

The course is relevant to:

- Practitioners in international development cooperation;
- Undergraduates, MSc and PhD students;
- Researchers, professors and other interested persons;
- Technicians working in WASH sector.

Participation is free of charge, but **registration** is required by **June 9th 2026** by filling out the registration form at this [link](#), or scanning the QR code,.



A *maximum number of 30 people* will be accepted to participate in class.

A certificate of attendance will be issued for students attending at least 75% of the course.

Students enrolled at University of Brescia in Civil Engineering, Land and Environmental Engineering or Architectural Engineering degree courses can get n. 3 ECTS, if Summer School has been chosen in the study plan.

Scientific and organizing committee

Sabrina Sorlini (UniBS, IT)
Mentore Vaccari (UniBS, IT)
Marta Domini (UniBS, IT)

Organizing secretariat

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CeTamb

CeTamb is a research center of University of Brescia supported by Fondazione Cogeme, Museke, Sipec and Tovini. CeTamb aims to build knowledge and develop research on appropriate technical solutions for the management of environmental issues in Low and Middle Income Countries. CeTamb collaborates with NGOs', universities and secondary schools to carry out research and education activities. So far, several projects have been implemented and developed on water, sanitation and energy in different countries.

<https://cetamb.unibs.it/> E-mail: cetamb@unibs.it

GETTING THERE

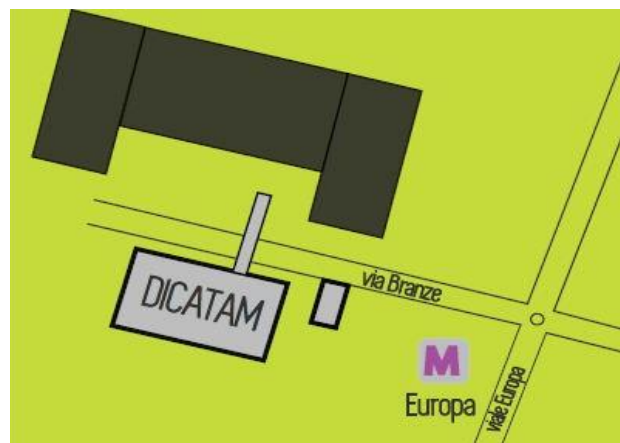
by car

Highway A4 Milano-Venezia

- from Milano, exit A4 at "Brescia Ovest" and follow indications to "stadio" (stadium) or "ospedale" (hospital) (North direction). Pass the hospital and turn right from via Triumplina to via Branze
- from Verona or Piacenza, exit A4 at "Brescia Centro" and follow indications to "stadio" or "ospedale".

by train

At Brescia station take the metro towards "Prealpino", stop at "Europa" then see the map below.



UNITA Partner



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XV International Summer School

Climate-resilient Water, Sanitation and Hygiene (WASH) solutions in low-income countries

Coordinator
Prof. Sabrina Sorlini

15th - 19th June 2026

University of Brescia - DICATAM
Via Branze 43, Brescia (Italy)
Room B.05

Participation:
in person and remote mode

In collaboration with:



Cooperazione & Volontariato
Fondazione G. Tovini - ETS

Climate-resilient Water, Sanitation and Hygiene (WASH) solutions in low-income countries

Presentation of the summer school

The course explores resilience as a fundamental principle for strengthening global WASH - water, sanitation, waste management, and health systems in the face of climate change, urbanization, epidemics, and humanitarian crises.

Through case studies, expert lectures, and applied group work, participants will critically assess vulnerabilities, evaluate adaptive strategies, and develop practical WASH solutions to improve equity, sustainability, and resilience in diverse global contexts.

Objectives

To provide students and young professionals with the tools to design, implement, and evaluate resilient WASH systems that protect public health in climate-sensitive contexts, connecting African and European experiences.

Specific objectives:

- Understand the main climate risks impacting essential services
- Analyze experiences and best practices in a global context
- Apply the concept of climate resilience in urban and rural contexts
- Develop integrated low-carbon solutions adapted to local realities
- Strengthen South-South cooperation and an interdisciplinary approach

Thematic contents

1 - Introduction to WASH & Global Health: resilience for sustainability

- Environmental aspects
- Health aspects
- Social aspects
- Economic aspects

2 - Resilience of drinking water supply services

- Theoretical lessons
- Case studies from low-, middle-, and high-income settings
- Working group: Group mapping of WASH vulnerabilities (EU vs African regions)

3 - Resilience of sanitation systems

- Theoretical lessons
- Case studies from EU and low income countries
- Working group: design a circular sanitation system for a resource-constrained community

4 - Resilience of solid waste management

- Theoretical lessons
- Case studies: Community-based waste management in Ghana, South Africa, and Mozambique
- Working group: Design of a Resilient and Low-Carbon Waste Management System

5 - WASH resilience, challenges and adaptation

- Health and social aspects
- Group Work and Interactive activities
- Conclusion

Learning outcomes

- Critically examine current evidence and research gaps in climate-resilient WASH systems
- Compare methodological approaches for evaluating resilience in WASH systems
- Formulate research questions and interdisciplinary approaches related to climate adaptation and WASH

Expected outcomes

- understand climate impacts on WASH systems;
- develop skills in resilient WASH planning and assessment
- explore innovative and low-cost adaptation solutions
- strengthen interdisciplinary and intercultural collaboration
- create practical strategies for resilient WASH implementation in vulnerable settings

Soft Activities

- Visit to CeTAmb laboratory of appropriate technologies, DICATAM Department
- Intercultural integration and guided tour to the old town center of Brescia