

DISTRIBUTION OF STUDENTS

2019

	UPRRP	UPRM	UPRP	
👤	4	4	1	30%
👤	5	11	5	70%

Total of 30 students enrolled

2020

	UPRRP	UPRM	UPRP	
👤	9	5	4	53%
👤	3	10	3	47%

Total of 34 students enrolled

2021

	UPRRP	UPRM	UPRP	
👤	5	8	1	44%
👤	4	7	7	56%

Total of 32 students enrolled



What is **RISE-UP**

After a natural disaster, multiple disciplines need to come together to rebuild the damaged infrastructure using new paradigms. Commonly, the academic preparation of scholars on infrastructure-related disciplines takes place in isolated professional domains, rarely tackling interdisciplinary problems or learning from the systematic research of previous experiences. In Puerto Rico, the aftermath of Hurricanes Irma and Maria has created awareness regarding the education on infrastructure-related disciplines to provide transdisciplinary solutions to pertinent complex challenges. The **Resilient Infrastructure and Sustainability Education - Undergraduate Program (RISE-UP)** is a collaborative platform among three campuses of the **University of Puerto Rico System**. Each of these campuses offers a different educational component relevant to this enriching educational initiative.

IMPACTS

- The project trains faculty members and students so that the framework developed as part of this research can be implemented in the curricular sequence of other courses and colleges. The modules developed will be used as a guide for designing, developing, and implementing other courses.
- RISE-UP has attracted students from Engineering and Architecture programs.
- The project serves as the foundation for creating additional courses that could be common to all three campuses. This project is the first step of a long-term vision to provide Resilient Infrastructure and Sustainability Education.
- The project serves as an example of the advantages of integrating information technology to allow students from different campuses to work together towards a common goal.
- The database will become a tool to be used by academics, professionals and community members to learn from past experiences and use the cases as tools for better decision making in the planning and implementation of resilient/sustainable solutions for infrastructure.
- The remote collaboration and practical nature of the courses greatly improves education related to resilient infrastructure in the disciplines of environmental design, engineering, surveying and construction.
- Students that graduate from the program have an increase in awareness and knowledge of the problems associated with resiliency and sustainability in the context of Puerto Rico and other communities in the US and the world affected by extreme environmental conditions and the role of the interdisciplinarity in the development of effective solutions.

GOALS

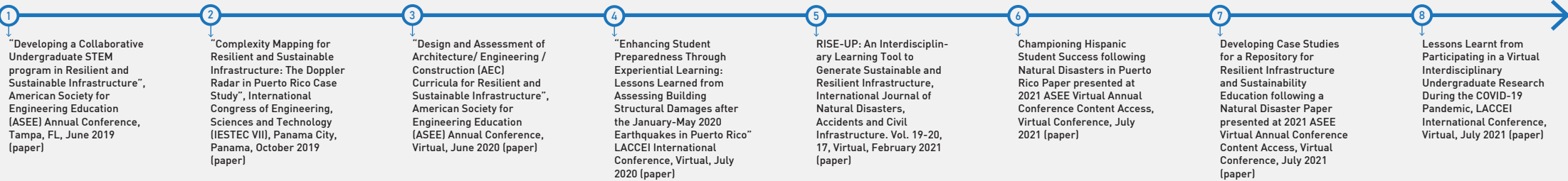
- 1 Development of a case study database

49 case studies have been developed by students enrolled in regular RISE-UP courses in years 1, 2 & 3.

- 2 To collaborate to strengthen the relationship between Academia and Governmental Agencies



DISSEMINATION
Selected Publications



RISE-UP WEBSITE <http://riseup.upr.edu/>

FACULTY

- Carla López del Puerto, Civil Engineering, P.I. **UPRM**
- Humberto Cavallin, Environmental Design, P.I. **UPRRP**
- Drianfel Vázquez, Engineering, P.I. **UPRP**
- Jonathan Muñoz-Barreto, Co-P.I. **UPRM**
- José Perdomo, Co-P.I. **UPRM**
- Marcelo Suárez, Co-P.I. **UPRM**
- Fabio Andrade, Senior Personnel **UPRM**
- Ismael Pagán, Senior Personnel **UPRM**
- Luis Suárez, Senior Personnel **UPRM**
- Luis Daza, Senior Personnel **UPRRP**
- Luis Montejo, Senior Personnel **UPRM**
- Aidcer Vidot, Senior Personnel **UPRM**

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