

2022 -2027



**INSTITUTIONAL
STRATEGIC PLAN**
**POLYTECHNIC
UNIVERSITY**



**POLYTECHNIC
UNIVERSITY**
SAN JUAN • ORLANDO • MIAMI • VIRTUAL



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INSTITUTIONAL GOVERNANCE

I

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II

MESSAGE FROM THE PRESIDENT



Ernesto R. Vázquez Martínez
President
Polytechnic University of Puerto Rico

Puerto Rico, along with the rest of the world, lived through an unprecedented five-year period of hurricanes, earthquakes, and a pandemic. These events have, undoubtedly, tested our abilities to respond and adapt to drastic and unexpected environmental changes caused by the interaction between humans and nature. Circumstances have shown, once again, the importance of having a team of people committed to the Institution. Equally important is having the financial and technological resources necessary to, despite all adversity, continue to deliver the services we provide to our communities: training professionals who produce tangible solutions to challenges that each new generation must overcome.

For the Polytechnic University of Puerto Rico (PUPR), this strategic planning cycle to develop our **2022-2027 Strategic Plan** has been imbued with significance for three main reasons. Firstly, we have succeeded in completing this plan despite the disruptions caused by the COVID-19 pandemic. Second, our 55th anniversary celebrations came with the reassertion of our commitment with Puerto Rico's socioeconomic development for generations to come by transmitting knowledge and providing training so that professionals may acquire the necessary technical skills to yield a positive impact on their working environment.

The third and most important reason is that, in December of 2021, we bade farewell to our president, my father, Dr. Ernesto Vázquez Barquet, as he left this earthly plane. For the last 31 years, he directed our Institution, and his vision and leadership helped shape Polytechnic University of Puerto Rico into the prestigious organization that it is today.

At this historical juncture, I took on the role of president of Polytechnic University of Puerto Rico and, as such, it is my duty to continue supporting and improving the family legacy that was born more than 55 years ago in our beloved island of Puerto Rico, led by my predecessors, Ernesto Vázquez Torres and Ernesto Vázquez Barquet. I and the team at Polytechnic University accept the challenges that the current global context poses to institutions of higher education around the world. We are convinced that, within our campuses and classrooms, we can transform these challenges into great opportunities and keep contributing to the development of knowledge and the search for solutions at the local, regional, and –dare I say– global level.

Over the next five years, our **2022-2027 Strategic Plan** will be the tool that guides PUPR in its new era. Our main goal will be to continue developing a student-centered culture that promotes their success. Likewise, we will encourage our university campuses to become ecosystems of true creativity, innovation, research, and entrepreneurship. We will move forward with a comprehensive institutional agenda of internationalization and expand our relations with the community, the industry, and the government. And lastly, we will strengthen our financial position, sustainability, and the responsible management of our institutional resources.



Ernesto Vázquez Barquet, President 1990-2021

I conclude by sharing that my father, Dr. Vázquez Barquet, was convinced that he could change the world and that the true evils of society could be transformed through the highest quality of education and the development of first-rate professionals. I hope that these ideas will inspire all of us daily at the Polytechnic University so we can work for a better society and a better Puerto Rico.

III

III. POLYTECHNIC UNIVERSITY OF PUERTO RICO

TRAINING PROFESSIONALS FOR 56 YEARS

In 1966, the great demand for professionals in the fields of Cartography and Land Surveying became a reality in Puerto Rico, and agronomist Ernesto Vázquez Torres had a clear vision:

To establish a university at the heart of the Metropolitan Area dedicated to the education and development of professional engineers and surveyors.

As a result, the Polytechnic University of Puerto Rico (PUPR) opened its doors. A decade later, in 1973, PUPR offered its first bachelor's degrees in Civil Engineering and Land Surveying. It was the first institution to offer this type of degree in the Metropolitan Area of Puerto Rico. Its innovative offering featuring evening classes was enthusiastically received by students from all corners of the island. La Poli, as it became known among its students, quickly became a feasible alternative for heads of household and professional adults. The institution extended its class schedules to evenings and Saturdays, making it possible for students to work during the day and complete their education in a practical and efficient manner.

