

# CIVIL AND ENVIRONMENTAL ENGINEERING

DOCTORAL PROGRAM 2024-2025



**Prof.ssa Maria Dolores Morelli** University of Naples Luigi Vanvitelli Department of Architecture and Industrial Design



**Prof.ssa Benedetta Terenzi** University of Perugia Department of Civil and Environmental Engineering



**Prof. Gabriele Goretti**University of Pisa
Department of Energy, Systems, Land and Construction Engineering

# Location

Campus of Engineering of University of Perugia, Via G. Duranti, 93 - Perugia

Kindly confirm the attendance by Wednesday, September 10.

# DESIGN STRATEGIES FOR SUSTAINABILITY S.S.D. CEAR-08/D-DESIGN

# **Course Description**

September 12, 2:30 p.m. - 6:30 p.m.

Ecodesign systems, processes and models.

## Prof.ssa Maria Dolores Morelli

Recent global phenomena, such as the climate emergency, the pandemic, and the intensification of conflicts, have profoundly influenced and continue to influence landscapes, cultures, and lifestyles, leading to significant transformations in territories and social dynamics. The lecture analyzes and describes ecodesign processes and projects that use climate resources powered by renewable sources, contributing to the sustainability of the Planet.

September 18, 9:30 a.m. – 1:30 p.m. Advanced Craftsmanship.

## Prof. Gabriele Goretti

The concept of Advanced Craftsmanship refers to high-end production chains in which historical know-how interacts with innovation-oriented, design-driven strategies. Design is used here as a tool to boost competitiveness and support circular economy systems. This involves rethinking products and processes with a focus on sustainability and renewal. Digitization models, spanning from Industry 4.0 to 5.0, are particularly noteworthy. These models foster intelligent and collaborative production methods, elevating craftsmanship through the integration of advanced technologies and co-creation processes.

September 24, 2:30 p.m. – 6:30 p.m. Innovability.

### Prof.ssa Benedetta Terenzi

Innovability, the synergistic integration of innovation and sustainability, is a strategic paradigm for design oriented toward ecological transition. In this context, design is not only a technical discipline, but also a cultural infrastructure that enables processes of systemic transformation. The lecture's focus is on regulatory mechanisms and European agendas, illustrating how design practice can serve as an interdisciplinary facilitator. The lesson presents case studies and practices of design for social innovation, emphasizing the necessity of an integrated approach that combines governance, technology, and design culture.





