



Gigliola Ausiello – Francesco Sommesse

Sustainable Design for climate change. Innovation and technology

Credits: 3 CFU

Number of hours: 18 frontal hours

Date: 20, 27 January 2026, 3,10,17,24 February 2026

Objectives: The course aims to provide technical information on the use of new materials and innovative solutions related to design of sustainable building to reduce the impact on the environment. Analyzing cutting-edge technologies, advanced materials and digital construction techniques, the course explores the latest frontiers of sustainable architecture to design innovative buildings capable of responding to the challenges of climate change.

Course programme: The course will cover: bioclimatic design and passive solar systems; adaptive technologies for the building envelope; advanced materials for energy efficiency; regenerative design for the urban microclimate; Technologies for reducing the carbon footprint; automated and digital construction processes.

Teaching materials: Books and/or indication of websites provided by the teacher.

Assessment methods: Final interview

Contact for information:

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Lectures Program

N	Date	Schedule	Duration	Topic / Teacher
1	20/01/25	14:30 - 17:30	3 hours	Bioclimatic design and passive solar systems Gigliola Ausiello
2	27/01/25	14:30 - 17:30	3 hours	Adaptive technologies for the building envelope Francesco Sommesse
3	03/02/25	14:30 - 17:30	3 hours	Advanced materials for energy efficiency Gigliola Ausiello
4	10/02/25	14:30 - 17:30	3 hours	Regenerative design for urban microclimate Francesco Sommesse
5	17/02/25	14:30 - 17:30	3 hours	Technologies for reducing the carbon footprint Gigliola Ausiello
6	24/02/25	14:30 - 17:30	3 hours	Automated and digital construction processes Francesco Sommesse