the candidate's specific research project (for a minimum of 10 credits). (see also section 6.2 below).

- Publishing at least two conference papers or articles in non-indexed journals (for a minimum of 10 credits). This requirement can also be matched with the publication of one article in an indexed journal (Scopus or Web of Science).

6.2 Research development

The main aim of all Politecnico di Milano PhD Programmes is the acquisition by 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 real 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 framed and codified in the PhD thesis, where the candidate's contribution is put in perspective with respect to 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 cooperate with one or more co-supervisors.

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

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 favours the candidates' research interactions with other groups in their research field, preferably abroad. Research visits of six months are strongly encouraged, as through them the candidates may acquire further skills to further develop their research work. During the PhD Programme in Design all candidates are strongly recommended to engage in this activity, which is compulsory for those who are supported with a scholarship. Candidates not supported with a scholarship who, for good reasons, cannot go abroad, are permitted to substitute the internship abroad with other learning activities. In more details, they are required to attend one optional course for each 3 months of internship missing (for a maximum of two courses).

The duration of the Programme is three years.

6.3 Objectives and general framework of the teaching activities

The PhD Programmes and the PhD School activate different kind of teaching activities, including courses, seminars, project workshops, laboratories. General teaching activities cover the basic research issues (problems, theories, methods), which represent the founding element of the PhD Programme and identify clearly its cultural position. Specialised teaching activities deepen in a specialist way some research issues connected with the problems developed in the theses.

Lessons are held in English. Structured teaching activities allow to earn ECTS credits.

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. The PhD School courses activated for the 2020-2021 Academic Year will be available at the following link:

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

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 PhD Programme in Design proposes a set of 3 characterising courses aiming to introduce the PhD candidates into the basics of design research. Candidates are required to take those courses and carry out the related activities. Professors in charge of these courses will specify the assessment procedures. Courses' Programmes and general information on teaching activities are available from the PhD Secretary's office as well as on the PhD website (<http://phd.design.polimi.it>).

Those candidates not carrying out a 6-months internship abroad are required to attend two PhD level courses provided by Politecnico di Milano and/or external Institutions for a minimum of 10 credits (see section 6.1 above).

The table below summarizes the candidate's path (as regards coursework activities). At the same time, candidates are required to carry out research activity in a continuous way, following the lead of their supervisors, and of the Faculty Board.

First and Second Year

Courses	Possible details or reference to following tables	Number of credits (min-max)
<i>Courses characterising the PhD Programme</i>	<i>See table A</i>	<i>15</i>
<i>PhD School Courses</i>	<i>See PhD School courses above</i>	<i>10</i>

Third year

In the third year, the candidate should be devoted entirely to the research and to the development of the PhD thesis.

PHD COURSES LIST

For the admission to the final exam the acquisition of **a total of 45 Credits** is mandatory.

At least 25 credits must be obtained by attending PhD courses as described below:

A) The PhD Programme in Design organises the **Characterising Courses** listed in table A. The acquisition of all the **15 credits** in this list is **mandatory**.

B) The PhD School organises every year general and Interdoctoral courses. The acquisition of **at least 10 credits** is **mandatory**.

PREPARATORY COURSES (only if foreseen)

If the supervisor finds it necessary that the candidate attends preparatory courses (chosen among those activated by Politecnico di Milano), the Faculty Board of the PhD

Programme will assign extra-credits to be acquired to complete the training path. These credits will be considered additional.

SPECIALISTIC COURSES, LONG-TRAINING SEMINARS

The attendance of further Specialist Courses, Workshops, Summer/Winter Schools, Seminars cycles is strongly encouraged. These courses and workshops can be inserted in the study plan as optional “additional teaching” that will not be evaluated (and therefore not qualified as credits),

The scheduled course planning for the academic year 2020-2021 follows. Other courses may be activated during the year. In this case, 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

Name of the Course	Professor	A.Y./Semester	Language	Credits
<i>Design research methodologies</i>	<i>Silvia Pizzocaro</i>	<i>1st/1st</i>	<i>English</i>	<i>5</i>
<i>Design research contexts and resources</i>	<i>Cabirio Cautela, Davide Fassi, Raffaella Trocchianesi</i>	<i>1st/1st</i>	<i>English</i>	<i>5</i>
<i>Design research Prototyping</i>	<i>Stefano Maffei, Chiara Colombi, Jonathan Chapman</i>	<i>1st/2st</i>	<i>English</i>	<i>5</i>

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 it to any change in the courses’ list, or to evolving needs of their PhD career. Study plans must be approved by the PhD Programme Coordinator, according to the modalities established by the Faculty Board of the PhD Programme itself.

