



Workshop Goals:

- Introduce circular design principles for architecture using bio-based materials like hemp-lime;
- Connect territory, local resources, and sustainable construction;
- Integrate material performance, life-cycle thinking, and short supply chains;
- Promote collaborative, hands-on experimentation and self-construction.



Approach: classroom learning & hands on experimentations:

- Theoretical knowledge exchanges at ARCES;
- Site visits: Arenella & Antiche Fornaci Majorana;
- Business visit: Neighborhood Laboratory of Palermo;
- Theoretical knowledge exchanges at Scalo 5B;
- Understanding Hemp and Lime: Materials and Benefits;
- Industrial factories: Scalo 5B.

PARTNERS:



Learn more!



Palermo WORKSHOP From Circular Thinking to Construction: Prototyping with Bio-Based Materials

Feb 28–Mar 4, 2026

LECTURES:

- Elena Catalano, Architect, USI AAM, Switzerland;
- Zeno Franchini, Designer, Co-Head, Master IED Torino, Italy;
- Ilgin Ezgi Tunc, Architectural Scientist & Natural Materials Researcher, Tokyo, Japan;
- Tina Ekener, Baubüro InSitu, Switzerland;
- Alessandro Pernice, EU Affairs Expert & Senior Project Manager, ARCES, Italy.



Co-funded by the European Union



Key activities:

- Hemp-lime mixture optimization & testing;
- Block molding (pressure/perforated molds);
- Overnight drying & property checks;
- Urban furniture design with blocks;
- Coating/plastering (Guglielmino Malte);
- Final exhibition setup + presentations & certifications.

Methods:

- Learning by doing approach;
- Adaptive and collaborative design methods;
- Theoretical knowledge exchanges at ARCES;

Tools:

- Tools for mixing, shaping, applying, and finishing the material

Lessons learned: positive aspects:

- Concept → practical prototypes completed;
- Predefined + flexible urban furniture elements;
- Student-led design process;
- Materials donated for Arenella seafront;
- Next: project authorizations for neighborhood impact.

Transferable/Scalable Elements:

- Potential to inspire urban regeneration across Palermo neighborhoods: Borgo Vecchio, La Zisa, Sperone;
- Multidisciplinary team collaboration skills;
- Prototyping as thinking/exploration tool;
- Abstract concepts → concrete prototypes;
- Universal collaborative design methods;
- Full student ownership of process.