

University of Puerto Rico at Carolina

Supplemental Information Report

Dr. José I. Meza-Pereira
Chancellor
February 14, 2025

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Introduction

The Middle States Commission on Higher Education requested, on January 16, 2025, a Supplemental Information Report to the University of Puerto Rico at Carolina (UPRCA) regarding concerns about results for student achievement and annual enrollment-FTE in the 2024 Annual Institutional Update (AIU). The Commission stated:

For the 2024 collection year, the Commission has analyzed the results for student achievement and annual enrollment-FTE. The data suggests concerns with the following:

- **Student achievement:** Graduation Rates calculated at the institutional level by credential level.
- Annual Enrollment-FTE: The Annual Enrollment-Full Time Equivalent (FTE) has fluctuated by more than 15%
- During the past two years; in that when comparing the current with prior year AIU Annual Enrollment-FTE values, the change (increase/decrease) is higher than 15%.

The Commission requested:

- Therefore, the institution should respond to this request for information in a supplemental information report (SIR) by February 14, 2025, providing (1) graduation rates for the last two years (Standard IV); (2) annual enrollment-FTE for the last two fiscal years (Standard VI); and (3) narrative analysis and evidence of the actions the institution has planned or has taken to address these concerns (Standards IV and VI).

Graduation rates for the last two years (Standard IV)

Institutional bachelor's degree cohort graduation rates fluctuate yearly and vary by degree level. Table 1 (Overall Graduation Rate Percentage) shows the overall graduation rates (OGR) for the past two years. Despite the fact that by 2022 the OGR was 38%, at the high school level, this cohort had a graduation rate of 54%. UPRCA recognizes the importance of establishing initiatives that support the strengthening of graduation rates at both levels. However, at the associate degree level, it is particularly important to implement initiatives aimed at supporting this student population in achieving their academic goals.

IPEDS	Overall Graduation Rate Percentage
2022-23	38
2023-24	40

The UPRCA has developed and implemented a Retention Policy (Appendix 1) at an institutional level. This was approved by the Academic Senate through Certification 23 (2022-2023) to increase graduation and retention rates at both associate and bachelor levels. The policy addresses UPR System regulations related to retention and graduation.

This policy is based on identifying the needs of students and updating the profile of each cohort. Some of the aspects that are already being worked on as part of this policy are the development of social and academic integration to promote the adaptation of new students through the Adjustment to University Life Skills program. This program encourages interaction with the student prior to the start of university studies and extends until the second year of study. Some of the immersion strategies used in this program are:

- Face-to-face and distance tutoring.
- Activities to provide guidance on all UPRCA services and offices, psycho-educational workshops and activities that foster emotional, psychological and social skills in their integration into university life.
- Early identification of at-risk students.
- Support, accompaniment and follow-up to enhance retention and graduation.

The aim is also to strengthen the personal, emotional, psychological and academic skills of students through integrated activities provided by the Department of Counseling and Psychological Services and the Library Learning Commons. Some of the activities that form part of this service are:

- Skills courses and tutorials in areas where there is a need
- Psychoeducational workshops, counseling services and psychological support. Some of the topics covered through this component are:

- Self-concept
- Decision making and problem solving
- Stress management
- Goal setting and clarification
- Study habits
- Time management
- Peer pressure
- How to achieve academic and personal success
- Career choice

Part-time psychologist/psychiatrist is available for night service and individualized follow-up, depending on the student's needs.

Annual enrollment-FTE for the last two fiscal years (Standard VI)

The Full Time Equivalent (FTE) in the 12-months enrollment component of IPEDS is calculated using the institution's calendar system. However, institutions have the option of reporting their own FTE calculation if they consider that the IPEDS calculation is confusing for comparison purposes. In 2021-22, UPRCA included its own FTE calculation in the IPEDS because the difference between the two was significant. Considering that this metric is used for longitudinal comparisons and understanding that it is not correct to compare the IPEDS FTE and the Institutional FTE with each other due to the differences between them, it was recently decided to continue using exclusively the FTE calculated by IPEDS.

On May 17, 2024, the Institution provided formal insight to MSCHE regarding this topic (Appendix 2: AIU Concern). When calculated using IPEDS numbers, the Annual Enrollment FTE is as follows:

Table 2: Annual Enrollment-FTE for the past two years at UPRCA

IPEDS	FTE Year	Calculated FTE	% Change
2022-23	2021-22	1717	-2%
2023-24	2022-23	1625	-5%

Narrative Analysis and Evidence of Actions

The University of Puerto Rico at Carolina consistently monitors graduation rates. Academic offerings with low graduation are supported by institutional efforts that seek to strengthen administrative, financial, and academic areas that may impact student graduation rates. This part of the report provides insight and evidence on initiatives implemented.

Institutional Retention Policy

In March 2023, the Campus Senate approved a new retention policy to increase graduation and retention rates at both associate and bachelor levels. The policy addresses UPR System regulations related to retention and graduation.

Grants

The Mechanical Engineering Technology program UPRCA is currently implementing two awards granted by the US National Science Foundation (Appendix 3) to improve enrollment, retention, and graduation rates through the establishment of partnerships and dual enrollment programs that provide for a seamless transition from high school to associate and bachelor programs. The grants also support and strengthen student services through mentoring programs that lead students to earn certifications at various stages. Implementation dates began on June 1, 2024 through May 31, 2026, and from October 1, 2024 through September 30, 2026. Goals intended for both grants include:

- Improve enrollment, retention, and graduation rates.
- Integrate artificial intelligence into the program curricula.
- Enable students to earn certifications at various levels (i.e. associate degrees) through a stackable program structure.
- Upgrade instrumentation equipment and software in the areas of instrumentation and control and mechatronics engineering technology.
- Increase institutional capacity to develop and implement STEM teaching at Hispanic-Serving Institutions.
- Increase STEM program enrollment.

This program, along with others in the Department of Engineering Technologies, represents irreplaceable strategic assets for the technological development of Puerto Rico, specializing in training technicians for the automation, control and advanced manufacturing industries. Its critical importance is evidenced by the federal and state grants that extend through 2026, validating its essential role on the island's economic development.

The NSF HSI Pilot Project proposal focuses on creating clear and engaging educational pathways for students by integrating emerging technologies into the existing curriculum. Its transformational objectives include:

- 1) Implementation of dual enrollment programs to create an educational pipeline
- 2) Integration of AI into existing curriculum to maintain relevance
- 3) Development of clear academic pathways to higher grades (associate degree to baccalaureate).
- 4) Creation of professional certifications aligned with industry
- 5) Projected impact on programs:
 - a) Improve retention
 - b) Increase in graduation rates
 - c) Strengthen links with industry through advisory boards

Department of Criminal Justice

The Department of Criminal Justice has played an active role, working closely with the Recruitment Office and the Dean of Student Affairs to promote its academic programs and attract more students to the department. Among the highlighted activities, open houses were held on January 15, 2025, and November 13, 2024, both at the UPR facilities in Carolina. In addition, a virtual open house was organized, focused exclusively on promoting the two distance bachelor's degree programs in Criminal Justice with majors in Forensic Psychology and Law and Society, to facilitate access to a wider audience. This activity took place on Thursday, January 11, 2024 (Appendix 4).

The faculty has taken a more active and proactive role in promoting its academic programs. In collaboration with the Recruitment Office, coordinated efforts have been made to offer orientations at various schools, highlighting the department's academic offerings and attracting potential students interested in its programs.

Bachelor of Arts in Social Sciences in Criminal Justice with concentration in Forensic Psychology (distance learning)

Forensic Psychology and Law and Society are the most demanded programs in our institution, representing 29% of UPRCA enrollment. As a result, in 2021 the online version of these programs was established aiming to continue to increase the recruitment of students, from different geographical areas traditionally served by UPRCA and students with a non-traditional profile. Likewise, the distance learning program is presented as an alternative for students who cannot continue studying in the face-to-face program, so that they do not have to abandon their studies but can reclassify themselves to this modality.

School of Hotel and Restaurant Administration

The School of Hotel and Restaurant Administration, accredited by the *Accreditation Commission for Programs in Hospitality Administration (ACPHA)*, has also taken steps to improve retention and graduation through several initiatives:

- In 2024, the Hotel and Restaurant Administration Student Association was reactivated.
- In academic year 2024-2025, students have benefited from grants by the American Hotel & Lodging Association (AHLAF).
- Students have received academic support through tutoring services in mathematics and accounting offered at the library learning commons.
- Since 2023, students have participated in many field trips to local small hotels and guesthouses. These visits provide real experience that increase student interest and enthusiasm in continuing their studies.
- In 2025, scholarships from the Kinesis Foundation of Puerto Rico will be available to students enrolled at the School (Appendix 5).
- The *Platos Calientes* (Hot Meals) project provides free hot meals to low-income students.
- The *Platos Calientes* and the School's catering service provide employment opportunities to over twenty students enrolled at the School.

