PLEA WORKSHOP 3

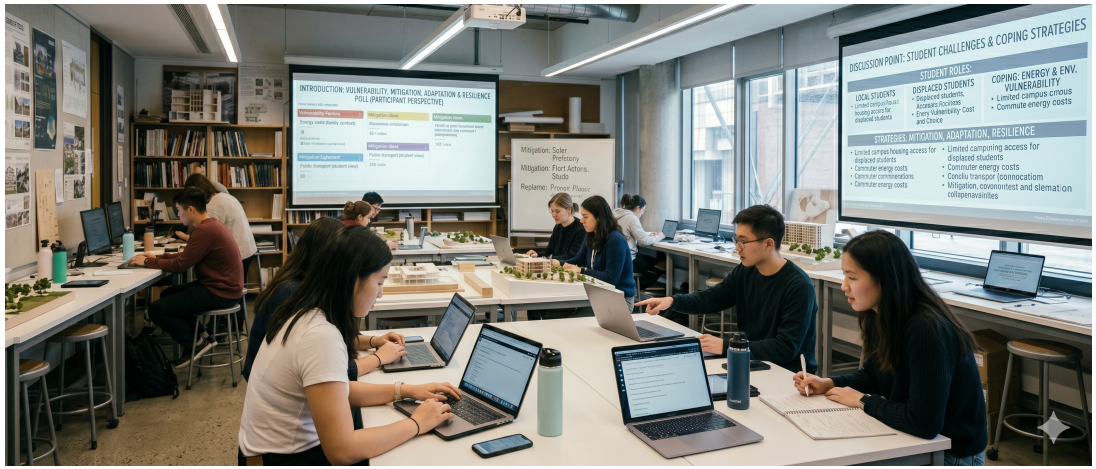
Mitigation, Adaptation and Resilience Measures in the Built Environment among University Students

by MARS Research Group

Date: July 28, 2026
Location: School of Architecture, Universidad de Costa Rica
Language / Capacity: English / 30 participants

WORKSHOP LEADERS

Teresa Cuerdo, João P. Gouveia, Carolina Rodríguez, Claudia E. Vázquez Torres and Andrea Martínez are researchers and practitioners affiliated with the MARS Group – Mitigation, Adaptation, and Resilience Measures, an interdisciplinary research network focused on addressing climate change through sustainable development, environmental policy, and resilience planning. Their work explores the intersections of climate mitigation, adaptation strategies, energy transitions, social equity, and environmental governance, with a strong emphasis on translating research into actionable solutions. Through international collaboration, policy engagement, and applied research, they contribute to advancing more resilient, inclusive, and climate-responsive communities, cities, and territories.



OVERVIEW

This participatory workshop investigates how university students perceive and respond to environmental and energy vulnerability within their everyday contexts. Through interactive discussions, collaborative exercises, and environmental monitoring activities, participants will collectively explore concepts of mitigation, adaptation, and resilience in the built environment. The workshop encourages critical reflection on climate challenges faced by students and vulnerable communities while collaboratively developing strategies, indicators, and practical responses for more resilient living environments.

LEARNING OBJECTIVE

By the end of this workshop, participants will be able to critically assess environmental and energy vulnerability within their own contexts and communities; understand the relationships between climate mitigation, adaptation, and resilience in the built environment; apply participatory methods and environmental monitoring tools to identify challenges and opportunities for action; and collaboratively develop indicators, strategies, and practical responses that support more equitable, resilient, and climate-responsive living environments.

PROGRAM SCHEDULE

Tuesday 7/28/26 Morning	**10:00 a.m.-11:00 a.m.** Introduction and group dynamics on what vulnerability, mitigation, adaptation and resilience are (by using participants' laptops, we can receive replies to those strategies, under the perspective of university students, and their surrounding context -families, professors...)-. Once filled, we discuss the specific challenges regarding their role of students - even differentiating by displaced/local ones- and comment the specificities to copy with energy and environmental vulnerability by Mitigation, Adaptation and Resilience. **10:00 a.m.-11:00 a.m.** Interactive P2P learning: Open Access Tools, Data and Workflows Exploring Tools, data requirements, and workflows in diverse urban contexts, including tropical climates. **Coffee break** **11:30 a.m.-1 p.m.** After exposing experiences and tools applied to different climates and contexts, we collaboratively develop solutions and indicators to face energy and environmental vulnerabilities at home, especially for those and other vulnerable groups.

Workshop Details + Tutors

Mitigation, adaptation and resilence | PLEA Costa Rica 2026

WS3

PARTICIPANTS

This workshop is intended for undergraduate and graduate students, architects, urban planners, engineers, researchers, community leaders, policymakers, and professionals interested in climate adaptation, environmental justice, resilience, sustainability, and the social dimensions of the built environment. It is particularly relevant for those seeking to better understand how environmental and energy vulnerability affects communities and how participatory approaches can support more equitable and resilient responses to climate challenges

RECOMMENDED BACKGROUND

Participants should have an interest in sustainability, climate change, urban studies, architecture, social sciences, public policy, community development, or related fields. No specialized technical knowledge is required. The workshop is designed to encourage interdisciplinary dialogue and welcomes participants from diverse academic, professional, and community backgrounds.

MATERIALS AND REQUIREMENTS

- Laptop
- Sketching materials
- **The workshop will provide access to:**

Environmental condition measurement devices.

PRACTICAL INFORMATION

Date: July 28

Location: School of Architecture, Universidad de Costa Rica

Capacity: 30 participants

Language: English

Registration:https://www.tiquetebox.app/e/workshop_2_design_tools_for_tropical_climates_atmoslab

Plea email: pleacr2026@gmail.com

ABOUT THE TUTORS

Teresa Cuerdo

Dr. Teresa Cuerdo holds a PhD Architect (U. Seville), MSc in Sustainable Cities and Buildings (U. Seville), MSc in Building Energy (Ind. Engineering School, U. Extremadura), MSc in Gamification and Transmedia Narratives. Interest in interactions among built environment, society, environment and health. Broad spectrum researcher profile (quantit-qualit).

João P. Gouveia

Dr João Pedro Gouveia holds a PhD in Climate Change and Sustainable Development Policies from NOVA School of Science and Technology of NOVA University of Lisbon (FCT-NOVA, PT). He is a Principal Researcher and Integrated Member at the Center for Environmental and Sustainability Research (CENSE).

Claudia E. Vázquez Torres

Dr Claudia Vásques PhD Researcher in Energy Efficiency & Sustainability. She promotes sustainable practices through design, consultancy, and research within the built environment.

Andrea Martínez

Dr.Andrea Martínez holds a Ph.D.in Architecture, University of Southern California, 2016. Master of Building Science, University of Southern California. She focuses on improving existing buildings and their potential for transformation to high levels of efficiency.

Carolina Rodríguez

Dr. Carolina Rodríguez holds a PhD in Architecture from the University of Nottingham and advanced training in university teaching from the University of Liverpool, officially recognized in Colombia as a Master's in Higher Education. I've led high-impact research projects across Latin America and Europe.