

## MIT-UNICT Summer School 2026

*Syracuse-Catania, 15-26 June 2026*

### Climate Resilient Solutions for Sicily

Mediterranean regions are highly vulnerable and face significant risks due to climate change. Right in the middle of the Mediterranean Sea, Sicily represents a hot-spot of high-temperature extreme events, with more frequent and intense droughts, increasing sea level, devastating river and coastal flooding, and impactful Mediterranean hurricanes, which put unprecedented pressure on the population and the environment, as well as unique ecosystems and critical assets.

Since 2023, Sicily has been facing an extreme drought, which has affected drinking water supplies as well as agriculture use. Lately, on the 19-21 of January 2026, cyclone Harry hit Sicily, Calabria and Sardinia, causing damages for over 2 billion of euros. While Harry has proven to be the most destructive storm over the last decades, it has highlighted the fragility of urban and infrastructural assets. Coupling sustainable technology and Engineering with Nature approach is needed to design and implement effective and efficient interventions and strategies.

Taking place in Syracuse and in Catania from the 14<sup>th</sup> to the 28<sup>th</sup> of June 2026, the Summer School will host students from both Massachusetts Institute of Technology, University of Catania, and La Sapienza University. Thanks to a combination of interactive workshops, hands-on activities and field trips, the MIT-UNICT Summer School 2026 will provide a unique opportunity to work on the search for climate-resilient solutions able to minimize climate-change induced pressures. Students will learn from the analysis of past events and successful case studies, as well as from results of most advanced research in the field. Through team working, they will be challenged to investigate and propose their own solutions dealing with the management of water systems, the improvement of food production through bio-inspired approaches, the protection against coastal flooding and erosion.

Additionally, lectures will be delivered by top-level scientists in the field of oceanography, civil and coastal engineering, and biological engineering.

## MIT-UNICT Summer School 2026 Syracuse-Catania, 14-28 June 2026

### Climate Resilient Solutions for Sicily Preliminary Programme

#### **15<sup>th</sup> of June 2026 - Palazzo Impellizeri (SR) – Opening Event**

General Lectures by

**Enrico Foti**

Rector of the University of Catania and Professor of Hydraulics, Department of Civil Engineering and Architecture, University of Catania

**Andrew Whittle**

Edmund K. Turner Professor, Civil and Environmental Engineering Department, Massachusetts Institute of Technology

#### **15th- 19th of June 2026 - Palazzo Impellizeri (SR) – Technical Lectures and Workshops**

Announced Lectures by

**Benedetto Marelli -**

Professor of Biomedical Engineering, Civil Engineering, Civil and Environmental Engineering Department, Massachusetts Institute of Technology

**Rosaria E. Musumeci**

Professor of Hydraulics, Department of Civil Engineering and Architecture, University of Catania

**Angela R. Lo Piero**

Professor of Agricultural genetics Department of Agriculture, Food and Environment, University of Catania

**Antonino Cancelliere**

Professor of Hydrology, Department of Civil Engineering and Architecture, University of Catania

**Heidi Nepf**

Donald and Martha Harleman Professor of Civil and Environmental Engineering, Massachusetts Institute of Technology

**Giuseppe Sappa**

Professor of Applied Geology and Groundwaters, Department of Civil, Building and Environmental Engineering, La Sapienza University

**Maria A. Marsella**

Professor of Geodesy and Geomatics, Department of Civil, Building and Environmental Engineering, La Sapienza University

**Carmelo Ignaccolo**

Assistant Professor of Urban design, Technology, Heritage, and Climate Resilience, Edward J. Bloustein School of Planning & Public Policy, Rutgers University

#### **22th- 25th of June 2026 – Villa Citelli (CT) – Conversations and Workshop/Fieldtrips**

Announced Conversation with

**Paola Malanotte-Stone**

Professor Emerita of Physical Oceanography, Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology

#### **26th of June 2026 – University of Catania (CT) – Final Event**

**Public presentation of the student projects and discussion with relevant stakeholders**