Conclusion

UPRCA has taken specific actions to monitor and improve retention and graduation rates by implementing policies that comply with UPR System and campus regulations including initiatives that support students through scholarships, curriculum revisions, increased practical experiences, and a strengthened sense of community. These actions provide support to bachelor's and associate degree credential levels offered by various academic departments.

All these initiatives evidence an institutional commitment to monitor, improve and enhance student life and retention, which will also have a positive impact on enrollment and graduation rates.

Appendixes

Appendix 1: Institutional Retention Policy

UNIVERSITY OF PUERTO RICO AT CAROLINA

INSTITUTIONAL RETENTION POLICY
UNIVERSITY OF PUERTO RICO AT CAROLINA
CERTIFICATION NO. 23 (2022-2023)

Prepared by:

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Office of the Dean of Academic Affairs

Reviewed by the Retention Committee:

José I. Meza Pereira, Rector, José A. Cruz-Vega, Interim Academic Dean, Ms.
Ana Yaritza Rivera, Dean of Students, Dr. Damaris De Jesús,
Dr. Antonio Vidal, Director of DeCoPsy, Dr. Eileen Perez
and by Dr. Cristina Martinez, Director of OIPEI

March 14, 2023

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APPENDICES

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APPENDIX 4- Sample Questions for Focus Groups

APPENDIX 5- UPRCA Strategic Retention Plan (2023-2026)

PART ONE - INSTITUTIONAL POLICY

Article I - Title

This document shall be known as *The Retention Policy of the University of Puerto Rico at Carolina*.

Article II - Background

The Retention Policy of the University of Puerto Rico at Carolina (UPRCA), has the purpose of establishing coordinated services directed to the needs of students in order to increase retention at the institutional level, as well as at the level of the Academic Departments. It encourages the collection and analysis of data at both levels for decision making and development of recommended evidence-based strategies. The persistence, retention and graduation of our students is the responsibility of all members of the academic community. The Retention Strategic Plan (Annex: 5-Retention Strategic Plan UPRCA 2023-2026), identifies the different services, as well as the university strategies for intervention and the recommended timing of their delivery. The policy includes the literature review on retention and recommendations to be considered in the design of retention plans (See Article XIII- Summary of the literature review on Student Retention at the University Level).

The present policy complies with the Certifications of the Board of Governors of the University of Puerto Rico, *Proposal for the Increase in Access, Retention and Graduation Rates at the University of Puerto Rico*, Certification No. 50 (2014-2015), Board of Governors of the University of Puerto Rico, the *Regulations for the Periodic Evaluation of Academic Programs at the University of Puerto Rico*, Certification No. 55 (2021-2022) December 2021, Board of Governors of Puerto Rico (Amendment to Certification 45 (2019-2020), the *Mission of the University of Puerto Rico at Carolina* (Certification 27 SA (2019-2020), the *Strategic Plan 2013-2017*, Certification 11 (2013-2014) University of Puerto Rico at Carolina, Academic Senate, as well as with the *Academic Transformation Plan, Dean of Academic Affairs 2020-2023* and the *Minimum Retention Rate*, Certification No. 06 (2009-2010), Amendments to Certification 37 (2009-2010), Academic Senate.

Article III - Justification

The UPRCA Retention Policy is aligned to the Mission of the University of Puerto Rico at Carolina (Certification 27 SA (2019-2020): "*The University of Puerto Rico at Carolina is part of the public higher education system and its services are available to all sectors of society. It offers a unique program of study in quarters that allows students to complete their academic degree in the UPR System in less time, focused on the arts, sciences, hospitality and technology. The*

commitment is to prepare graduates with a comprehensive education that will enable them to work or continue advanced studies that will strengthen their professional development and contribute to the socioeconomic advancement of the country".

The University of Puerto Rico at Carolina is committed to promoting strategies that result in increased admission, retention, persistence and graduation rates; thus achieving the mission of "*...preparing graduates with a comprehensive education that allows them to work or continue advanced studies that strengthen their professional development and contribute to the socioeconomic advancement of the country.*"

The Academic Transformation Plan of the Office of the Dean of Academic Affairs 2020-2023 includes retention among its five pillars. Strategic Project II: Retention - The Dean of Academic Affairs of the UPR at Carolina has among its purposes to help our students achieve their academic goals. Persistence during the first term and retention during that first year are crucial elements for them to achieve those goals. The objective of the UPRCA Retention Policy is to establish student support services to maximize the opportunities to complete their academic degree in the shortest possible time.

Article IV - Legal Basis

This Policy is adopted and promulgated by virtue of the powers granted by Law No. 1 of January 20, 1966, as amended, better known as the "University of Puerto Rico Act"; the "*Higher Education Act* (HEA) of 1965, as amended in 1998, and in the *Student Right to Know Act* (SRTK) of 1990, "Extended Admission, Reasonable Accommodation, and Retention for Students with Disabilities or Functional Diversity in Transition from High School to Postsecondary Degrees Act" Act 250 of September 15, 2012, as amended (Contains amendments incorporated by the following laws: Act No. 171 of August 11, 2016) To create the "Post-Secondary Passport of Reasonable Accommodation Act" [Note: Renamed by Act 171-2016], for students with disabilities from secondary schools, aspiring to study in postsecondary institutions. This policy is in harmony with federal laws, state laws, and applicable institutional regulations, among others.

Article V - Purpose

A. This Policy is intended to:

1. Establish a Retention plan, as well as metrics for retention, persistence and graduation, as required by the UPR and UPRCA Certifications.
2. Implement the Strategic Retention Plan by members of the entire university community. See Annex 5- UPRCA Strategic Retention Plan (2023-2026).

3. Request the Retention Committee to analyze the institutional retention indicators and related factors and develop the necessary adjustments to the UPRCA Retention Strategic Plan for the continuous improvement of retention.
4. Inform the university community about the different services/intervention strategies offered by the UPRCA and how these relate to student success (persistence, retention and graduation).
5. Support efforts and initiatives to improve retention, persistence and graduation metrics at the academic program and institutional levels.
6. Strengthen the learning skills development program and the academic advising process.
7. To offer different types of support for students, aimed at maximizing their success in their university studies and the achievement of their graduation.
8. Identify and implement coordinated strategies for intervention and follow-up with students at risk of academic suspension.
9. To support the Academic Departments in the continuous analysis of data in order to know the metrics related to the retention of students; as well as the development of strategies with the objective of achieving a retention rate higher than 70%.
10. Submit annually a Student Retention compliance report of the Academic Departments to the Academic Dean and the Chancellor.
11. To have the participation and input of the members of the different members of the university community in the retention efforts.
12. Disseminate the results of retention-related initiatives to the university community.

Article VI - Definitions

The following is a definition of the terms used in this policy:

A. Retention - A metric that indicates the number of first-year students who return to the same institution to continue their second year of study.

B. Persistence - A metric that indicates the number of students returning to the institution in a given academic term.

C. Cohort - Students coming from high school or its equivalent, enrolled for the first time at the university level during the first academic term, with complete homework and enrolled in a program leading to a degree.

D. Retention Rate - Percentage of students who return to study their second academic year, using the cohort as a base. Calculated: $[\text{total students who continue their studies in the second year} / \text{total cohort}] \times 100$.

E. Graduation Rate - Percentage of students who complete their degree within 150% of the time required for the degree. Calculated: $[\text{total number of students who complete their studies within 150\% of the time required to complete a degree} / \text{total cohort}] \times 100$. (See: APPENDIX 2 -Additional definitions related to UPRCA Retention).

Article VII -Certifications of the University of Puerto Rico related to the Retention

- *Proposal for the Increase in Access, Retention and Graduation Rates at the University of Puerto Rico, Certification Number 50 (2014-2015) Board of Governors of the University of Puerto Rico.*
- *Regulations for the Periodic Evaluation of Academic Programs at the University of Puerto Rico, Certification 45 (2019-2020), Board of Governors of Puerto Rico.*
- *Regulations for the Periodic Evaluation of Academic Programs at the University of Puerto Rico, Certification No. 55 (2021-2022) December 2021, Board of Governors of Puerto Rico.*
- *Minimum Retention Rate, Certification No. 06 (2009-2010) Academic Affairs Senate.*

