PhD in ARCHITETTURA, INGEGNERIA DELLE COSTRUZIONI E AMBIENTE COSTRUITO / ARCHITECTURE, BUILT ENVIRONMENT AND CONSTRUCTION ENGINEERING - 39th cycle

PNRR 118 PC Research Field: CULTURE OF DESIGN AND ART OF BUILDING

<table>
<thead>
<tr>
<th>Monthly net income of PhD scholarship (max 36 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>€ 1275.0</td>
</tr>
</tbody>
</table>

In case of a change of the welfare rates during the three-year period, the amount could be modified.

**Context of the research activity**

Starting from the assumption that the design constitutes the synthesis between the technique and the poetics of building, the research path intends to propose an action aimed at identifying possible methods and tools for reading, enhancing, and updating the concept of design culture, meaning the set of knowledge, skills, and relationships necessary for the development of the elements and contents necessary for the feasibility of the architectural work.

The research assumes that the concept of feasibility of the work constitutes the fulcrum of every design understanding, proposing an exploration of the relationship between the technical-productive and linguistic-compositional dimension, which can identify new interpretative and educational keys of the disciplinary tools of the project, also in the light of renewed requests in terms of environmental performance and social quality of the built environment.

The inseparability between research and design requires the parallel development, or strictly alternating phases, of investigation and design, where the levels of experimentation and creativity are based on the main methodological theorems of design, with the aim also of enhancing the work of the masters not only as a cultural heritage but also as a useful resource for the development...
of approaches capable of responding to the needs of the contemporary world. The research, starting from a free comparison between the different cultural positions present in the modern and contemporary debate, develops from the knowledge of construction techniques and systems, from the phases they involve, from the materials, from their relationship with the natural, socio-economic and environmental. Regarding the areas of intervention of the National Recovery and Resilience Plan (PNRR) provided by Article 3 of Regulation (EU) 2021/241, the project proposal meets the programmatic directions of some of the main horizontal pillars of the PNRR-Next Generation Italy. The research program affects the areas of digital transformation, innovation and competitiveness in culture and tourism (mission 1 - C2 and C3), development and innovation in scientific research and education (mission 4).

The reading of models constitutes an essential preparatory and complementary phase of the design activity: the research therefore aims to stimulate those skills of observation, description and interpretation of architectural and construction phenomena, necessary for design practice through the analysis of examples and paradigms referable to the disciplinary tradition of the Modern Movement and to recently implemented architectural episodes, with particular attention to their experimental contents, the critical investigation of history, past and present, the contextualization of phenomena and their understanding. The research will be developed through the valorization of the cultural heritage that some archives of modern architecture can make available, in line with a concept of continuity that has always fueled innovation in architecture not only in its outcomes but also in its generative processes. Dealing with the complexity of the design culture in its different aspects, passes through precise activities that define the organization of the architectural project delivery processes: from the creation of a system of thematic theoretical contributions to support the design experience,
aimed at the knowledge of the discipline and the definition of its tools; research and analysis of reference paradigms and case studies useful for developing a critical attitude and understanding of the construction characteristics of the work in relation to the architectural language; to the critical interpretation of tools capable of addressing the design action in a perspective of constructability of the architecture.

The methodological orientation provides for an organic approach to the examination of architectures in order to examine in the form of critical and analytical reading the different contents and areas of study around the "technique" and the "poetics of building" through interdisciplinary approaches.

The collaboration with the Centro Studi e Archivio della Comunicazione (CSAC), a research center of the University of Parma whose institutional task is the collection, conservation, cataloging and promotion of cultural heritage, together with other research paths on the project, will allow draw on a documentary heritage whose analysis and reading will constitute the raw material for the critical reflection object of the research.

An internship at CSAC (6 months) and a period abroad in a university/research centre/institution related to the topic of this PhD research will be scheduled.

**Educational objectives**

Educational goals are to develop and learn research methodologies and understand design approaches, developing skills in an multidisciplinary perspective.

**Job opportunities**

Job and career opportunities include professional outlets in all sectors, public and private, having to deal with research and practice in architectural design.

**Composition of the research group**

1 Full Professors
1 Associated Professors
1 Assistant Professors
1 PhD Students

**Name of the research directors**

Prof. Maria Pilar Vettori

**Contacts**

mariapilar.vettori@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) | -- |

<table>
<thead>
<tr>
<th>Scholarship Increase for a period abroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount monthly</td>
</tr>
<tr>
<td>By number of months</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>National Operational Program for Research and Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company where the candidate will attend the stage (name and brief description)</td>
</tr>
<tr>
<td>By number of months at the company</td>
</tr>
<tr>
<td>Institution or company where the candidate will spend the period abroad (name and brief description)</td>
</tr>
<tr>
<td>By number of months abroad</td>
</tr>
</tbody>
</table>

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

Additional support:
Budget for the research activity (only for positions supported by scholarship): total amount Euro 5197.60 per student.
In detail:
- 1\textsuperscript{st} year Euro 1732.53
- 2\textsuperscript{nd} year Euro 1732.53
- 3\textsuperscript{rd} year Euro 1732.53

Additional information about the organization and regulations of ABC-PhD programme can be found in the Regulations for the 39th Cycle of ABC-PhD: download is available at link: https://www.dottorato.polimi.it/corsi-di-dottorato/architettura/architettura-ingegneria-delle-costruzioni-e-ambiente-costruito

Additional information about ABC department and ABC-PhD programme: available at link: https://www.dabc.polimi.it/

Desk availability: The ABC department provides non-permanent desks to be temporarily booked in common PhD rooms.

This scholarship is funded by the PNRR national programme under the research line on "Cultural Heritage" in D.M. 118. This means that the owner of the position will be obliged to
submit periodical reports about her/his activity.