6.5 Yearly evaluations

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

The third year assessment establishes the candidate's admission to the final PhD defence. As a result of each successful annual assessment, 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)”. In the former case (Er), candidates are allowed to repeat the PhD year at most once. The PhD scholarship – if any – is suspended during the repetition year. In the latter case (Ei), candidates are excluded from the PhD programme and lose their scholarship – if any.

In case the Faculty Board holds appropriate to assign directly an exclusion evaluation (Ei) without a previous repetition year, the request must be properly motivated, and validated by the PhD School. After the final year, candidates who have achieved sufficient results but need more time to conclude their research work and write their theses, may obtain the admission to a further year.

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 knowledge in the candidate's research field.

The PhD study and research work is carried out full time, during the three years of PhD. 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 toward 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 PhD studies, the Faculty Board evaluates the candidate. Candidates who receive a positive evaluation submit their thesis to two external reviewers for refereeing. If the evaluation provided by the external reviewers is positive (or after the revisions required), the candidates defend their thesis in a final exam, in front of a Committee composed of three members (at least two of which must be external experts).

7. Laboratories, PhD Secretary Services

Laboratories for practical activities and experiments:

Colour Laboratory

Exhibit Design Laboratory

Fashion Laboratory

Lighting Laboratory

Model Laboratory

Movie Design Laboratory

Photography Laboratory

Polifactory

Virtual prototyping-reverse modelling Laboratory

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e-mail: segreteriaadottorato-design@polimi.it

8. Internationalisation and inter-sectoriality

Carrying out study and research activities at external research centers is strongly recommended.

Politecnico di Milano supports joint PhD paths with International Institutions, as well as Joint and Double PhD Programmes. Further information is available on the PhD School website and on the PhD Programme website.

The PhD in Design fosters relationships with international design schools, particularly those running PhD Programmes. In addition, the PhD Programme organises regular meetings, seminars and lectures with internationally renowned professors and experts in order to foster dialogue and debate on the latest research issues.

More specifically, the PhD Programme in Design collaborates with the following foreign universities:

University Name	Country
<i>Northeastern University</i>	<i>USA</i>
<i>ITT INSTITUTE OF DESIGN</i>	<i>USA</i>
<i>Carnegie Mellon</i>	<i>USA</i>
<i>AALTO UNIVERSITY</i>	<i>Finland</i>
<i>DELFT UNIVERSITY OF TECHNOLOGY</i>	<i>The Netherlands</i>
<i>IMPERIAL COLLEGE</i>	<i>UK</i>
<i>TONGJI UNIVERSITY</i>	<i>China</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.

Attachment A1 – PhD Programme Coordinator

Paola Bertola

Graduated cum laude in Architecture, PhD in Industrial Design and Multimedia Communication at Politecnico di Milano, Scholar Researcher at the Illinois Institute of Technology in Chicago (IIT).

Teaching

She is currently Full Professor of Design at Politecnico di Milano, where she teaches in the Bachelor Program in “Fashion Design” - School of Design; in the “International Master of Luxury Management” and in the “Executive MBA” (elective in Luxury Management) - School of Management; in the Master Program in “Fashion Direction – Brand & Product Management” at Milano Fashion Institute (a multidisciplinary consortium owned by Politecnico, Università Bocconi and Università Cattolica del Sacro Cuore).

Since 2015 she is a faculty member of the “Data Shack Program” between Politecnico di Milano, and Harvard University, Institute for Applied Computational Science (IACS) at John A. Paulson School of Engineering and Applied Sciences (SEAS).

She has been developing lectures, seminars and educational projects with primary university institutions such Università Cattolica del Sacro Cuore - Milano, Università Commerciale Luigi Bocconi - Milano, Università La Sapienza di Roma, Università di Napoli Federico II, American University Beirut, Fashion Institute of Technology New York, London College of Fashion, Philadelphia University, Seoul National University, Shanghai Jiao Tong University, Shenkar College of Engineering & Design Tel Aviv, University of Brighton.