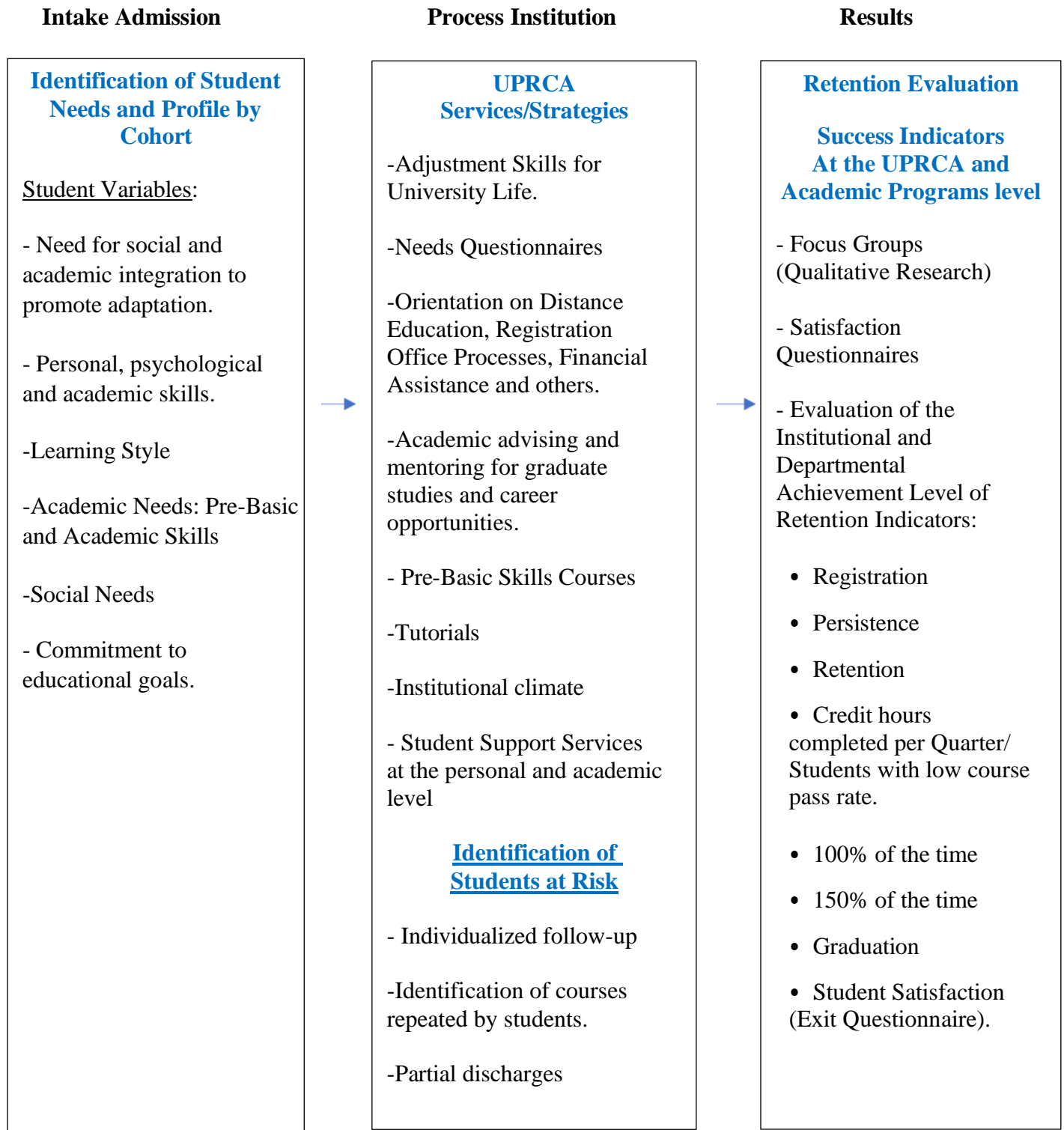
Article VIII - Composition of the Retention Committee

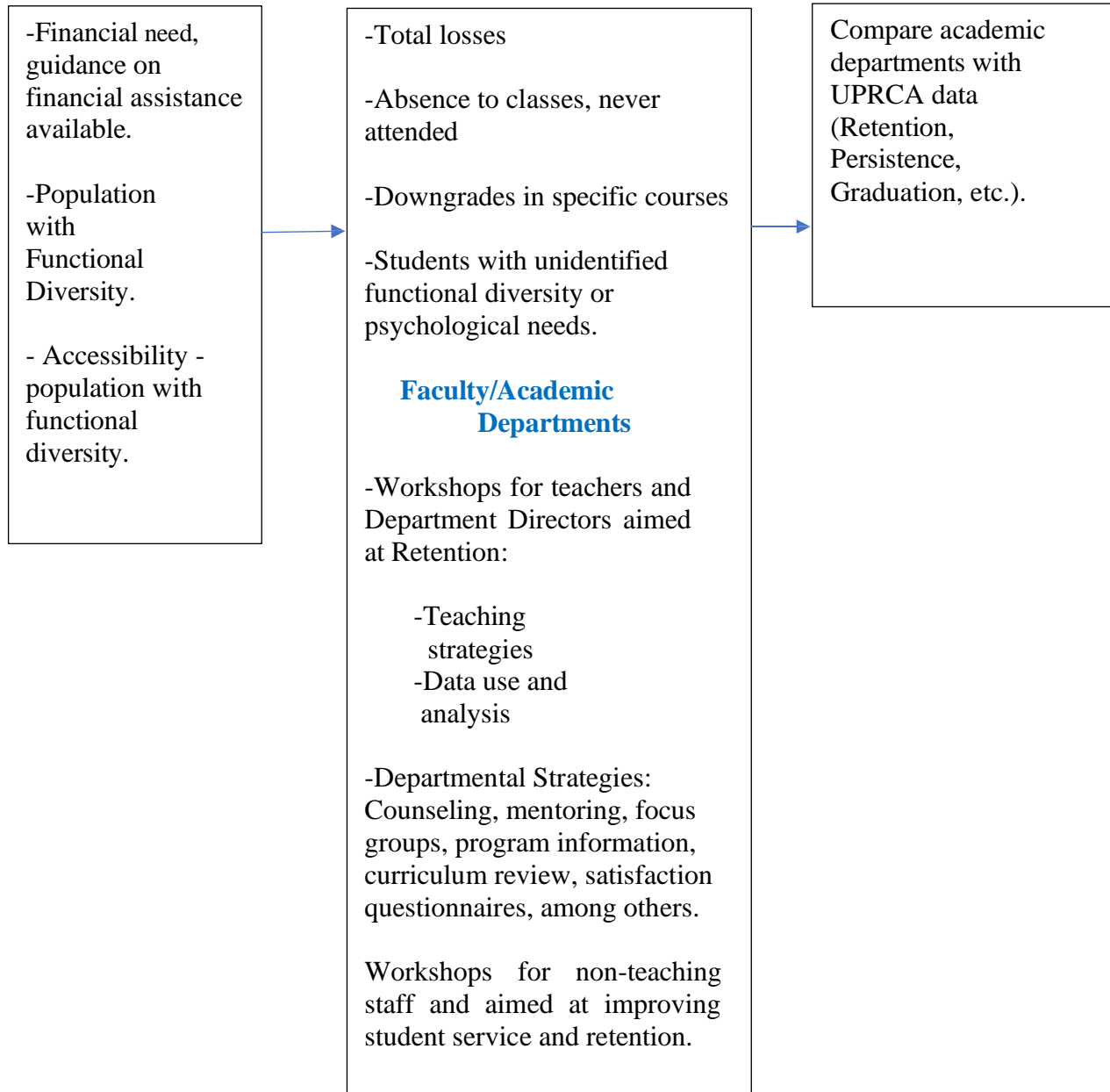
The Retention Committee shall consist of the following members and such other members as the Appointing Authority may determine:

- Dean of Student Affairs
- Dean of Academic Affairs
- Department of Counseling and Psychological Services (DeCoPsy)
- Student Ombudsman
- Registrar
- Title IX Coordinator
- President of the General Student Council

Article IX - Student Retention Model, Activities aimed at Persistence, Retention and Graduation at UPRCA

UPRCA Student Retention Model





*It was taken as the Model developed by the UPR Cayey, in which Dr. Lizaida López Padilla participated, who modified and updated it in 2022, according to the literature review.

Article X - Activities aimed at Persistence, Retention and Graduation at UPRCA

Main Objective of the UPRCA's Student Retention Policy

The objective of the UPRCA Retention Policy is to establish student support services to maximize opportunities to complete their academic degree in the shortest possible time. To increase student retention and academic success through

of the development of competencies-academic and personal. A comprehensive model for the retention and academic success of UPRCA students is presented below.

A. Retention Strategies:

Student Level:

New Entrance Student (Prior to and at the beginning of university studies)

Immersion Strategies: Adjustment Skills for University Life

1. Pre-basic skills courses
2. On-site and distance tutorials
3. Activities to provide orientation on all UPRCA services and offices
4. Psycho-educational workshops and activities that promote emotional, psychological and social skills in their integration to university life.
5. Early identification of at-risk students
6. Support, monitoring and follow-up to enhance retention (Student Success Coordinator is recommended for needs identification, service orientation and follow-up processes).

Beginning of University Life (Emphasis First Year and Sophomore Year)

1. Academic Support

Academic support with special emphasis on the first two (2) years of study. Skills courses and tutoring in courses in areas where there is a need.

