

# PhD IN DESIGN, ARTS AND TRANSDISCIPLINARITY

## Research framework and themes

The PhD in “**Design, Arts and Transdisciplinarity**” is aimed at students who want to deal with the complexity of ongoing social, cultural, environmental and economic transitions to design positive changes and imagine more equitable, supportive and sustainable futures starting from a post disciplinary perspective, open to hybridizations between knowledge and the experimentation of new and unexpected connections.

The era of transformations we are going through is generating a radical paradigm shift that forces us to reflect on the role and function of Design, the Arts and more generally all creative fields, observing them as potential agents of responsible and conscious change, which impacts in a positive and proactive way on society and the planet.

The PhD programme aims to investigate new interpretative paradigms of Design and the Arts, and their roles, in a fluid, rapidly evolving context, through the experimentation of systemic research methodologies, based on multiple connections and hybridizations (human , nature, machine), the sublimation of linear disciplinary approaches, in favour of relational and critical, abductive and transdisciplinary readings, which look not only at applications, but also at the implications and impacts of design and creative action.

In this scenario, Design and Art stand as a transformative platform capable of enabling the interconnection between different forms of knowledge, the relationships between different forms of intelligence (human, non-human, other-than-human) and multiple application possibilities, generated by the intersection between design, art, technologies, sciences (human, social, environmental, economic), in a reference value framework based on principles of equity, inclusiveness, responsibility, sustainability and solidarity.

An open and collaborative research environment, an ecosystem in which to activate transdisciplinary and relational design dynamics, experiment new hybrid, generative and regenerative methodologies, and apply emerging technologies (AI, robotics, automation, data-driven technologies, human-computer interaction) consciously and responsibly, with a critical, ethical and non-conformist outlook, to go beyond conventional approaches and orient research action towards the common good, planet and shared resources.

- **Collective intelligence and Human - non human creativity**
- **Design, Arts and the creative industries in new socio-economic circular environments**
- **Cultural Heritage through digital and phigital technologies**
- **Smart technologies and bio-materials: unconventional and circular application**
- **Data design and information ecology: awareness and knowledge**
- **Decolonization, commoning and social good in design and art practices**

The thematic areas may also be expanded in relation to the research projects activated at the Institution, the profiles of the individual members of the PHD Programme Committee, and the research interests expressed by the students.

## Training objectives

The aim of the course is to train researchers capable of tackling the complex and profoundly transformative challenges of our time using design and artistic practices as a platform of intersection between different disciplines, methods, practices and theories, a collaborative environment, open to experimentation and to creating new and unexpected connections to produce responsible change. Thanks to the transdisciplinary and participatory approach, the acquisition of the methods typical of design research and artistic practices, and the construction of a reference value framework, researchers will be able to produce research activities strongly oriented towards critical, relational and unconventional thinking and at the same time towards field experimentation applied to different fields and production sectors, in line with the objectives indicated by the PNRR (mission 4, Component 2 “From research to business”).

More specifically, the PhD programme has the following training objectives:

- acquiring a high level of scientific knowledge of research theories, methodologies and practices;
- developing the ability to autonomously manage and finalise the research process in complex areas and environments;
- acquiring autonomy and capacity for continuous learning and self-learning;
- developing an aptitude for systemic, critical and unconventional thinking and experimentation in plural, collaborative, formal and informal contexts, open to contaminations;
- acquiring and applying to theoretical and applied research activities a reference value system oriented to the principles of responsibility, awareness, equity, justice, solidarity and sustainability and to the evaluation of the impacts of project and research action;
- developing original research that expands the frontier of knowledge and contributes to the creation of new knowledge;
- guaranteeing the validation and dissemination of research results through national or international publication and critical sharing with the scientific and professional community;
- acquiring tools and languages to communicate with peers, with the wider community of scholars and with society in general in the areas of expertise;
- promoting, in academic and professional contexts, technological, economic, social and cultural advancement oriented towards the common good, care for the planet and shared resources;
- contributing to the development of the productive and cultural system through research, circular knowledge transfer and participatory collaboration.

