

# 3<sup>rd</sup> INTERNATIONAL SUMMER SCHOOL

Bacoli - Naples, Italy

July 14<sup>th</sup> – 18<sup>th</sup> 2025



UNIVERSITY OF NAPLES  
FEDERICO II

Department of Structures for  
Engineering and Architecture



DIPARTIMENTO  
DI ECCELLENZA  
MUR

Within the courses of the Ph.D.  
program in *Structural & Geotechnical  
Engineering and Seismic Risk*

## LOCATION

Villa Ferretti - Via Castello, 14  
80070 Bacoli - Naples, Italy  
<https://bacoli.it/visitare/monumenti/villa-ferretti.html>

## CHAIRS

**Costantino Menna**

University of Naples Federico II

**Freek Bos**

Technical University of Munich

## WHO SHOULD ATTEND

Ph.D. students, postdoctoral  
researchers, practitioners interested in  
research and applications of additively  
manufactured structures

## CONTACTS

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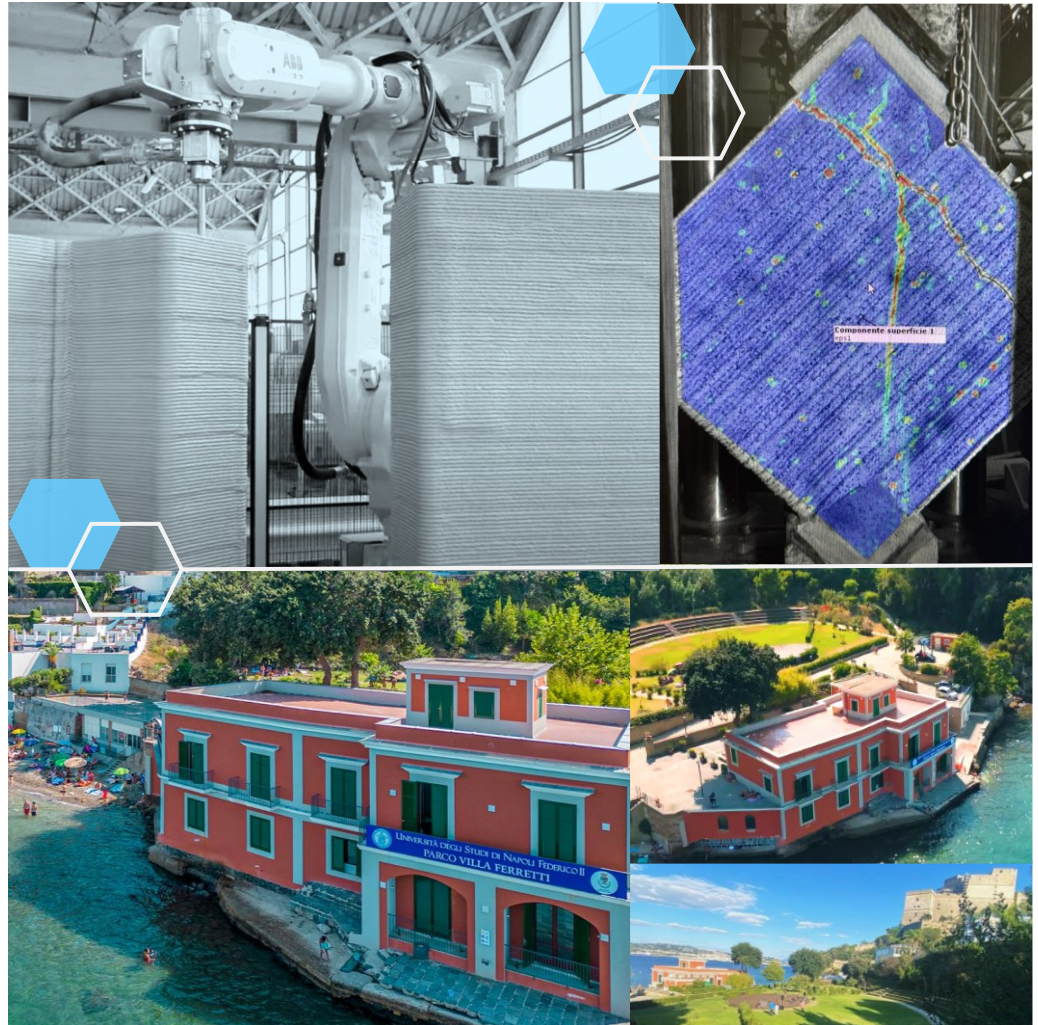
[phd.dist@unina.it](mailto:phd.dist@unina.it)

## PRE-REGISTRATION

Please note that the number of participants  
is limited, and pre-registration is required:

<https://tinyurl.com/2r9rebes>

## ADDITIVELY MANUFACTURED CONCRETE STRUCTURES



### AIM and SCOPE

The field of additive manufacturing (AM) of cementitious materials, particularly through 3D Concrete Printing (3DCP), is experiencing rapid growth within the construction industry. Significant advancements are being made in material science, production technologies, and the innovative design of high-TRL (Technology Readiness Level) projects. This dynamic development highlights the need for a deeper understanding of key aspects, such as controlling fresh-state material properties, addressing structural and reinforcement challenges, and scaling up applications effectively. Currently, there is a critical need to establish a strong academic framework for researchers involved in the digital design-to-fabrication process of cutting-edge 3D-printed structures. Advancing technological and engineering expertise in 3DCP not only enhances understanding within the construction sector but also maximizes the socio-economic and environmental advantages that arise from its efficient implementation.

The main goal of this Summer School is to equip participants with advanced technical skills—spanning analytical, numerical, and practical 3DCP sessions—necessary for the design and construction of structures using 3DCP. The program features expert-led sessions by renowned guest lecturers, focusing on specific research topics and real-world applications of 3DCP. Additionally, it provides increased opportunities for students to engage actively with their own research. This initiative is designed to encourage meaningful exchanges and in-depth discussions, enriching participants' knowledge and enabling them to address the opportunities and challenges of 3DCP more effectively.

### INTERNATIONAL LECTURERS

**Costantino Menna** - University of Naples Federico II (Italy)

**Freek Bos** - Technical University of Munich (Germany)

**Arnaud Perrot** - Université Bretagne Sud (France)

**Jacques Kruger** - Stellenbosch University (South Africa)

Check for updates: [https://www.dist.unina.it/en\\_GB/didattica/postdoc/summer-school](https://www.dist.unina.it/en_GB/didattica/postdoc/summer-school)