2. Personal and Social Support (Department of Counseling and Psychological Services (DeCoPsy))

Recommended activities for personal integration

Psychoeducational workshops, counseling and psychological support services:

- Self-concept
- Decision Making and Problem Solving
- Stress management
- Development and clarification of goals
- Study habits
- Time management
- Peer pressure
- How to achieve academic and personal success
- Career selection
- Psychologist/Psychiatrist - part-time, evening services
- Individualized follow-up
- Focus groups
- Needs questionnaires
- Equipment/Materials Race Room

3. Additional support services:

- a. Office of Services to Students with Disabilities (OSEI)
- b. Information and Technology Program
- c. Office of the Student Ombudsman
- d. Title IX Program
- e. Support for their food needs, such as: Come Jaguar, Student Organization: Platos Calientes, etc.
- f. Financial Assistance - Guidance on alternative ways to help cover part of their educational expenses.
- g. Quality of Life and Placement Office- Trains students in skills development and self-employment search through Self-Employment Search and provides them with intensive individualized job placement services.
- h. Veterans Service

4. Identification and follow-up of at-risk students: (Student Success Coordinator is recommended, in addition to the follow-up and support of the Academic Departments, Academic Advising, DeCoPsy and other services described above).

Student Success Coordinator:

- Supports in the services and processes of adjustment to University Life.
- Provides individualized follow-up to increase retention.
- Orientation and referral to the Support Services offered by UPRCA: Academic, emotional and psychological, Financial Assistance, OSEI and others.
- Identifies and refers to tutoring for academic skills deficits.
- Coordinates services needed by the student.
- Orientation and referral to Academic Advising.
- Provides follow-up/support to students taking distance learning courses.
- Coordinates computer rooms for assistance in enrollment processes, among other services.

5. Needs questionnaires and focus groups Third

Year and Fourth Year

1. Academic, psychological and emotional support, other types of support
2. Tutorials
3. Academic advising and mentoring
4. Support for courses with the highest failure rates
5. Identification and support for students with low academic progress, requesting withdrawals, or on probation.
6. Career counseling
7. Extracurricular activities
8. Student Associations
9. Needs questionnaires

At the Teacher Level: Training workshops, academic advising, mentoring and follow-up for students who are absent or show poor academic progress.

Faculty Training

1. Teaching strategies
2. Diversity
3. Accessibility
4. Strategies for Effective Academic Advising and Mentoring
5. Evidence-based teaching-learning techniques
6. Use of technology for the development of strategies that active learning.
7. Curricular review and development of academic competencies
8. Retention and graduation as everyone's responsibility
9. Strategies for student motivation
10. Others

Departmental Level: Data collection, analysis of retention rates, as well as follow-up of students requesting withdrawal, among others.

UPRCA Institutional Level: The Academic Success Coordinator is recommended, offering Pre-Basic Courses, Tutoring for basic skills and other subjects where there is a need. Accompaniment and support in the first two (2) years of study.

B. Identification and follow-up of at-risk students: At the end of the first until graduation.

(Data collection and analysis at UPRCA level / Academic Departments / Offices and retention related services)

Monitoring, intervention and follow-up with the at-risk student:

1. New students:
 - conditionally accepted
 - Under IGS, IES
 - Low scores CEEB-verbal/matte
 - Students a program as a stepping stone
2. Identify students who are absent from classes (UPR Portal absenteeism record).
3. Identify courses in which you are failing (midterm grades).
4. Academic average per quarter
5. Identify students who are not following the curriculum sequence as expected.
6. Low average concentration
7. Part-time students
8. Students with unidentified functional diversity or psychological needs

9. Lack of Academic Progress: Probation and Suspensions
10. Students requesting withdrawals

C. Reinforcement System to Encourage Retention: (Recommended)

1. Recognition Student Achievement
 - a. Incentives: Letter from the Chancellor, Recognition Activity and others
2. Recognition Faculty and Academic Programs
3. Faculty/Academic Department Stimulus
4. Publicizing the achievements of Students, Faculty, Academic Departments and the UPRCA.
5. Accountability continuous improvement and decision making

Article XI - Strategic Retention Plan UPRCA

The UPRCA Retention Strategic Plan establishes the activities and services of the Institutional and Academic Programs aimed at the retention component. It identifies the phase prior to the beginning of university life, the phase of the first and second year of university life, and the phase in preparation for graduation. This plan identifies the needs to be addressed, as well as the office in charge and the way to evaluate the results.

See Annex 5- UPRCA Strategic Retention Plan (2023-2026).

Article XII - UPRCA Metrics related to Retention

Academic Program Level Metrics evidencing criteria included in the Five-Year Academic Program Evaluation Report: (Regulations for the Periodic Eyaluation of Academic Programs at the University of Puerto Rico, Certification No. 55 (2021-2022) December 2021, Board of Governors of Puerto Rico).

Each Academic Department will make a report at the end of the first and second quarter and at the end of each academic year to the Dean of Academic Affairs - This will serve as a continuous input to the departments on how the retention indicators of their programs are doing. These results should be analyzed by the department faculty for continuous improvement and development of retention strategies.

The following is a summary of the data relevant to retention according to current certifications:

1. **Student Profile of New High School Entrance Students**
 - a. Applicants
 - b. Admitted
 - c. First alternative

- d. IES
- e. IGS
- f. Public School, Private School, Homeschooling

2. Profile of the students of the Academic Program:

- a. Towns of origin
- b. Sex
- c. School of origin
- d. Country of Birth
- e. Ethnicity
- f. Age by range
- g. Civil Status
- h. GPA High School

3. Strategies for recruiting, attracting High School Students.

4. General Program Data:

- a. Admission Fee
- b. Occupancy Rate
- c. New Enrollment
- d. Enrollment / Admitted
- e. Total Enrollment
- f. Persistence Rate
- g. Graduation Rate
- h. Others:
 - Age
 - Marital Status
 - Genre
 - Employees
 - Average personal monthly income
 - Students admitted by non-traditional methods persistence, retention and graduation
 - Courses repeated by students
 - Students with different types of financial aid
 - Student Satisfaction Questionnaires

5. Comparison of Academic Program students with UPRCA's total enrollment.

- a. Percentage of students applying to the UPRCA who belong to the Academic Program.
- b. Percentage of students admitted to the UPRCA who belong to the Academic Program.
- c. Percentage of newly enrolled students at UPRCA who belong to the Academic Program.

- d. Percentage of UPRCA's total enrollment students who belong to the Academic Program.
 - e. Percentage of UPRCA graduate students who belong to the Academic Program.
6. **Trends for the past five (5) years have been observed in terms of quotas, applicants and program occupancy rates.**
- a. Applicants First Alternative
 - b. Total applicants
 - c. Quota
 - d. Occupancy Rate
 - e. IMI
 - f. Admitted
 - g. Registration
 - h. UPR General Course Approval
 - i. Academic Program Course Approval Rate
 - j. Overall Grade Point Average
 - k. Academic Programs Retention Rates by Cohort
 - l. Persistence Rate Comparison between UPRCA students and Academic Program students.
 - m. Comparison conferred and projected grades
 - n. Graduation Rates 100% Academic Programs by Cohort
 - o. Graduation Rate 150% Academic Programs by Cohort

Article XIII- Summary of the Literature Review on Student Retention at University Level

- In order to achieve student retention, it is imperative to identify and address basic and academic skills deficits.
- Encourage the development of emotional and psychological skills.
- To provide a pleasant, welcoming and supportive institutional climate.
- Facilitate social and academic integration. Failure to achieve this may lead to difficulty in the adaptation process.
- Provide the student with alternative resources to meet the financial need.
- Encourage students to increase their commitment to their educational goals and to the institution.
- Intervene with students with risk factors early as soon as possible in the first and second year of studies, and follow up in the process.

- Researching and analyzing the retention rate, persistence rate and graduation rate are relevant to develop strategies that result in student retention.
- In conclusion, student retention is one of the most important criteria of institutional effectiveness.

