

MILANO LEONARDO CAMPUS

## ARCHITECTURE, BUILT ENVIRONMENT AND CONSTRUCTION ENGINEERING PHDPROGRAMS

## Programme

The ABC-PhD Programme has been established in 2012, following the complete reorganization of the area of Architecture, Built Environment and Construction Engineering in one Department only. It results as a combination of the following four Programmes:

- Architectural Composition
- Building Engineering
- Design and Technologies Exploitation for the Cultural Heritage
- Technology and Design for Environment and Building

partly joined by a group of researchers from a fifth one: the PhD Programme in Structural Seismic and Geotechnical Engineering. The blend of these Programmes, all active since 1990 mainly on one academic discipline, was aimed at optimizing the capability of the Department in facing and solving complex training needs, with a single organizational unit.

The Student will be trained with a direct integration in Department's research activities and, in particular, with a focus on the following strategic themes.

- Advanced Materials and Innovative Systems for Buildings
- Design and Technologies for the Energy-Efficient and Sustainable Built Environment
- Seismic and Fire Safety of buildings, infrastructures and construction sites
- Architectural Design and Urban Design in Construction
- Complex Buildings Design, Construction and Management
- Preservation, Valorization and Promotion of Built Heritage
- ICT and Smart Systems in Construction and Planning
- Built Environment Economics and Management

Mission and goals	<ul> <li>The mission of the PhD Programme is to prepare the best designers and researchers able to solve any single elementary question concerning the "Built Environment Industry":</li> <li>the design and management of its Architectures,</li> <li>the design of the Systems (building, structural and service systems) that are part of such Architectures,</li> <li>the organization of the productive and technological systems that realize and manage them,</li> <li>the promotion of their innovation,</li> <li>the care and administration of their value as a social, cultural, functional and economical asset.</li> <li>It aims at becoming an Italian Point of Reference for the training of the influential designers and researchers in the evolution and transformation of the built environment, at the highest international levels.</li> </ul>
Career Opportunities	<ul> <li>The objective of the new ABC-PhD Programme is to train researchers: <ul> <li>able to set up and develop advanced R&amp;D activities in all the topics concerning Architecture, Built Environment and Construction Engineering in general.</li> <li>endowed with enough scientific knowledge, and organizational experiences to obtain the resources needed for an independent continuation of their activity and to be able to gain, in few years, an outstanding position in the best international research centres.</li> </ul> </li> <li>The PhD Programme benefits from with a strong relationship with the Department of Architecture, Built Environment and Construction Engineering and, through it, with the Schools served by the Department. Moreover, The PhD Programme aims at enabling a continuous knowledge transfer from the Department toward private companies and public bodies, toward and together with other universities.</li> <li>In this way, the three years of research experience, indirect involvement in teaching and study provide the best occupational opportunities for a researcher looking for an academic career as well as for an employment in research centres, architectural and engineering design enterprises, public bodies or private societies that need highly qualified personnel.</li> </ul>
Eligible students	Requirements for participation in the selection, for Italian and foreign citizens, are described in the Politecnico di Milano Ph.D admission selection call published each year.
Scholarships	Architecture, Built Environment and Construction Engineering Ph.D. scholarships are generally awarded by the Politecnico di Milano; additional research scholarships may be provided by companies and external institutions.
Contacts	For further information, please visit the following web site: www.ricerca.polimi.it/phd or contact the School of Doctoral Programmes - Politecnico di Milano at: dottorato.ricerca@ceda.polimi.it.