## Methodology

The PhD program is designed to encourage the intersection between critical and speculative research and action research, oriented towards experimentation and application to real cases, representative of the complexity of the ongoing transitions, with the involvement of partners (experts, companies, research centres, universities), stakeholders and communities in relation to the research topics agreed upon with the students.

The training programme is based on the acquisition of a progressive and autonomous awareness and responsibility in the development of one's own research project, in an open environment, with the guidance of a Tutor (first reader) and a co-Tutor (second reader) with whom to agree on teaching, integrative and dissemination activities.

The research programme also includes a study period abroad that may be organised at the schools in the IED network, partner institutions or others, proposed by the students in agreement with the PHD Programme Committee.

The teaching activities will be organised in such a way as to encourage comparison and contamination between the various disciplines, methodologies and theories, with formal, informal and non-formal learning methods, favouring participatory methods open to the communities of reference and to citizens.

The training programme is divided into a single curriculum over the three years and envisages the following training activities:

- Research activities: Development and implementation of a research project over the three years, projects and field research activities also in collaboration with external partners and participation in funded projects consistent with the topics of the PhD.
- Dissemination activities: presentation of research results at one or more international conferences in the form of an oral presentation or poster and publication of the results (conference proceedings, article or essay).
- Activities abroad: study period of at least three months abroad to carry out research activities.
- Teaching activities: attendance of compulsory courses also at other institutions in the fields of art and design, research methodologies, sciences (human, social, environmental, pedagogical, economic), digital and post-digital technologies, group and individual research workshops.
- Additional activities: seminars, conferences, practice-based transdisciplinary workshops, participation in research projects and groups, educational and extracurricular activities with students.

Language skills will be integrated into teaching and further activities that can be provided in English and into dissemination activities on an international level. IT skills will be improved in teaching and further activities in the field of technology.

## **Programme and specific objectives**

### **1. Research knowledge grounding**

The first year is devoted to building and strengthening the theoretical and practical foundations necessary for setting up the research project and acquiring the theoretical, technical and critical tools for conducting research independently or in groups. The activities are aimed at the acquisition of knowledge related to research management, methodologies, theories and systems at an international level, the integration of knowledge in disciplinary fields other than one's own, the acquisition of academic tools for the validation and dissemination of research results in an international context, in-depth study of thematic areas and the setting up of one's own research project.

Activities: research training, setting up international research groups, participation in peer-to-peer networks, in the institution's own or other partners' research projects, in seminars, teaching activities and setting up research through the evaluation of initial hypotheses, the selection of a methodology and a first literature review.

### **2. Action research and public sharing of knowledge**

The second year is devoted to the proactive deepening and refinement of the research topic and participation in research activities in formal and informal contexts, also at international level, with the aim of expanding networks of connections and relationships functional to the development of the research project, acquiring knowledge and critical awareness, sharing the first research results in an academic and non-academic context by collecting feedback.

Activities: participation in research, seminar and project activities at international level, creation and organisation of research and dissemination activities within the Institution or in collaboration with national or international partners, creation of the tools for the development of the research project, final literature review. The activities include a period abroad with participation in research groups with other universities.

### 3. Doctoral thesis and dissemination

The third year is devoted to the completion of the doctoral thesis project and to the dissemination of the results in international contexts, the acquisition of complete autonomy, awareness and responsibility in the management of one's own research activities and in the proposal of activities and research projects to the Institution to which one belongs.

Activities: synthesis and drafting of the Doctoral thesis, dissemination of results through publication, presentation and discussion of results in academic, public and international contexts, organisation and management of research activities and participation in partnership research projects.

Training areas

## Employment prospects

The doctorate will train researchers and experts capable of dealing with the complexity of digital, environmental, economic, social and cultural transition challenges through the perspective of design and the arts, bringing non-conventional interpretations and future projections that will impact the ecosystem in an inclusive, responsible and sustainable manner. Thanks to the transdisciplinary, collaborative and experimental approach, they will have the opportunity to carry out research and development activities in different fields and sectors, thus responding to the demand of companies, public and private organisations and institutions, universities and research centres, for profiles capable of adapting rapidly to changes, tackling complex problems in an innovative way and at the same time being promoters of ethical and responsible change that promotes systemic, equitable and sustainable development.