Recommended strategies to increase retention:

A. Student Services

- Pre-university orientation activities
- Seminars on adjustment university life
- Tutorials
- Academic advising
- Trainings and seminars for diverse student populations: functional diversity, dropouts, parents, athletes and others.
- Career counseling

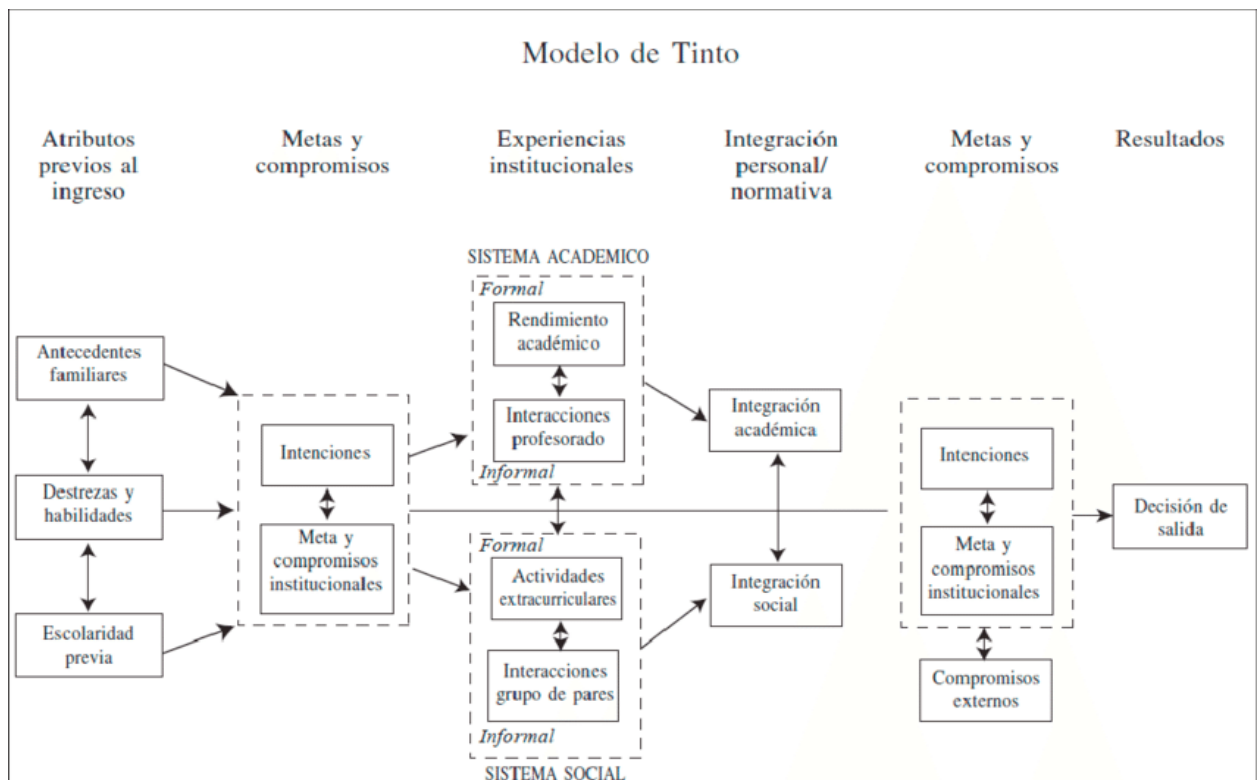
B. University/Academic Programs

- Use of instruments to identify student needs-development of immediate strategies.
- Curricular innovation and strengthening of academic programs.
- Workshops for faculty on: learning styles and teaching strategies to meet the student profile.
- Activate a Retention Committee.
- Career Center, Learning Skills and Personal Development Center.
- Research on institutional effectiveness and retention.

C. The Tinto Model recommends:

- Have high expectations for student learning.
- Provide clear and consistent information on institutional requirements, curriculum alternatives and future academic goals.
- Identify undecided students and provide them with support and follow-up.
- Provide academic, emotional and psychological support and socialization experiences.

- Summer programs, mentoring, student organizations, contact with faculty and counselors.
- Involve students as members of the Institution.
- Provide an active learning and research .
- Encourage social skills as well as intellectual skills.
- Academic counseling is one of the variables with the greatest impact on the retention of incoming students.
- Workshops on the development of self-help skills on academic motivation, social motivation and university adaptation.
- Student persistence is a function of the congruence between individual's motivation and academic ability and the academic and social characteristics of the institution.
- It is recommended that students with risk indicators be identified and followed up.



D. Addressing the needs of special populations:

- Students with functional diversity.
- Students with learning disabilities, mental health conditions.
- Athletes
- Single parents
- Caregivers
- Others

References:

Minimum Retention Rate, Certification No. 06 (2009-2010), Amendments to Certification 37 (2009-2010), Academic Senate, University of Puerto Rico at Carolina.

University of Puerto Rico at Carolina Mission (Certification 27 SA (2019-2020)

Strategic Plan 2013-2017, Certification 11 (2013-2014) University of Puerto Rico at Carolina, Academic Senate.

Academic Transformation Plan, Office of the Dean Academic Affairs 2020-2023

Proposal for the Increase in Access, Retention and Graduation Rates at the University of Puerto Rico, Certification No. 50 (2014-2015), Board of Governors of the University of Puerto Rico, <https://apicertificaciones.upr.edu/file/download/25614>.

Student Retention: Trends and Recommendations. Gerardo Javariz Cordero, Office of Planning and Institutional Studies, University of Puerto Rico at Aguadilla, February 2015, https://uploads.uprag.edu/images/pdf/opei/Investigacion_Institucional/2014-2015/Retenci%C3%B3n_Estudiantil_UPR-Aguadilla_2015.pdf.

UPR Student Success Prediction System, Information on the Student Success Prediction System, <https://www.upr.edu/ee/>
<https://www.upr.edu/ee/sample-page/instrucciones/>

UPR Carolina, Microsoft Power BI (various): <https://www.upr.edu/ee/carolina/admision-por-school/>

Regulations for the Periodic Evaluation of Academic Programs at the University of Puerto Rico, Certification 45 (2019-2020), Board of Governors of Puerto Rico.

Regulations for the Periodic Evaluation of Academic Programs at the University of Puerto Rico, Certification No. 55 (2021-2022) December 2021, Board of Governors of Puerto Rico (Amendment to Certification 45 (2019-2020).

APPENDICES

Annex 1: Proposal for the Increase in Access, Retention and Graduation Rates at the University of Puerto Rico, Certification Number 50 (2014-2015) Board of Governors of the University of Puerto Rico.

- **Proposal for the Increase in Access, Retention and Graduation Rates at the University of Puerto Rico, Certification Number 33 2014-2015 Board of Governors of the University of Puerto Rico.**
- **Proposal for the Increase in Access, Retention and Graduation Rates at the University of Puerto Rico, Certification Number 50 (2014-2015) Board of Governors of the University of Puerto Rico.**
 - This Certification incorporates the actions previously adopted by the Board through Certification No. 33 (2014-2015).

Statement of Purpose The University of Puerto Rico, in full compliance with the objectives set forth in its organic law and fully aware of its obligation to promote the most responsible, fair and efficient use of the public resources allocated to it, adopts as a priority, to optimize the use of institutional resources by increasing admission, retention and graduation rates, while attempting to reduce the gaps that exist in these areas between socioeconomically disadvantaged students and those from sectors with greater resources.

General Goal: Increase access, retention and graduation rates at the UPR.

General Principles or Postulates:

1. Approach the increase in the three rates as angles of the same process, addressing them in an integrated and continuous manner and not in isolation or separately from each other.
2. Address the measurement of each of the rates from quantitative as well as qualitative metrics, incorporating sustained evaluation and research measures and the formulation of periodic reports at all levels of the administrative sphere.
3. In accordance with the institutional mission set forth in the University Law, incorporate into the general proposal a pilot plan designed to specifically address the increase in access, retention and graduation rates of the student population from socioeconomically disadvantaged sectors.
4. Promote the performance and success of university studies, upholding standards of quality and academic excellence.

A. Overall goal in Access rates: Increase the access rate of baccalaureate students in each unit by 10%.

SHORT-TERM MEASURES

1. Each unit shall establish and adopt a rigorous and scientific methodology for the quota of its programs, including criteria, such as; the analysis of the

demand by program, its emphasis, resources allocated, demographic factors, among others, and should be reviewed periodically. 1
2. To increase the number of baccalaureate students entering the University of Puerto Rico, so as to enroll 100% of the established quota, adopting for this purpose, as a pilot project, a conditional admission for those with an IGS lower than that established, but not lower than the minimum pre-established by the unit for such purposes.
3. Inventory existing recruitment processes and efforts and initiatives and publicize them.
4. Incorporate measures such as the following into recruitment efforts: <ul style="list-style-type: none"> a. Identify attitudes and beliefs that hinder access for consideration in recruitment efforts, including improving information and services provided by school-based counselors. b. Improve the dissemination of information on available financial assistance. c. Redesign the portal to make it more attractive and user-friendly. d. Evaluate electronic access to application and admission procedures. e. Conduct recruitment efforts, both from the UPR and in public and private schools. f. Do not eliminate the paper application and have it available for recruitment activities. g. Evaluate the impact of the elimination of the application fee. h. Evaluate the effect of the free administration of the College Board. i. Periodically measure the effectiveness and impact of the recruitment efforts used, including aggressive follow-up on offers of admission and timely survey of the reasons why admitted students did not enroll. j. Consistently study and evaluate the exodus of students admitted private universities.
5. Increase the percentage of exchange students in baccalaureate programs. Set a percentage per unit. <ul style="list-style-type: none"> a. Review existing agreements, identifying the academic offerings per unit that are of interest to the objectives of the agreements. b. Develop an aggressive recruitment plan in the student populations of universities with agreements. c. Prepare a summer program, especially designed for high school students from North American universities. d. Resume efforts to offer exchange programs for students from the diaspora.
6. Increase distance learning offerings for students in and out of Puerto Rico.
7. Formalize inter-campus agreements on university courses taken in high school and establish systemic norms for this purpose.
8. Determine which courses students in middle and high schools should take in order to achieve a better performance in their university studies, and disseminate an orientation campaign to that effect.

