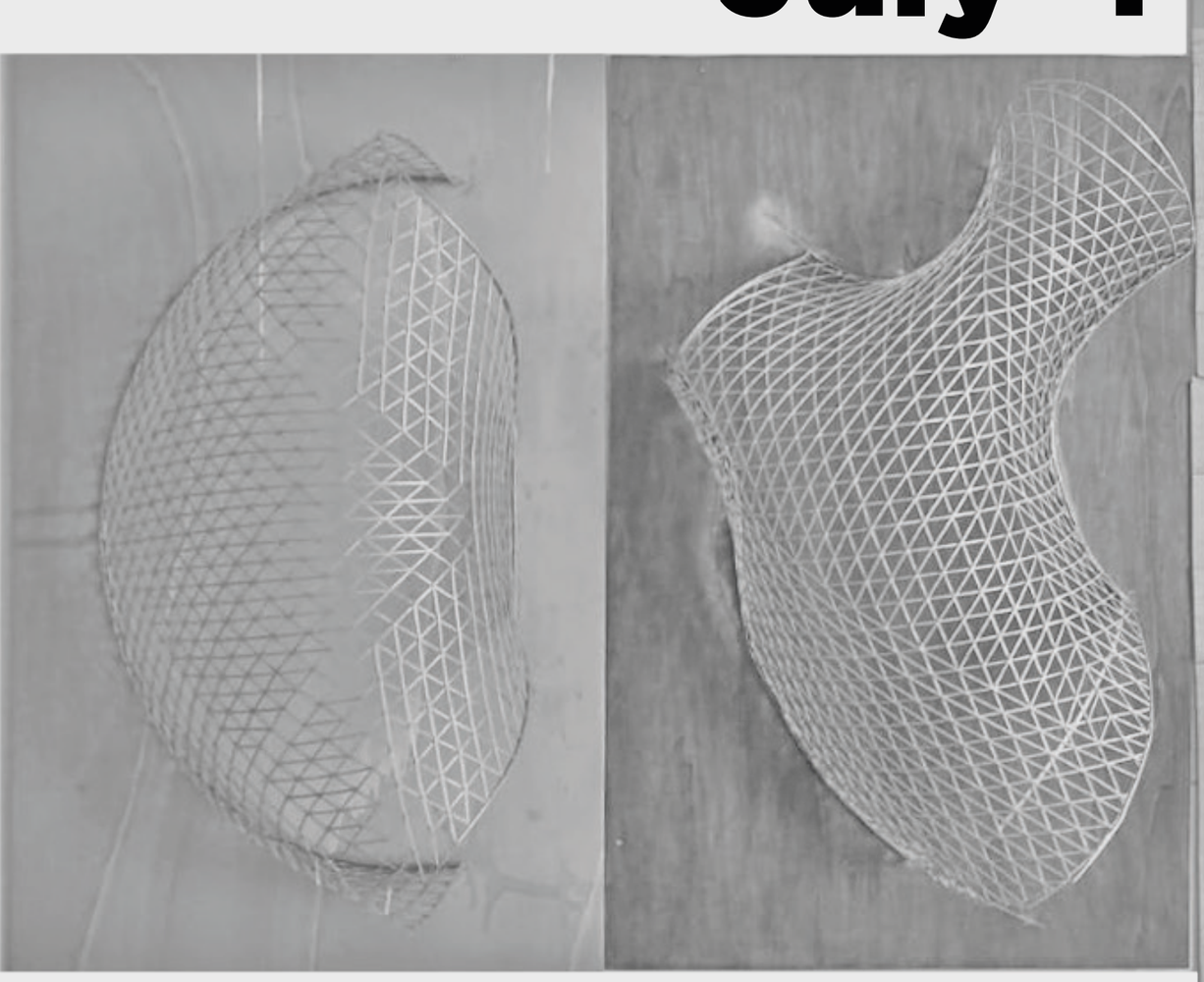
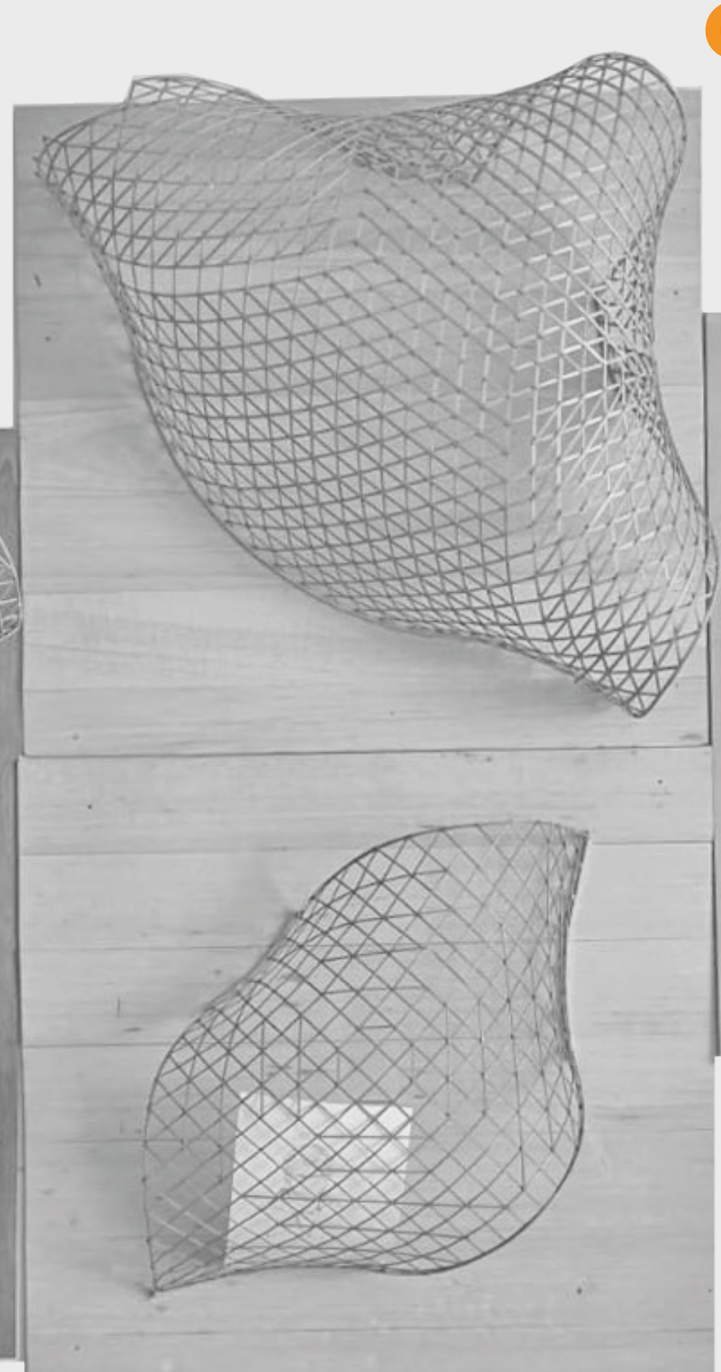