Possible professional opportunities include:

- consultant at strategic consultancies in the relevant sectors and in the creative industries in general;
- business strategist, business innovator, CEO in the reference sectors and in the creative industries in general;
- researcher with an application profile, who configures and activates complex analytical - proactive strategies and paths on processes, products and product systems, innovative and sustainable services, promoting the acquisition of new knowledge and technologies;
- researcher in Academies, Universities and public and private research institutions as research manager or professor with an orientation towards transdisciplinary practices;
- research manager in national and European research projects at companies, public and private institutions, universities and academies;
- researcher and designer mediator between technological and digital innovation and the business system and society, through the development of co-creative models aimed at inclusiveness

## PHD Programme Committee

### **RICCARDO BALBO | PHD Program Committee Coordinator**

Architect, PhD in Theory and Construction of Architecture, he is Academic Chief Officer and Academic Director of the IED Group, President of the Francesco Morelli Foundation, owner of the Istituto Europeo di Design. He is an ANVUR expert for the evaluation of the AFAM system and *National Foreign Expert "1000 people"* for the Government of the People's Republic of China, consulting firms and institutions. Director of IED Turin until 2017, from 2008 to 2013 he directed the Masters in Urban Design and Regeneration and in Digital Architectural Design at the School of the Built Environment of the University of Salford (UK), where he participated in the foundation of the MIND (Mediated Intelligence in Design) research group.

The key words of his research are: digital architectural design, design-led innovation, design education, knowledge and creativity, urban regeneration, urban redevelopment, smart city

### **Members of the PHD Programme Committee**

#### **VITTORIA MARTINI**

An art historian, in 2012 she obtained her PhD in Art Theory and History at the School of Advanced Studies in Venice (IUAV University of Venice/Cà Foscari University). Her research mainly focuses on the analysis of institutions producing visual arts exhibitions as mass-media and how artistic practices and countercultures can drive change within institutions. She is currently an independent art historian: alongside her research and writing work, she combines research work for male and female artists, teaching at Campo, Course of studies and curatorial practices launched by the Sandretto Re Rebaudengo Foundation in 2012, and IED\_Istituto Europeo di Design and work as manager for the editorial coordination of various publications.

#### **GIANFRANCO BOMBACI**

Architect and PhD in Environmental Design since 2008. From 2009 to 2011 he was lecturer and theses supervisor in Landscape Architecture at the Faculty of Architecture in Ferrara. He is currently Director of the School of Design at IED Rome where he continues his teaching activities and is a Visiting Lecturer at the School of Architecture of the Royal College of Art in London, where he leads Architecture Design Studio 10. In 2009 he co-founded 2A+P/A associated studio, developing architecture, urban planning and landscape projects, with particular interest in nature. He participates in international design competitions in which he has received awards and mentions, and has illustrated his work in various conferences and publications. In 2015, he founded the CAMPO architecture gallery, a space to debate, study and celebrate architecture in Rome. Within this cultural project, he participates in the organisation of exhibitions, seminars and workshops.

#### **LUCA DAL POZZOLO**

He is architect and founding member of the Fitzcarraldo Foundation, active in the sector of business economics and cultural and environmental heritage, where he is responsible for research activities. Since 1998 he has been Director of the Cultural Observatory of Piedmont. He is currently a member of the scientific committee of the Ticino Cultural Observatory and of the cultural committee of IED - Istituto Europeo di Design.

He taught architectural design from 1990 to 2015 at the Faculty of Architecture of the Polytechnic of Turin and has participated in many activities at European Universities. He currently teaches Museography at a Master Course at the Polytechnic of Turin, is a lecturer at the Master's in Cultural Management at SUPSI in Lugano and at the Faculty of Economics in Bologna where he teaches Regional Cultural Policies.

As an architect, he focuses on museum design and the enhancement of cultural heritage. He has published articles and books on economics of culture and cultural heritage topics.

