DOTTORATO
DI RICERCA
IN DESIGN

POLITECNICO DI MILANO
DIPARTIMENTO DI DESIGN

DESIGN PHD 2019 SUMMER SCHOOL

Organized by :
Design PhD Politecnico di Milano

With the support of:
PhD School of Politecnico di Milano
PhD in Design Network of Excellence
Polifactory - the Makerspace and Fablab of Politecnico di Milano

DESIGN RESEARCH PROTOTYPING

DESIGNING RTD EXPERIMENTS

*E*xploring and Materializing the Boundaries of Experimental Knowledge

THE DESIGN PHD PROGRAMME - POLITECNICO DI MILANO

Established in 1990, the current PhD programme in Design aims to develop competences and skills to carry out high quality research in design as a specific field of enquiry. The Politecnico di Milano was one of the first universities in Italy to establish a School of Doctoral Programmes in 2001 with a view to coordinating, assessing and monitoring the single doctorate programmes. The Design Programme is the only one - among 19 Polimi doctoral programmes - entirely devoted to the design discipline with 60 candidates in design in a 3-year programme.

The Programme aims at educating researcher who will contribute original knowledge to the field of design by tackling the problems and identifying the potential of contemporary society.

Their contribution may be brought to bear in:

- creating designs, visions, and proposals (research through design);
- developing tools and methods for putting these into practice (research for design);
- developing critical analysis of design and its application domain (research on design).

The Programme proposes different methodologies of research, promotes the attitude to collaborate, and offers opportunities in universities and research centres, enterprises and public corporate bodies.

Other fields partially covered are Science and Philosophy, Language Theory, Sociology of Cultural Processes and Communication, History of Art, Science and Technology of Materials, Industrial Engineering, Operations Research, Computer Science.

The Programme is going through a structural transformation in the last years, due to the profound changes in the context and status of the discipline,and to the increasingly heterogeneous pool of candidates with a growing international component. This transformation is concerning recruitment processes, highly qualified teaching, investment in research infrastructures and resources (for doctoral or post-doctoral scholarships, research grants, visiting professors, student assignments, etc.), and in strengthening national and international networks.

In the framework of the 2019 SUMMER SCHOOL, the PhD programme in Design is exploring opportunities and challenges of the recently established PhD in Design Network of Excellence, an informal network of 6 PhD programmes in Design, spanning Northern and Southern Europe and the USA with the aim of sharing experiences, reflections and ideas for future developments.

PROGRAM & GOALS

The Summer School has its focus in trying to explore what might be defined Research through design (RtD) nowadays. It tries to explore the relationship between theory and practice also focusing on what could be the contributions given by other disciplines. In particular, the aim is to discuss an idea of design research that moves away from the positivist vision that tends to assimilate it strictu sensu to the conventional hard sciences approach. The School proposes an epistemology of praxis as an inspirational methodological opportunity to develop an RtD inquiry. In fact, it aims to explore the potentialities of other disciplinary experiences which could be meaningful for the design practice to produce original, tacit/explicit, generalizable knowledge in forms that are not exclusively textual. Therefore, the School embraces the studio format within the doctoral didactic path and it wants to sustain, doctoral students capabilities in applying their competences and knowledge (and the research tools typical of their disciplinary context) to foster the investigation of their own experimentation process considered as an assemblage of epistemological, experimental and cognitive models and a codification of non-textual knowledge and practices (defining their accountability and comparability with other disciplinary approaches characterized by experimental research processes).

The School includes stimulating lectures and studio activities where students, organized in small groups, will have the opportunity to integrate, through a peer-to-peer exploration and discussion, the insight provided by the Keynotes and Guest Speakers.

APPROACH & PROCESS

From a methodological point of view, the Course will propose a semi-flipped classroom educational approach. This approach aims to enable open knowledge dynamics, through practices of peer-to-peer exchange and sharing. Part of the goal is to rethink the educator's role, which should not be intended anymore as a "master" (in the classical sense), but rather as a "mentor", a guide into the intricate art of heuristics. This approach is particularly relevant today, as the quantity of information exceeds the capacity of knowledge that a single individual can process and critical attitude becomes a necessary tool to address complexity.

