POLITECNICO DI MILANO

PhD in ARCHITECTURAL URBAN INTERIOR DESIGN - 38th cycle

PARTENARIATO PNRR Research Field: DESIGN FOR URBAN BIODIVERSITY

Monthly net income of PhDscholarship (max 36 months)
€ 1195.5
In case of a change of the welfare rates during the three-year period, the amount could be modified.

Context of the research activity	
Motivation and objectives of the research in this field	The AUID Program studies architectural, urban, and interior design in all aspects through the methodological frame of design-driven research, where design is the cultural environment to test and produce theoretical and technical knowledge. The research is aimed at the investigation of urban biodiversity, from a design perspective, under a multidisciplinary and transdisciplinary framework. Urban areas cover about 3% of the global surface (7% in Italy); however, green areas occupy less than 10% of the urban territory. In this context, the research aims to develop strategies, design approaches, and guidelines to improve urban biodiversity, focusing on the recovery of marginal and abandoned areas. There is a growing need to improve biodiversity in the urban environment and to contrast climate change. The relevance of this research program concerns looking at urban biodiversity from a design and aesthetic perspective as well as from a functional and ecological one, aiming at reclaiming abandoned areas, generating resilient ecosystems, and promoting plant and animal biodiversity, human wellbeing, and life quality in urban contexts.
Methods and techniques that will be developed and used to carry out the research	The candidate will develop a research methodology starting from the lectures and assignments of the AUID courses and the courses of the Polimi Ph.D. School. The research aims at finding and operating processes and strategies to increase the urban biodiversity and ecosystem services in critical areas such as polluted,

	abandoned, or highly disturbed sites in different urban contexts representative of Mediterranean cities. Biotechnology-based approaches will be applied to design (i.e., phytoremediation and mycoremediation). Specific activities and research devoted to the enhancement of plant and animal biodiversity will be operated to increase urban habitat as well as the development of research about best design practices and contribution to the development of design proposals. Studying the different formats, methods, and expressions that can shape the research, the candidate will profile her/his methodology by considering the specificity of the selected object, the target, and the attended results. The program considers designing a relevant and necessary component of any architectural research. Each candidate will establish a specific relationship between design and research with the Board and the Supervisors.
Educational objectives	Educational objectives focus on the deep understanding of a well-selected and defined topic oriented to sustainable development. The candidate will define 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.
Job opportunities	The Program aims to train highly qualified researchers and professionals who will work in academic institutions, research centers, and 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 field of complex architectural developments and interventions of recovery and transformation; • Researcher with an excellent scientific profile in the field of International Cooperation Agency, UN

	Agency, and private international company; • Independent professionals qualified in the management of highly complex design processes; • - Designers with high responsibility 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.
Composition of the research group	15 Full Professors 23 Associated Professors 7 Assistant Professors 64 PhD Students
Name of the research directors	Matteo Poli, Chiara Geroldi

Contacts
AUID email contact   phd-auid@polimi.it   **AUID Program Head**   **prof. dr. Alessandro Rocca** _ Alessandro.Rocca@polimi.it   **Prof. Matteo Poli:** matteo.poli@polimi.it   **Departmental Ph.D. Office**   Marina Bonaventura _ marina.bonaventura@polimi.it _ phone +39/02/2399.5165   Marilena Mastalli _ marilena.mastalli@polimi.it _ phone +39/02/2399. 9395   Further information is available at: **http://www.auid.polimi.it**

Additional support - Financial aid per PhD student per year (gross amount)	
Housing - Foreign Students	--
Housing - Out-of-town residents **(more than 80Km out of Milano)**	--

Scholarship Increase for a period abroad	
Amount monthly	597.76 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information

Universities and National Institutions that are cooperating in the research:

- Consiglio Nazionale delle Ricerche (CNR)
- Università degli Studi di Milano-Bicocca
- Università degli Studi di Salerno
- Sapienza Università di Roma
- TU Delft, School of Architecture

Educational activities (purchase of study books and material, funding for participation in courses, summer schools, workshops, and conferences)

Total budget for research costs per three years: **4872.90 euro .**

Workspace

The AUID hall, on the 4th floor of Bldg 12 in Leonardo Campus, is available for workstations for shared use.

All Ph.D. students can use their laptops with a wireless connection.