



**POLITECNICO**  
MILANO 1863

DIPARTIMENTO DI ARCHITETTURA,  
INGEGNERIA DELLE COSTRUZIONI  
E AMBIENTE COSTRUITO

MATERIALBALANCE



RESEARCH

I EDITION 2022/23

# MATERIAL BALANCE DESIGN

DIGITAL TECHNIQUES AND CIRCULAR INNOVATIONS IN ARCHITECTURE

**Main topics:**

*Material Balance Design*  
*Computational design*  
*Performance Based Design*  
*Circular Materials Scouting*  
*Executive Design (DfAM)*  
*Public Space Experimental*  
*Demonstrator*  
*Future Scenarios / Metaverse*  
*Material Balance Protocol*

**Master I - II level**

**The Master Material Balance Design, Digital Techniques and Circular Innovations in Architecture** aims to train professionals capable of becoming unique and anticipatory figures in the contemporary evolving context of architecture. The goal is to create professionals in the field of digital techniques and strategies for circular innovation, which are increasingly requested in the national and international construction market. The master is held in **blended** mode, with theoretical online and practical sessions in presence at the **Maba.Saperlab of the ABC Department**.

The theoretical lessons aim to acquire cultural and technical-scientific knowledge which will be used for the experimental sessions with the most advanced and sustainable methodologies for the design, manufacture and prototyping of architectural systems.

Participants will be given an opportunity to do an internship at international companies and architectural studios which look at design experimentation and future scenarios.

**14 november 2022 - 20 november 2023 - 60 CFU**

**mad** architects

Snøhetta 

 MDL CIRCLE

**BOLLINGER+GROHMANN**

**RIMOND** 

 **MATEREA**  
Automate the non-standard

 Versy