UNIVERSITÀ
DI TORINO

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VP_111_INF

Visiting Professor Program
Academic Year 2025/2026

TEACHING COMMITMENT: 12 hours

COURSE TITLE

Digital Innovation in the Living Spaces: Renovation and Reuse of Historical Buildings

TEACHING PERIOD
II semester

SCIENTIFIC AREA
Digital Modeling and Infrastructure for Preservation of the Historical Heritage

LANGUAGE USED TO TEACH
Italian

COURSE SUMMARY
The module titled "Digital Innovation in Living Spaces: Renovation and Reuse of Historical Buildings" explores the intersection of technology and heritage conservation. It focuses on leveraging digital tools, such as Building Information Modeling (BIM) and digital twin technology, to enhance the renovation and adaptive reuse of historical structures. Participants will learn how these innovations can improve project efficiency, sustainability, and preservation outcomes while maintaining the cultural significance of the buildings. The curriculum includes case studies that illustrate successful applications of digital technologies in various contexts, highlighting best practices and potential challenges in the renovation process. By engaging with experts in the field, attendees will gain insights into contemporary methods for integrating modern design principles with historical integrity. This course aims to equip students with the skills necessary to navigate the complexities of preserving our architectural heritage in an increasingly digital world.

LEARNING OBJECTIVES

Main learning objectives for the course "Digital Innovation in Living Spaces: Renovation and Reuse of Historical Buildings" are summarize as follows:

- understand the principles of digital innovation and its relevance to the renovation and reuse of historical buildings;
- explore various digital tools, including Building Information Modeling (BIM) and digital twins, and their applications in heritage conservation;
- analyze case studies that demonstrate successful integration of digital technologies in the renovation of historical structures;
- develop skills in creating and managing digital models for historical buildings to enhance project efficiency and accuracy;
- evaluate the sustainability impacts of renovation projects through digital analysis tools.

OTHER ACTIVITIES BESIDE THE COURSE

It will be possibile to propose activities with the PhD of the doctorate program T4C - Technology for cultural heritage which has a lot of operalapping interest on this course.

- 3D Modeling and Virtual Reconstruction: how to use digital tools to create 3D models of historical buildings. This activity will involve techniques such as photogrammetry and laser scanning to capture the existing conditions, followed by virtual reconst

VISITING PROFESSOR PROFILE

The ideal candidate for the position is an academic with a strong background in architecture and a commitment to preserving cultural heritage. He/she should possess an advanced degree and a PhD focused on historical preservation or urban studies, along with extensive teaching and research experience. A proven track record of publications and participation in international conferences on architectural and possibly in use of digital technology for renovation of the heritage would be essential. His/her research interests would include authenticity in restorations and sustainable practices in conservation. The candidate would actively engage with the community and industry stakeholders, promoting awareness of architectural heritage through outreach initiatives. Leadership skills would be demonstrated through involvement in advisory councils related to cultural heritage, contributing to policy development. His/her interdisciplinary approach would bridge historical preservation and digital twins.

CONTACT REFERENT

Lavinia Chiara Tagliabue
laviniachiara.tagliabue@unito.it