B. Access Goals particular to the Pilot Project for socioeconomically disadvantaged population: Increase access to the Baccalaureate Program for socioeconomically disadvantaged students.
SHORT-TERM MEASURES
1. Expand the UPR experience initiative for the student population from socioeconomically disadvantaged sectors so that they appreciate the UPR as their own.
2. Make the paper admission application available by visiting schools and provide assistance and support in completing it (Visit schools with computers and internet facilities).
3. Design a pilot admission program aimed at the extremely socioeconomically disadvantaged population, using alternative criteria, such as: interviews, portfolio evaluation, essays, community activity experiences, and others, so that points can be added to the IGS that fell short by a narrow margin and in this way 100% of the IGS can be filled. the pre-established quotas.
4. Design orientation and counseling programs, especially designed for this population.
5. Inventory and analyze existing studies on predictors of college success, including the compilation of studies on criteria with the best predictive value.
6. Based on the results of the evaluation of the alternative criteria used in the pilot project, consider amending and adapting the admission criteria, adopting a uniform data collection system.
MEDIUM- AND LONG-TERM MEASURES
7. Incorporate measures such as the following into recruitment efforts: <ul style="list-style-type: none"> a. Identify attitudes and beliefs that hinder access for consideration in recruitment efforts, including improving the information and services provided by school-based counselors. b. Improve the dissemination of information on available financial assistance.
8. Revise the printed and online application for admission to integrate the socioeconomic profile section as a required field, so that better data can be obtained on the population to be served in the pilot project.
9. Develop recruitment strategies aimed particularly at this population, especially in the public schools surrounding the units, with low representation of graduates admitted to the UPR, previously identifying the dissuasive factors to reformulate more effective alternative admission processes.

10. Evaluate the academic performance of students admitted in the last ten years, using criteria by special abilities to verify their retention and graduation rates.
11. Evaluate the effectiveness of the alternative admission criteria adopted for this pilot project, taking into consideration the retention rate in the 1st and 2nd year of those admitted.
C. Overall Goals for Retention Rate: Increase the retention rate of baccalaureate students in each unit by a minimum of 3% to 5% annually for the next two years.
SHORT-TERM MEASURES
1. Conduct an inventory of existing programs and initiatives, including tutoring and mentoring programs, that support retention and complete a compilation of existing studies on the topic.
2. Set up a committee with representatives from the sites where these initiatives are being developed and verify the results of their efforts and studies so that common actions can be coordinated on the basis of these results.
3. Intervene in the withdrawal process, first through interviews to inquire about the causes of the withdrawal and offer guidance and support to dissuade the student from . Create a database on the main factors that motivate withdrawal.
MEDIUM- AND LONG-TERM MEASURES
4. Improve the quality and agility of services to the student population, with emphasis on the processes of enrollment, registration and financial aid.
5. Review academic programming to adapt it to the needs and schedules of the student population.
6. Develop an agile data system that allows for continuous monitoring and immediate action in the event of risk signals, which will make it possible to gather data and formulate appropriate actions.
7. Use available admissions data from the last 10-15 years to build a regression model that explains student success (success could be doing well in the first year or graduating) and with this model, identify admitted students who may not graduate and design an intervention program in the summer prior to the first semester of study for these at-risk students. This summer program would aim to help students address the deficiencies they bring with them in areas that make them at-risk.

fail during the first year. It could be financed with the expected savings if a significant number of students do not fail in their first college courses, which typically tend to fail.
8. Create an intervention program that, just as class attendance is reported, reports how students are performing in their classes and that once a semester begins, continuously reports how the student is performing and raises a flag when performance inadequate, to ensure timely intervention and support through counseling, mentoring and tutoring.
D. Particular Retention Goals for the Pilot Project for socioeconomically disadvantaged population.
SHORT-TERM MEASURES
Incorporate the objectives of this plan into the criteria guiding the selection of teachers to teach the first grades of mathematics and English.
2. Develop an institutional recognition program for high-risk students who successfully complete the 1st and 2nd year of university, which will provide financial support and positive incentives to reward effort.
MEDIUM- AND LONG-TERM MEASURES
3. With the benefit of an agile and updated database, provide support to students with signs of risk, monthly and semi-annually during the first two years of studies.
4. Articulate and strengthen existing academic support efforts in high-difficulty courses in order to improve performance in high-risk courses.
5. Develop an online system available to offer immediate support, provide referrals and provide all the necessary tools to at-risk students, which will make it possible to address situations on an ongoing basis with less intensive human resources.
6. Design pilot peer mentoring program (Contigo hasta el éxito) that will work with: 1) preparation for college life, 2) academic support referrals, 3) enrollment orientation, 4) psychological support referrals and counseling when applicable, 5) workshops on study habits, time management, writing skills, analytical reading.
E. Overall Graduation Rate Goals
SHORT-TERM MEASURES
Increase the graduation rate of high school students in each unit by a minimum of 3-5% annually over the next two years.

2. Develop a data system on student performance starting in the 3rd academic year that takes into account reasons for dropping courses, lack of academic progress, total dropout, among others. These measures will make it possible to identify risk factors and design efforts to address them.
3. Make an inventory of existing initiatives and studies.
4. Establish a committee with representatives of the sites to share these initiatives and the results of the studies and, based on these, to coordinate common actions.
F. Graduation rate goals particular to the Pilot Project for socioeconomically disadvantaged population.
<p>5. Adopt measures to guarantee a graduation rate for socioeconomically disadvantaged high school students, similar to the rest of the student population. To this end, the following is proposed:</p> <ul style="list-style-type: none"> • Collection data and existing initiatives. • Identification of risk factors. • Develop performance data system for high-risk population. • Sustaining the academic support program for high-risk populations. • Provide sustained counseling services to those entering their senior and up to exit interviews. • Develop an exit interview and satisfaction survey system to refine areas of the university experience that challenge students' academic progress and strengthen those that facilitate it. • Maintain up-to-date data collection through the use of a uniform system.

APPENDIX 2 -Additional definitions related to UPRCA Retention

Active in Institution: Students who were enrolled in September of the following year.

Partial Withdrawal: Voluntary withdrawal from one or more courses, without suspending their studies in the other enrolled courses, after having completed the required process in their unit.

Total Disenrollment: Voluntary suspension from university studies. The student will be inactive if he/she does not enroll in the next semester.

Cohort: A group of individuals with a statistical factor in common, used, for example, in follow-up studies. In case the cohort is composed of students from high school who are enrolled for the first time at the undergraduate level full time in programs leading to a degree at UPRCA and is used to calculate the number of them who continue studying in September of each year (retention) and the number who graduate from an associate degree in a maximum of 3 years (graduation rate-associate degree) and from a bachelor's degree in a maximum of six (6) years (graduation rate-bachelor's degree).

Initial General Cohort (IGC): Consists of the group of freshmen, high school or equivalent, enrolled for the first time at the university level, during the first quarter of the base academic year for which graduation rates are to be calculated. They must have enrolled with a full load of 12 credits or more in a program leading to an academic degree.

Continued: (Persistence) Percent of cohort students who are registered as enrolled students in the UPRCA as of September of each year.

CEEB: College Entrance Examination Board is the entity that offers and administers the admission required for anyone interested in studying at the University of Puerto Rico.

GPA: High school graduation rate.

Degree: Students who completed an academic program of studies and received the recognition and degree granted by the UPRCA.

General academic index: This is the measure of the student's level of academic achievement. It is calculated by dividing the total number of honor points by the total number of credits accumulated in the subjects in which the student has received a final grade, including grades of "F" or "IF". Any grade accompanied by "I" has the numerical value assigned to the alphabetical grade. An academic index of 2.00 at the undergraduate level representing a grade of "C" is considered satisfactory. Subjects marked with "W" and "P" are not considered for the index.

Overall Grade Point Score (GSI): Score awarded to the applicant for admission and obtained by taking into consideration the high school GPA and the results of the verbal and mathematical reasoning sections of the Academic Aptitude Test.

Minimum Entrance Index (IMI): Score-criteria established by each program in the unit to select its students.

Irregular enrollment: Number of students who study in a unit of the System with a partial academic load, per semester, trimester or quarter. It is considered irregular load at the undergraduate level 11 credits or less; and at the graduate level, seven (7) credits or less.

Regular enrollment: Number of students who study with a full academic load per semester, trimester or quarter. A full load at the undergraduate level is considered 12 credits or more and at the graduate level, eight (8) credits or more. In addition, at the graduate level, a student enrolled in a thesis is considered a full-time student.

Total enrollment: Number of students officially enrolled, registered, who have paid their tuition fees and are pursuing credit-bearing studies or academic recognition for thesis students) in a unit of the University Puerto Rico System during an academic session.