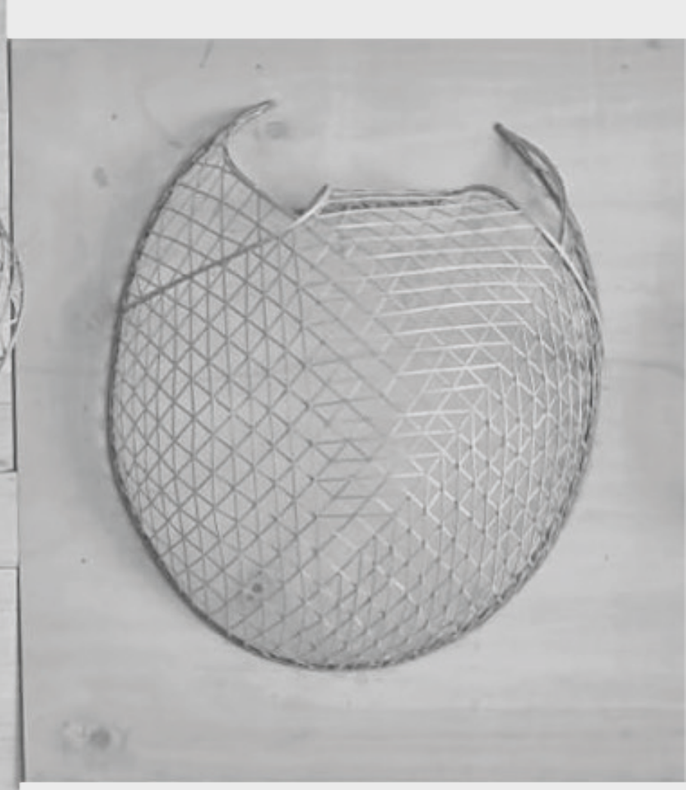
SUMMER SCHOOL
2025

