

#### Collaborative Research on

# Resilient Infrastructure and Sustainability Education Undergraduate Program (RISE-UP)

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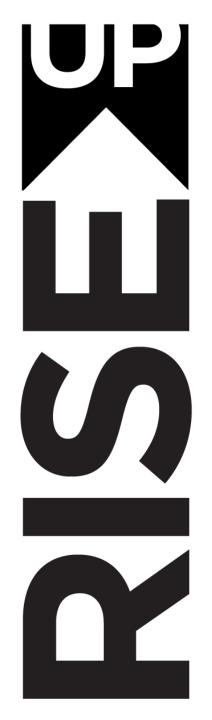






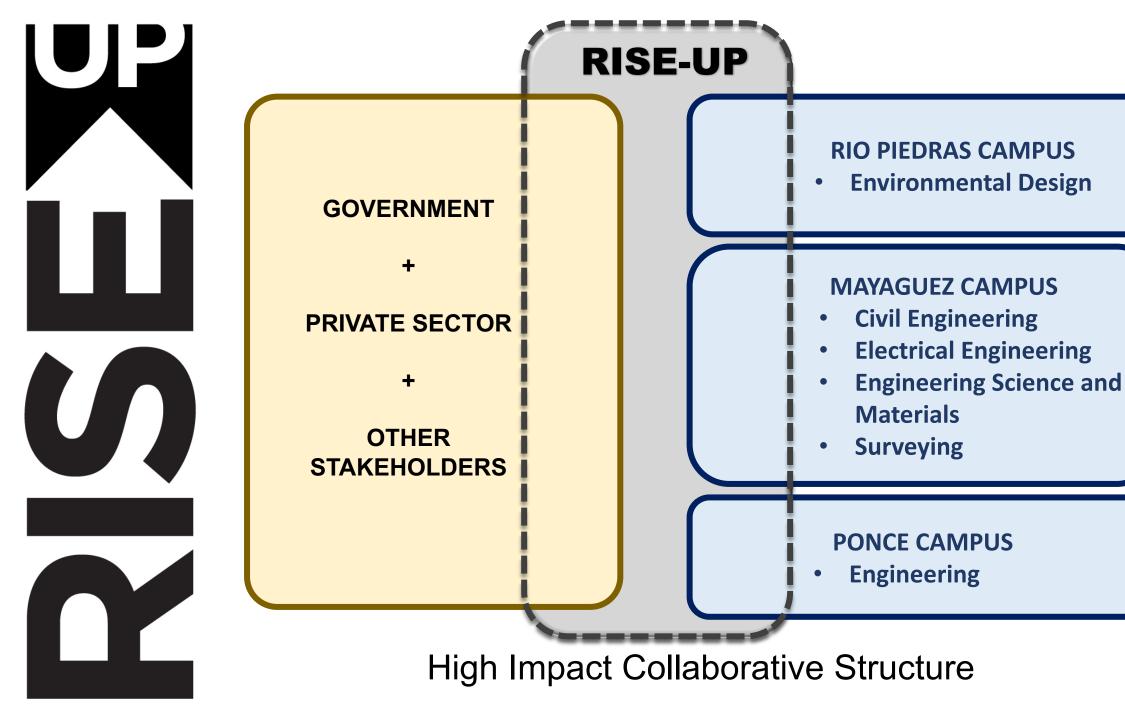


HSI# 1832468; 1832427



#### **About the Program:**

- Purpose: Educate future engineering and environmental design professionals to design and build a more resilient and sustainable Puerto Rico.
- Interdisciplinary program in resilient infrastructure and sustainability
- Rapid response and resilience to counter natural disasters
- Novel curricular sequence
- Undergraduate research and internships opportunities





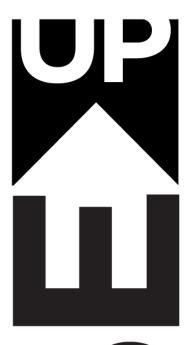
Level	RISE-UP Courses	Credits
4	INCI 5036: Design-Build Project Delivery	3
3	INCI 5010: Resilient and Sustainable Design and Construction	3
Internship / Undergraduate Research		
2	INCI 5996: RISE-UP Seminar Series	3
1	ARQU 4147: Fundamentals of Integrated Practice for Resilient and Sustainable Infrastructure	3

- Courses may be counted as free electives
- Levels 4 and 5 are advanced undergraduate (5000 level) courses which may be used as part of a graduate program at UPR.