### ANGELA RUI

Angela Rui is a curator and design researcher. Angela obtained her PhD in Exhibition Design at the Polytechnic of Milan, Faculty of Architecture (2011). She currently teaches "Pedagogies of the Sea" at the GEO-Design Master - Design Academy Eindhoven (NL), Contemporary Criticism at the University of Design of San Marino and is director of master's degrees at IED Milan. She believes that design is a critical and designers can work to recognise collective goods and design for a more-than-human society. She writes for editorial commissions on design criticism. Her writings have appeared in publications and catalogues published by various institutions, including MAXXI (Rome) and CCA (Montreal), and she was a member of the theoretical, historical, critical and editorial research project commission for ADI Design Index (2013-2015). She curated the 2015 edition of Operae, the independent design festival based in Turin. With Meeting Mirabilia she conducted a series of interviews live from the LiveOn4G (Telecom) studios to discuss the use of poetry, dreams, uncertainty, nature and desire as new platforms for design (2014).

### MICHAEL KAETHLER

Michael Kaethler is a researcher, curator and writer, working at the crossroads of art, design, anthropology and sociology. Michael brings his training in social anthropology and work (and life) experience as a human rights researcher in conflict and post-conflict contexts (including Afghanistan, Pakistan, Phillipines, Sierra Leone, Somalia etc.) into the arts and design. In recent years he has been developing critical theory and practice around the notion of "Social Design", bringing ethnographic techniques into design and art, through writing, teaching and curatorial practices. He is currently the director of Hospitality Lab, a research fellow at the OSMOS Network, scientific director of both the Experimental Observatory on Artistic Freedom (OoAF) and The Offing Foundation (NL) and lecturer in Transdisciplinary Design at IED Istituto Europeo di Design and in Social Design at the Design Academy Eindhoven.

### TUBA KOCATURK

Tuba Kochaturk is PhD, MSc. Professor of Circular Cities, architect, lecturer and a researcher in the field of technology-mediated design & innovation in the Built Environment. Tuba is the founding director of MInD (Mediated Intelligence in Design) Research Lab, a transdisciplinary and practice-based design research lab at Deakin University, which operates at the intersection of Built Environment, Information Technology, Design Innovation and Circular Economy. Co-founder of the Resilient Urban Ecosystems Network and the European Transdisciplinary Design Network. Her work led her to receive one of the first Design Foundations grants, introduced by the UK government through Innovate UK, aimed at helping companies engage with customers and wider stakeholders through human-centred research to identify high-value innovation opportunities and generate more innovative solutions, products, services and business models

### BENACHIR MEDJDOUB

Benachir Medjdoub is Professor of Digital Architecture Design at the School of Architecture, Design and the Built Environment of the Nottingham Trent University (UK) where he is the founding director of the Creative and Virtual technologies Research Laboratory, Chair of the College Research Degree Committee and member of the University Research Degree Committee.

Benachir's research goals are directed towards a greater understanding of the human intelligence involved in the design process of our buildings and cities, developing new generative design models, tools and visualisation systems to support building design.

Benachir has been awarded and completed numerous industry and EPSRC funded research grants and has collaborated with leading research institutions and organisations including: ATKINS, KPF, PLP Architecture, VTT, Foster and Partners, AECOM, Buro Happold, Bentley Systems, Autodesk, University of Cambridge, University of Cardiff, University of Nottingham, University of Bath, Ecole Centrale de Paris, TU Delft, and ETH Zurich amongst others.

### CRISTINA CASASCHI

Cristina Casaschi is a university professor in *Didactics and Special Pedagogy*, PhD in *Personal Education and the Labour Market* and has specialised in gifted and in neurobioethics and AI ethics, as well as in psychology and management for educational institutions.

She taught at the University of Bergamo until 2019 and directed the SantaGiulia Academy of Fine Arts in Brescia until 2022. She has coordinated, planned and participated in national and international scientific research projects.

She is a member of numerous Scientific Commissions and Committees.

As an expert she is an INVALSI (National Institute for the Evaluation of the Education and Training Educational System) and ANVUR (National Agency for the Evaluation of the University and Research System) evaluator.

Her activity is characterised by constant synergy between public and private contexts, in a subsidiary perspective.

Her main lines of research have resulted in numerous publications and concern the relationships between art, research and personal talents, and how active training can generatively short-circuit these dimensions.

In summary: Universal Design for Learning.