LET'S SHAPE
GRIDSHELLS

June 30
July 4







Lecturers

Sergio **Pone**
(Università di Napoli Federico II)

Chris **Williams**
(Chalmers University of Technology)

Daniele **Lancia**
(Università di Napoli Federico II)

Salvatore **Sessa**
(Università di Napoli Federico II)

Stefano **Gabriele**
(Università di Roma, "Roma Tre")

Amedeo **Manuello Bertetto**
(Politecnico di Torino)

Andrea **Micheletti**
(Università di Roma Tor Vergata)

Francesco **Marmo**
(Università di Napoli Federico II)

The second edition of the summer school **Let's Shape** is an advanced training program for engineering and architecture Master Students, graduate and PhD students, focusing on the **design, analysis, and construction of gridshells** and other lightweight structures through computational and experimental form-finding techniques.

Naples Italy

Naples is a city of contrasts, where centuries-old architecture and modern life blend seamlessly along the stunning Mediterranean coast. Its rich cultural heritage, vibrant street life, and world-renowned cuisine make it a truly unique and inspiring destination.

4S Associazione Italiana per gli Studi sulle Strutture Spaziali ed a Guscio

DiARC DiST

powered by *Eleonora Orefice*

The School Teaching Program

The summer school combines specialized **lectures and hands-on exercises** to explore key aspects of gridshell design and construction. Students will learn the **geometric principles** behind gridshells, investigate **material behavior**, and study **construction techniques** with real-world applications.

The course will cover **numerical methods** for designing bending-active gridshells efficiently, introduce advanced **structural models** for performance assessment, and use **simplified mechanical models** to analyze structural behavior.