The approach and process of the School include:

1. Overview of the epistemology of experimental knowledge. Which epistemologies? A systematic review discussing the connections between the models and verifying the disciplinary portability;
2. Exploration of epistemologies, experiences, protagonists, ideas, cases;
3. Peer-to-peer discussion on what might be defined as experimental research. Attempt to produce a shared definition; definition of idealtypes of experimental knowledge linked to the previous inquiry;
4. Production of an epistemology of experimental knowledge: production of an RtD ideal type explorative description; definition of a methodological approach applied to their chosen transformative situation (eg. Gigamaps / SOD); challenge of the disciplinary portability;
5. What if? How to apply the process and the learning to personal research;
6. Giving context to the students' representations: evaluation of approaches, languages, processes, tools;
7. Final presentation: sum up of the emerged ideas and possible directions for further exploration and development.

FACULTY

Stefano Maffei, PhD
Full Professor Design, Department, Politecnico di Milano

Chiara Colombi, PhD
Associate Professor, Design Department, Politecnico di Milano

Jonathan Chapman, PhD
Full Professor, Director of Doctoral Studies, Carnegie Mellon (Pittsburgh, USA)

KEYNOTE SPEAKERS

Pam Alldred, Reader in Education and Youth Studies at Brunel University London (UK)
<www.brunel.ac.uk/people/pam-alldred>

Jonathan Chapman, Full Professor, Director of Doctoral Studies, PhD in Transition Design, School of Design, Carnegie Mellon (Pittsburgh - USA)
<design.cmu.edu/people/faculty/jonathan-chapman>

Barbara Sciascia, Researcher, INFN (Istituto Nazionale di Fisica Nucleare), Laboratori Nazionali di Frascati (LNF) (Rome, Italy)
<home.infn.it/en>

GUESTS

Enrico Bassi, Director at Opendot Fab Lab (Milano, Italy)
<opendotlab.it>

Claudio Giorgione, Curator of the "Leonardo, Arte e Scienza" Department of the Museo Nazionale della Scienza e della Tecnologia Leonardo da Vinci (Milano, Italy)
<museoscienza.org/english>

Amalia Ercoli-Finzi, Honorary Professor, Department of Aerospace Science and Technology, Politecnico di Milano (Milano, Italy)

Marta Handenawer, Executive Creative Director at Domestic Data Streamers (Barcelona, Spain)

CLASSWORK

During the Course, there will be time dedicated to the development of the research and its relative outputs. Students are encouraged to use those moments not only for working but also as occasions for dialogue and revision of progressing work with teachers and tutors. It will also be an opportunity for exchanging thoughts and point of views among members of different groups.

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LOCATION & FURTHER INFO

Location

POLIFACTORY - THE MAKERSPACE AND FABLAB OF POLITECNICO DI MILANO
Candiani Campus - Via Candiani 72, 20158 - Milano

Date

July 1-5, 2019

More information

Tutor and School management: Annalinda De Rosa, Research Fellow | Design Department, Politecnico di Milano | annalinda.derosa@polimi.it

Websites

Politecnico di Milano | www.polimi.it/en
PhD programme in Design | www.phd.design.polimi.it
Polifactory | www.polifactory.polimi.it/en

Students

PhD candidates from the PhD programme in Design of Politecnico di Milano + design PhD candidates from institutions part of the PhD in Design Network of Excellence: Aalto University, Helsinki – Finland

PhD in Transition Design, School of Design - Carnegie Mellon, Pittsburgh - USA

PhD in Design, Institute of Design - IIT Illinois Institute of Technology, Chicago - USA

PhD in Design Engineering, Dyson School of Design Engineering - Imperial College, London - UK

TU Delft Graduate School, Faculty of Industrial Design Engineering, TU Delft, Delft University of Technology, Delft - The Netherlands