Institutional duties

Between 2005 - 2011 she was chair of Fashion Design Programs at Politecnico di Milano that was established under her supervision.

Between 2008 - 2013 she was member of the Board of the Alta Scuola Politecnica, a school for higher education created by Politecnico di Milano and Politecnico di Torino, coordinating multidisciplinary field projects.

Between 2008 - 2014 she was the Director of the “Master in Fashion Direction _ Brand & Product Management” at Milano Fashion Institute (MFI) and part of the Executive Board contributing to MFI creation.

She is the Coordinator of the PhD Program in Design - Politecnico di Milano.

She coordinates the program “FIT@Polimi”, an international exchange program between Politecnico di Milano and Fashion Institute of Technology in New York.

She developed and coordinates the joint exchange MA program between the School of Art and Design at Philadelphia University and the School of Design at Politecnico di Milano.

She is part of the board “Polimi 2040”, a strategic planning body within Politecnico di Milano University. She is the delegate for the School of Design’s of international relationship with North American Universities.

She is cofounder research collective “Fashion in Process” within the Design Department - Politecnico di

Milano.

She is member of the Editorial Board of the scientific journal "Fashion Practice", Taylor & Francis Publisher.

She is Editor in Chief of the book series "Fashion in Process", Pitagora Editore, Bologna.

Research

Her research focuses on creative processes, design management & planning and design research within culture intensive industries (fashion, furniture, etc.).

In 2011 she was awarded with the ADI Compasso d'Oro Price for Research for leading, together with Stefano Maffei, the research program "Design Research Maps".

2019

Outstanding Paper Award, Emerald Publishing Limited, RESEARCH JOURNAL OF TEXTILE AND APPAREL

Attachment A2 – PhD Faculty Board

Description of the composition of the Faculty Board

Surname	Name	Affiliation	Scientific Disciplinary Sector
<i>BERTOLA</i>	<i>Paola</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>BERTOLO</i>	<i>Maresa</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>BORDEGONI</i>	<i>Monica</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>BOSONI</i>	<i>Giampiero</i>	<i>Politecnico di Milano</i>	<i>ICAR/16</i>
<i>BUCCHETTI</i>	<i>Valeria Luisa</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>CAPPELLIERI</i>	<i>Alba</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>CARATTI</i>	<i>Elena</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>CELI</i>	<i>Manuela</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>DEL CURTO</i>	<i>Barbara</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>FASSI</i>	<i>Davide</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>IRACE</i>	<i>Fulvio</i>	<i>Politecnico di Milano</i>	<i>ICAR/18</i>
<i>LUPO</i>	<i>Eleonora</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>MAFFEI</i>	<i>Stefano</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>MAFFEIS</i>	<i>Rodolfo</i>	<i>Politecnico di Milano</i>	<i>L-ART/02</i>
<i>MARANI</i>	<i>Pietro Cesare</i>	<i>Politecnico di Milano</i>	<i>L-ART/02</i>
<i>MERONI</i>	<i>Anna</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>MORTATI</i>	<i>Marzia</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>PENATI</i>	<i>Valeria Antonella</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>PIZZOCARO</i>	<i>Silvia Luisa</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>RAMPINO</i>	<i>Lucia Rosa Elena</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>

<i>REBAGLIO</i>	<i>Agnese</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>ROGNOLI</i>	<i>Valentina</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>ROSSI</i>	<i>Maurizio</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>SANGIORGI</i>	<i>Daniela</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>SCULLICA</i>	<i>Francesco</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>
<i>VOLONTE'</i>	<i>Paolo Gaetano Francesco</i>	<i>Politecnico di Milano</i>	<i>SPS/08</i>
<i>ZURLO</i>	<i>Francesco Paolo</i>	<i>Politecnico di Milano</i>	<i>ICAR/13</i>

Attachment A3 – PhD Advisory Board

Description of the composition of the Advisory Board

Name	Affiliation
<i>PIETER JAN STAPPERS</i>	<i>TU Delft, The Netherlands</i>
<i>WESTON BAXTER</i>	<i>Imperial College, UK</i>
<i>GUY JULIER</i>	<i>Aalto University, Finland</i>
<i>JONATHAN CHAPMAN</i>	<i>Carnegie Mellon University, USA</i>
<i>CARLOS TEXEIRA</i>	<i>IIT-Institute of Design, USA</i>