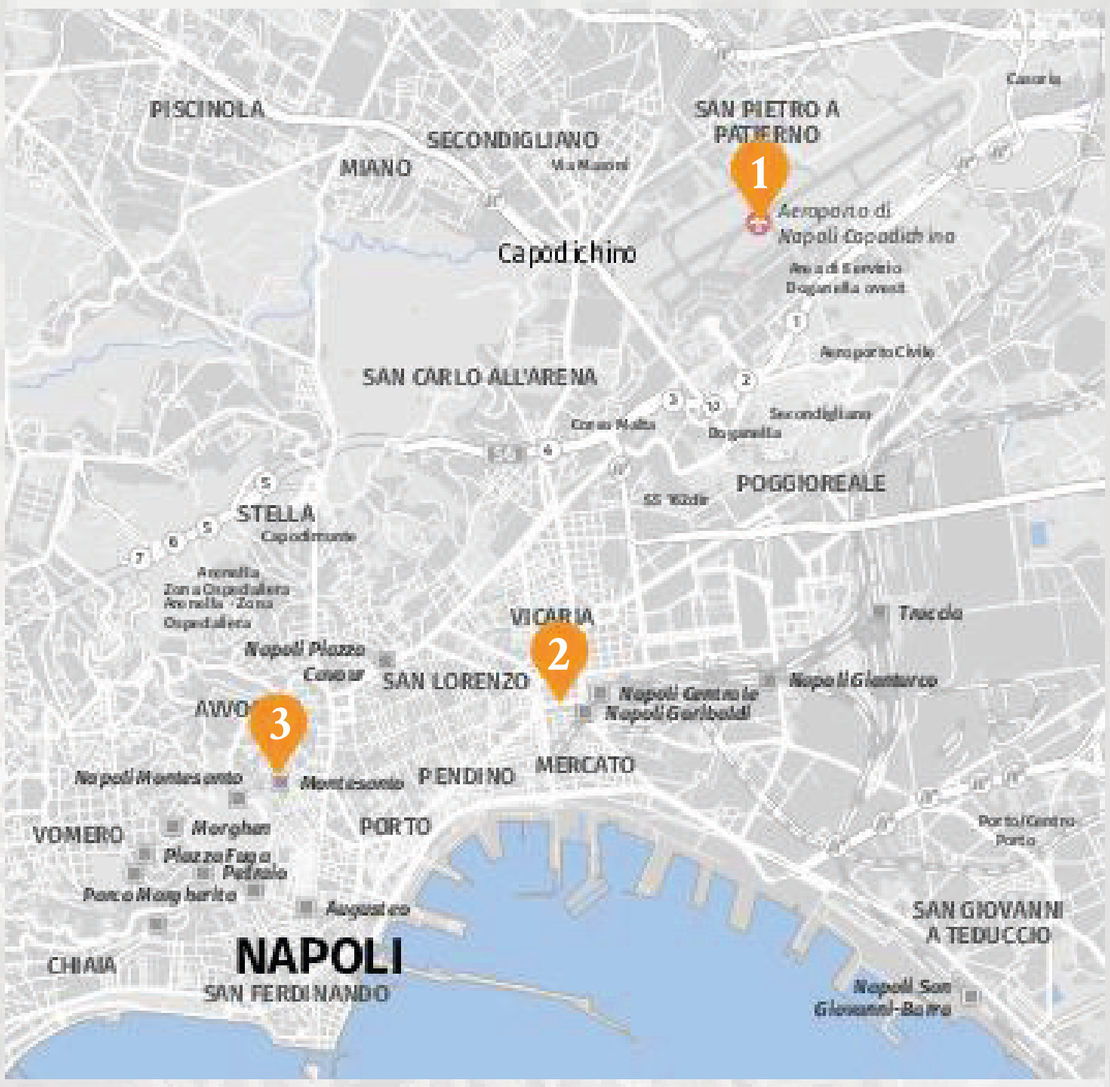
Additionally, students will apply optimization strategies to improve structural efficiency.

Students will work in teams, applying acquired knowledge to real-world case studies through both **digital simulations** and **physical prototyping**. They will apply form-finding techniques like dynamic relaxation and evolutionary optimization and use numerical models to design gridshells and simulate their stage-by-stage construction. In practical exercises, they will also build **scaled active bending timber gridshell models**, exploring how material properties, form generation, and construction feasibility interact.

The detailed program will be announced soon

The Venue

Hosted by the **Department of Architecture (DIARC), University of Naples Federico II (UNINA)**, the program combines theoretical foundations, computational approaches, and hands-on experimentation on timber gridshells scale models to provide a comprehensive learning experience.



How to reach the Venue

1. **From Naples Capodichino Airport (NAP):**
Take the Alibus shuttle to Napoli Centrale (Piazza Garibaldi). From there, follow the instructions below.

2. From Napoli Centrale (Piazza Garibaldi) Train Station:
Take Metro Line 2 (direction Pozzuoli) and get off at Montesanto station. The journey takes about 5 minutes.

3. From Montesanto, the **Department of Architecture (DIARC), Via Forno Vecchio 36**, can be reached on foot in approximately 10 minutes.

Registration

Registration closes on May 30
Registration fee 400,00 €

Info and updates
Visit sites.google.com/view/iwss
Contact iwss@polito.it

Registration fee includes
- 30 hours of lectures and practical activities supervised by Lecturers
- Materials to build physical scaled models
- Coffee breaks and lunches
- Social dinner

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