#### **Course Descriptions:**

- Fundamentals of Resilient and Sustainable Infrastructure: Implications of natural disasters on the design and construction processes, including the human factors, for solving problems of the design team.
- RISE-UP Seminars: Seminars allow students to build the necessary technical skills needed to develop design solutions in the advanced courses of the curricular sequence.
- Sustainable and Resilient Design and Construction: Study of sustainable development and the application of sustainability and resiliency to architecture/engineering design and construction.
- Experiential Learning: Internships and research with faculty, government agencies and industry partners.
- **Design-Build Project Delivery:** Apply concepts learned throughout RISE-UP courses and in their experiential learning experience to provide solutions.



## **RISE-UP Scholarship:**

UPR - Mayaguez | UPR - Rio Piedras | UPR - Ponce



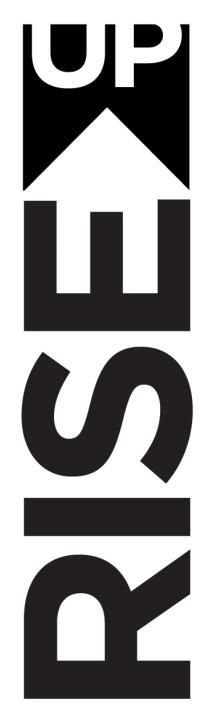








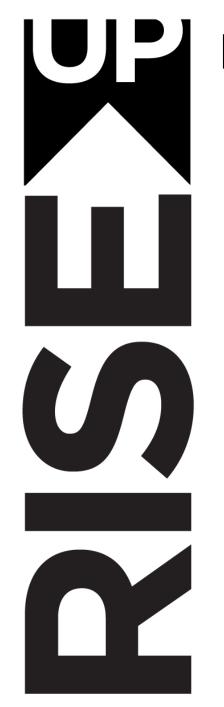
- Participants will receive a stipend of \$525 per semester while completing the sequence of RISE-UP courses.
- Participant support for travel and special activities related to the program.



#### **Eligibility Requirements:**



- Be an active student of one of the participating programs: Civil Engineering, Surveying, or Electrical Engineering. In special cases, the evaluation committee will evaluate students from other engineering programs.
- Have a minimum overall grade point average of 2.75
- Have completed or currently taking INGE 3016 Algorithms
- Have completed less than 50% of the required credits for Major degree and/or minimum 2 years of coursework remaining.
- Fill out the participant application form online.



## **Eligibility Requirements:**



- Be an active student in Environmental Design. In special cases, the evaluation committee will evaluate students from other programs.
- Have a minimum overall average 2.75
- Have completed or currently taking ARQU 3134
- Have completed less than 50% of the required credits for Major degree
- Fill out the participant application form online.

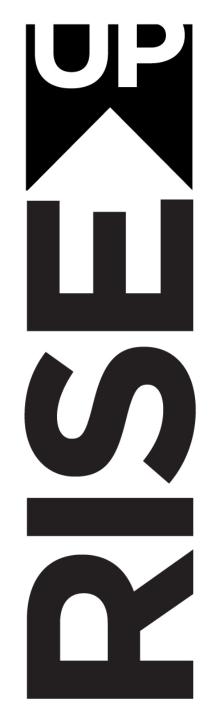


## **Eligibility Requirements:**



- Be an active student in an associate degree in engineering or an articulated engineering program. In special cases, the evaluation committe will evaluate students from other programs.
- Have a minimum overall average 2.75
- Associte Degree Students
- Have completed of currently taking: TECI 1006 - Construction Materials, TECI 2012 - Material Testing, MATE 3031 - Pre-Calculus 1
- Articulated Degree Students
- Have completed or currently taking: INGE 3011 – Eng. Graphics 1

Fill out the participant application form online.



#### **Evaluation Criteria:**

#### UPR - Mayaguez | UPR - Rio Piedras | UPR - Ponce







Academic performance (GPA) 70%

Letter of Interest 20%

Leadership 10%

Total 100%

\* RISE-UP scholars who continue to meet eligibility requirements will continue to receive the benefit throughout the program.



# **Cohort #2 Key Dates**

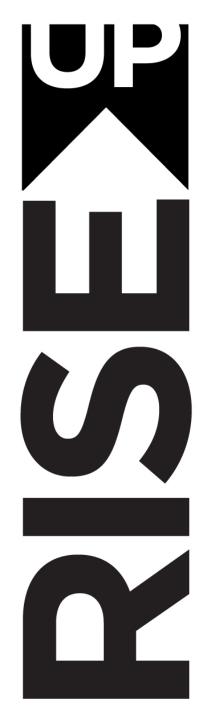






- Applications Open: February 1<sup>st</sup>, 2020
- Applications Close: March 1<sup>st</sup>, 2020
- Selected participants take Fundamentals course: Fall 2020

https://riseup.upr.edu



# Questions? Thank you

**Contact Persons** 

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