Enrolled: A student who is officially enrolled, registered, has paid tuition and is pursuing credit-bearing studies. In this case it refers to students coming from high school.

Academic Probation: Status granted to a student for not having obtained satisfactory academic achievement. Disciplinary Probation: Status granted to a student for manifesting improper or unsatisfactory conduct (See Student Regulations).

Academic Suspension: Process by which the Institution forces a student to interrupt his/her studies for not complying with the required retention rate in his/her unit.

Graduation rate (overall): Computation required by federal Know Act regulations. It is calculated using the total number of students who completed 150% of the time required for their program of study requirements divided by the revised cohort. UPRCA baccalaureate degrees are four years, therefore, the UPRCA graduation rate is the total number of students in the cohort who graduated in six (6) years or less.

Program graduation rate: Graduation rate of students in the program cohort who graduated from the same program in which they were first admitted on or before 150% of the stipulated time.

Institutional graduation rate: Graduation rate of students in the general cohort who graduated from a UPRCA program to which they were first admitted on or before 150% of the stipulated time.

Institutional retention rate: Computation of the persistence of students coming from high school to remain in a UPRCA program of study expressed as a percentage of the overall cohort. It represents the portion of students in a cohort who successively enroll at the beginning of the next academic years.

Institutional Retention: The sum of students in the cohort who have remained active in the UPRCA (any program) through the subsequent year.

Program retention: The sum of students in the program cohort who have remained active at the beginning of next academic years in the same program they were initially admitted. First alternative applicants: High school students who to the UPR indicating the RRP and one of its academic programs as their first alternative or priority of studies.

Source: Glossary of Terms, University of Puerto Rico at Carolina (UPRCA) Office of Planning and Institutional Studies.

Appendix 3: Profile of UPRCA Incoming Students (2020-2021)

Table: Student Profile of UPRCA Incoming Freshmen 2020-21	
Criteria respondent	Percent
Academic Load: Regular Homework	86.0
Studying High School	71.9
Age: 18 years old or younger	92.0
High School GPA of 3.50 or higher	72.0
Singles	96.0
Resides with Parents	87.0
Staying at	5.3
Does not work	51.0
Employed	18.0
Search for a job	29.0
Areas of academic need	
Oral expression in English	50%
Written expression in English	41%
Study Habits	27%
Academic Orientation: Programs and steps to follow	31%
Access to technology	
Own laptops	76%
Smartphone	89%
Two (2) or more technological equipment	79%
Internet at Home	53%

Table: Student Profile of UPRCA Incoming Freshmen 2020-21	
Criteria respondent	Percent
Internet on Mobile Phone	43%
Internet in someone else's home	2%
Preferred form of communication: Institutional e-mail	68%
Data source: Office of Research Planning and Institutional Effectiveness, UPRCA.	

Annex 4: Sample questions for the Focus Groups:

1. Greetings and introduction
2. How has the experience been at the University, in the classes?
3. What did they like the most?
4. What difficulties have you encountered, if any?
5. What do they need that can facilitate their academic success?
6. Provide reinforcement for achievements, motivate them and refer those who need some kind of help or recommendation.

Appendix 2: AIU Concern



Outlook

AIU concern

From PORTELA VALENTIN STANLEY R. <stanley.portela@upr.edu>

Date Fri 5/17/2024 7:31 PM

To Anne Wahl <AWahl@msche.org>

Cc research@msche.org <research@msche.org>; Cristina Martinez Lebron <crisrina.martinezlebron@upr.edu>; Wanda Rodriguez Delgado <wanda.rodriguez6@upr.edu>; MEZA PEREIRA JOSE I. <jose.meza1@upr.edu>

Dear Dr. Wahl:

We deem highly important to explain a potential error in the data used for the annual comparisons of the Full-Time Equivalent (FTE) of UPR Carolina. The year 2021-22 was the only one an Institutional FTE was reported (2,315), considering it would have been a more representative estimate of UPR Carolina's FTE as compared to the FTE calculated by IPEDS for that year (1,756). Nonetheless, after reviewing the data from the previous and subsequent year, an Institutional FTE was not reported again, as the FTE calculated by IPEDS had been accepted as a reasonable estimate FTE for IPEDS comparison purposes. Since the two measures are calculated differently, we would like to request MSCHE to use the IPEDS calculated FTE for that year, instead of the Institutional calculated FTE.

Please let us know if you have further questions.

Best regards,

Stanley Portela-Valentín, MLS, MT

[Director](#) | José P. Fernández-Miranda Learning Resource Center | University of Puerto Rico at Carolina

[Accreditation Liaison Officer](#) | Middle States Commission on Higher Education | University of Puerto Rico at Carolina

[President](#) | Board of Library Directors | University of Puerto Rico

Appendix 3: National Science Foundation Grants

**Award Abstract # 2345302****HSI Pilot Project: Empowering Puerto Rican STEM Futures: Connecting Students to Successful Careers**

NSF Org:	EES Div. of Equity for Excellence in STEM
Recipient:	UNIVERSITY OF PUERTO RICO AT CAROLINA
Initial Amendment Date:	May 29, 2024
Latest Amendment Date:	May 29, 2024
Award Number:	2345302
Award Instrument:	Standard Grant
Program Manager:	Sonja Montas-Hunter smontash@nsf.gov (703)292-7404 EES Div. of Equity for Excellence in STEM EDU Directorate for STEM Education
Start Date:	June 1, 2024
End Date:	May 31, 2026 (Estimated)
Total Intended Award Amount:	≈199,956.00
Total Awarded Amount to Date:	≈199,956.00
Funds Obligated to Date:	FY 2024 = ≈199,956.00
History of Investigator:	Narcisa Meza (Principal Investigator) narcisa.meza1@upr.edu Eduardo Cabrera (Co-Principal Investigator)
Recipient Sponsored Research Office:	UNIVERSITY OF PUERTO RICO AT CAROLINA 2100 SOUTH AVE CAROLINA PR US 00987 (787)257-0000
Sponsor Congressional District:	
Primary Place of Performance:	University of Puerto Rico at Carolina 2100 SOUTH AVE Carolina PR US 00987

Primary Place of Performance Congressional District: 00

Unique Entity Identifier (UEI): TL1UNGGY39N4

Parent UEI:

NSF Program(s): HSI-Hispanic Serving Instituti

Primary Program Source: 04002425DB NSF STEM Education

Program Reference Code(s): 8209, 9150, 9178

Program Element Code(s): 077Y00

Award Agency Code: 4900

Fund Agency Code: 4900

Assistance Listing Number(s): 47.076

ABSTRACT

With support from the Improving Undergraduate STEM Education: Hispanic-Serving Institutions (HSI) Program, this Track 1 project aims to address critical challenges in STEM education at the University of Puerto Rico in Carolina (UPRCa). The general problem centers around the underrepresentation of Hispanic students in STEM programs across the Nation, leading to lower enrollment, retention, and graduation rates. This issue is of critical importance as it impedes the full potential of these students and fails to meet the growing demands of the STEM workforce. Currently, there is a gap in providing accessible and relevant STEM education, particularly in emerging fields like Artificial Intelligence (AI). Existing programs lack incorporation of these technologies, making it imperative to renew and diversify STEM degrees to align with current and future job requirements.

To improve enrollment, retention, and graduation rates, the project will establish partnerships with local high schools, implement dual enrollment programs, and create clear pathways for a seamless transition from high school to associate and bachelor's degree programs. Through needs assessments, faculty training, and curriculum enhancements, we aim to integrate AI into existing programs, ensuring graduates possess cutting-edge skills. Employing a stackable program structure, students can earn certifications at various stages, enhancing their employability. Additionally, we will provide robust student services, mentoring programs, and Continuing Education Certifications for the existing workforce. Anticipated outcomes include increased STEM program enrollment, enhanced retention and graduation rates, and a skilled workforce ready for 21st-century technologies. Aligned with the HSI Program's broader impact, our project enhances undergraduate STEM education, fosters partnerships, and contributes new knowledge to address STEM challenges at HSIs. Dissemination includes a project website, social media, newsletters, workshops, and seminars, ensuring impact across academia, industry, and society, ultimately contributing to a successful STEM community. The HSI Program aims to enhance undergraduate STEM education and build capacity at HSIs. Projects supported by the HSI Program will also generate new knowledge on how to achieve these aims.

This award reflects NSF's statutory mission and has been deemed worthy of support through evaluation using the Foundation's intellectual merit and broader impacts review criteria.

