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DIPARTIMENTO
DI INGEGNERIA
CIVILE E AMBIENTALE

CIVIL AND ENVIRONMENTAL ENGINEERING

INTERNATIONAL DOCTORAL PROGRAM CALL 2023-2024

Programme

The International Doctoral Program in Civil and Environmental Engineering focuses on interdisciplinary research in **Civil Engineering, Architecture, Materials Engineering, Environmental Sciences, and Product Design**. Courses are primarily conducted at the Engineering main campus in Perugia, Italy. They are taught by board members and internationally recognized experts. Additional advanced courses are offered by partner institutions. The program's international faculty board comprises professors from the Department of Civil and Environmental Engineering and international scholars.

Students are required to conduct **at least 6 months of research at an international partner institution**. The Doctoral Program has established collaborations with renowned institutions such as Iowa State University, University of Liege, University of Granada and almost all Universities in the area of New York. Cotutelle programs, leading to a dual PhD degree from both institutions, are strongly encouraged.

Mission and goals

The Doctoral Program places a strong emphasis on multidisciplinary research related to forecasting, preventing, and mitigating natural and human-induced hazards in the built environment. It also focuses on the design and management of complex infrastructural systems. To achieve these goals, the program integrates quantitative approaches utilizing engineering mathematical models, as well as laboratory and field experiments. Furthermore, it incorporates advanced composite materials and digital innovation technologies to address these challenges effectively.

In addition to its research focus, the Doctoral Program offers a comprehensive range of courses and seminars. These educational opportunities cover both fundamental and applied aspects of Civil and Environmental Engineering. By providing students with a solid scientific foundation, the program equips them with the necessary skills and competences to compete at an international level within their specific research field. Moreover, it prepares them to enter the workforce with a high level of professional qualification.

Contacts

To learn more about us, follow us on social networks and visit our page.



Career

Graduates of the International Doctoral Program in Civil and Environmental Engineering are highly sought after worldwide, securing prominent positions in academia, research centers, construction firms, and public organizations. They excel in solving complex interdisciplinary engineering challenges, coordinating research activities, and advancing technology. Their contributions span various sectors, including industry, academia, public administration, and freelance work. The program's notable collaboration with industries involves co-financing PhD positions, providing students with industry experience alongside their research. This strengthens the connection between academia and the industry, enabling students to tackle real-world challenges and contribute to practical technological advancements. Close ties with industry partners enhance employability and foster mutually beneficial relationships between academia and the private sector.

Eligible students

The Doctoral Programme is the pinnacle of education for Master's degree holders in Civil, Environmental, or Materials Engineering, Architecture, Physics, or related fields. It offers a unique opportunity to excel in a rigorous academic environment, equipping students with advanced knowledge, skills, and expertise. It fosters innovative research, empowering students to make a lasting impact in academia, industry, and society. The programme nurtures exceptional talents, fostering expertise and leadership in specialized areas.

Scholarships

The International Doctoral Program in Civil and Environmental Engineering offers **21 sponsored positions** for the XXXIX Cycle (a.y. 2023-2024). Collaboration with industries provides unique research opportunities. Two scholarships are reserved for foreign Master's degree holders, promoting diversity. Financial assistance, including mobility grants, supports research activities and academic exchanges. The program focuses on sustainable infrastructure, environmental engineering, advanced materials, transportation systems, geotechnical engineering, and water resources.

We are actively seeking exceptional candidates to join our program and embark on a journey of theoretical and applied research. Our program focuses on cutting-edge topics at the forefront of the field, providing students with the opportunity to make significant contributions in areas such as:

- Automated generation of digital twins
- Digital twins of cultural heritage structures
- Advanced materials for aerospace
- Advanced Safety Assessment of bridges
- New sustainable construction technologies
- Innovative precast reinforced concrete buildings
- Utilization of byproducts from agri-food chains for a third-generation biorefinery
- Structural Health Monitoring of Strategic Buildings
- BIM technologies for built asset management
- SHM of historic structures
- SHM of large dams
- Advanced digital technologies for cultural heritage preservation
- Advanced thermoplastic materials

Application

The call and application forms are available at:

<https://www.unipg.it/didattica/percorsi-post-laurea/dottorati-di-ricerca/bandi-avvisi-e-modulistica>

The deadline for applications is **July 28, 2023**.

For more information please contact: ufficio.dottorati@unipg.it

Industrial sponsors