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**Award Abstract # 2434808****Equipment: Strengthening Instrumentation Education at UPR Carolina:
Implementing New Resources and Practical Training for Industry 4.0****NSF Org:** [EES](#)
[Div. of Equity for Excellence in STEM](#)**Recipient:** UNIVERSITY OF PUERTO RICO AT CAROLINA**Initial Amendment Date:** August 28, 2024**Latest Amendment Date:** August 28, 2024**Award Number:** 2434808**Award Instrument:** Standard Grant**Program Manager:** Sonja Montas-Hunter
smontash@nsf.gov (703)292-7404
EES Div. of Equity for Excellence in STEM
EDU Directorate for STEM Education**Start Date:** October 1, 2024**End Date:** September 30, 2026 (Estimated)**Total Intended Award Amount:** ≈199,140.00**Total Awarded Amount to Date:** ≈199,140.00**Funds Obligated to Date:** FY 2024 = ≈199,140.00**History of Investigator:** Narcisa Meza (Principal Investigator)
narcisa.meza1@upr.edu**Recipient Sponsored Research Office:** UNIVERSITY OF PUERTO RICO AT CAROLINA
2100 SOUTH AVE
CAROLINA
PR US 00987
(787)257-0000**Sponsor Congressional District:****Primary Place of Performance:** UNIVERSITY OF PUERTO RICO AT CAROLINA
2100 SOUTH AVE
CAROLINA
PR US 00987

Feedback

Primary Place of Performance Congressional District: 00

Unique Entity Identifier (UEI): TL1UNGGY39N4

Parent UEI:

NSF Program(s): HSI-Hispanic Serving Instituti

Primary Program Source: 04002425DB NSF STEM Education

Program Reference Code(s): 8209, 9150, 9178

Program Element Code(s): 077Y00

Award Agency Code: 4900

Fund Agency Code: 4900

Assistance Listing Number(s): 47.076

ABSTRACT

With support from the Improving Undergraduate STEM Education: Hispanic-Serving Institutions (HSI Program), this Educational Instrumentation project at the University of Puerto Rico at Carolina (UPRCa) will strengthen undergraduate learning in mechanical engineering, instrumentation and control systems, and mechatronic engineering technology. Specifically, this project will secure integrated instrumentation stations with sensors, PLCs, panel views, and visualization systems, which will allow students to gain hands-on experience in configuring, calibrating, and maintaining instrumentation systems oriented towards implementing the Internet of Things (IoT) in courses such as Instrumentation and Controls/ Instrumentation and Controls Laboratory, Sensors and actuators, and Fundamentals of Instrumentation/ Fundamentals of Instrumentation Laboratory. An estimated 70 students and 5 faculty will utilize the project-funded equipment each year. In addition to providing improved experiences in engineering technology courses, the new equipment will also be used in undergraduate research projects and recruitment efforts (such as laboratory tours and equipment demonstrations), and to showcase advanced technology in the field.

The goals of this project are to enrich the learning and experiences of undergraduate students by upgrading critical instrumentation equipment and software in mechanical engineering, instrumentation and control, and mechatronics engineering technology. The project will assess the impact of the project funded equipment using course assessments, student surveys, student performance data, and faculty self-assessments. The integration of advanced instrumentation technologies is crucial for preparing students for the demands of Industry 4.0 and smart factories, where real-time monitoring, control, and optimization are essential.

This project for HSI program funding, aims to enhance undergraduate STEM education, broaden participation in STEM, and increase capacity to engage in the development and implementation of innovations to improve STEM teaching and learning at Hispanic-Serving Institutions.

This award reflects NSF's statutory mission and has been deemed worthy of support through evaluation using the Foundation's intellectual merit and broader impacts review criteria.

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Appendix 4: Criminal Justice Marketing



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Decanato de Asuntos Académicos
Departamento de Justicia Criminal

Conozca el nuevo Bachillerato en
Justicia Criminal
100% en línea

 Hablando
Claro

Play

0:00 / 1:01:37

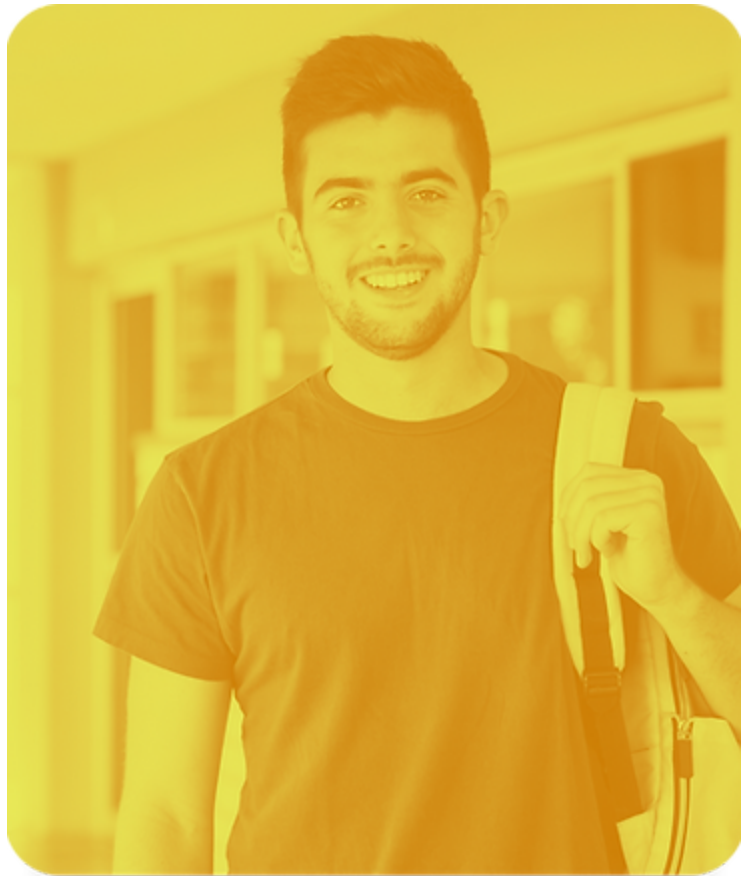


Appendix 5: Kinesis Foundation of Puerto Rico Scholarships

Scholarships | Kinesis Website

 kinesispr.org/en/scholarships





SCHOLARSHIPS

Since 2004, the Kinesis Scholarship has helped hundreds of Puerto Rican students pursue their dreams of obtaining their bachelor's, master's, or doctoral degrees at top universities in the United States and Puerto Rico.

KINESIS SCHOLARS

Kinesis Scholars is a renewable college scholarship program combined with support services to help Puerto Rican students have a successful college experience and prepare for the workforce. The scholarships are for students who wish to study their bachelor's, master's, or doctorate at the best universities in the United States and Puerto Rico.

In addition to financial aid, we help students with the following areas:

1. First Year:

Adjusting to college and knowing your resources.

2. Second Year:

Exploring leadership opportunities to develop key skills for professional success.

3. Third and Fourth Year:

Benefit from internships or research activities to prepare for the workforce or postgraduate studies.



Requirements to apply to the program



Be a U.S. citizen and resident in Puerto Rico, or have obtained permanent resident status from the Federal Government and be a resident of Puerto Rico.



Be a new student entering the educational program for which you are applying for the scholarship.



Have an overall GPA of 3.5 or higher.



Present evidence of financial need.



Have completed the FAFSA at the time of applying for the scholarship. Submit the document identified as SAR.



Be admitted to an accredited university in the United States or Puerto Rico.



Complete the online application and submit all required documents within the required timeframe.



Commit to the social and economic development of Puerto Rico.



Have and maintain an email account where all communications from the Kinesis Scholarship Program will be received.

APPLY TODAY

Deadline: May 24, 2024

**Our counselors are members of the
National Association for College Admission Counseling**



Fonalledas Scholarship for Agricultural Sciences

Partnership between the Fonalledas Foundation and Kinesis to develop Puerto Rican agriculture

This scholarship is geared towards students who want to pursue a bachelor's or master's degree, in PR or the US, in studies related to agriculture. The studies may include but are not limited to the following majors:

Agronomics, Agricultural Sciences, Forestry and Environment Engineering, Engineering in Agrarian and Food Industries, Horticulture, Animal Sciences, Engineering in Energy Resources, Enology

The student must meet a 3.00 GPA.



Hugh Andrews Scholarship for Hospitality and Tourism

Partnership between the Scholarship Foundation for Hospitality and Tourism Studies, Inc. and Kinesis to develop Puerto Rican tourism

This scholarship is geared towards students who want to pursue a bachelor's or master's degree in studies related to tourism and hospitality. The studies may include but are not limited to the following majors:

Hospitality and Tourism Administration, Culinary Arts,
Business Administration

Accredited universities may be located in the US or PR.

The student must meet a 3.00 GPA.



Kinesis Fellowship at the University of Notre Dame

Partnership between the University of Notre Dame and Kinesis to support diversity at Notre Dame

This fellowship is intended to enhance diversity at Notre Dame by providing funding for U.S. citizens from Puerto Rico. Fellows are doctoral students who receive a stipend from \$34,875 to \$42,000, according to program, on a 12-month basis for up to five years. Fellows in a master's program receive \$20,000 annually.

Students must be admitted by the university to qualify for the funds.

For more information, visit the official website for the [Kinesis-Fernández Richards Family Fellowship](#).



Your commitment helps us empower the bright future of students and Puerto Rico!

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Receive the latest news about our foundation.