Polytechnic University's growth became evident in the 1980s, decade during which the institution was accredited by the Middle States Commission on Higher Education (MSCHE) for its first academic programs, including Industrial Engineering, Electrical Engineering, Mechanical Engineering, and Business Administration. In 1986, PUPR acquired the iconic building known as Clínica Juliá, located in the heart of Hato Rey.

In 1992, the institution was authorized to offer a graduate program for the first time. During this same decade, at the dawn of the new millennium, Polytechnic University expanded its scope to Florida, offering the same academic excellence to students in the United States.

Since 2013, the future of thousands of professionals has been shaped by five major schools at the Polytechnic University: School of Engineering, Surveying, and Geospatial Science; School of Architecture; School of Business Administration; School of Arts, Sciences, and Education; and the Graduate School. In 2014, PUPR began offering the first Doctor of Philosophy in Engineering and Applied Sciences in Puerto Rico. It became the first university in Puerto Rico to develop and launch a high-power rocket (Guanin 1 USL) in collaboration with Honeywell. In 2015, it became the first university in Puerto Rico to develop an electric Formula car to compete in the Formula SAE West event. And in 2016, it introduced a fully online bachelor's degree program in Biomedical Engineering, the first of its kind in the island.



Fifth Centenary Square
Polytechnic University
of Puerto Rico

In efforts to evolve with the times and transform the Polytechnic University of Puerto Rico into an eco-friendly and resilient campus, our university has undergone extensive renovations and continuous improvements. PUPR provides student housing and first-rate facilities equipped with the latest technology, creating an environment that fosters academic and research activities.

In 2021, PUPR celebrated its 55th anniversary educating competent professionals for the future. The university currently holds the highest accreditations and awards in recognition to its dedication to high-quality education and vision focused on research work and constant academic development. What started as a small academic institute focused on engineering and land surveying has successfully grown into a university with a prestigious educational curriculum.

PUPR is the private institution that graduates the largest number of Hispanic engineers in the United States, as well as the institution with the largest number of women attending Engineering programs. It has also been recognized by the non-profit organization Excelencia in Education as one of the 25 most important educational institutions and the number one graduate program for Hispanics in the United States in the fields of Science, Technology, Engineering, and Mathematics (STEM).

At present, the university has a clear vision for the future, and its academic offering continues to cater to the needs of the most in-demand careers in today's professional world.



1966

Foundation of PUPR

In 1966, agronomist Ernesto Vázquez Torres had a clear vision to establish a university in the heart of the Metropolitan Area dedicated to educating and developing professional engineers and surveyors. This led to the foundation of the Polytechnic University of Puerto Rico (PUPR).

1973

New Bachelor's Degrees

PUPR starts offering its first bachelor's degrees in Civil Engineering and Land Surveying, becoming the first institution to offer this type of degree in the Metropolitan Area of Puerto Rico.

1977

Night Classes

The institution extends its class schedules to evenings and Saturdays, making it possible for students to work during the day while completing their education in a practical and effective way.

2009

Plasma Laboratory

The first and only plasma laboratory in Puerto Rico is inaugurated.

2003

Orlando Campus

PUPR continues growing its presence in the continental U.S. with the inauguration of its second campus in the state of Florida.

2011

New Online Master's Degree

A new online master's degree program in Management Engineering (MEM) is introduced.

2013

Aerospace Laboratory

The only aerospace laboratory in Puerto Rico and the Caribbean is inaugurated, featuring MOTUS 6221, a full-motion flight simulator.

Five Major Schools

Five major schools help shape the future of thousands of professionals: School of Engineering, Surveying, and Geospatial Science; School of Architecture; School of Management and Entrepreneurship; School of Arts, Sciences, and Education; and the Graduate School.

2023

100%-Online Bachelor's Degrees

PUPR launches 100%-online degree programs in Environmental Engineering and Computer Engineering.

Awards

The PUPR team earns three awards in the categories of Finalists, Best Video, and Champions at the U.S. Department of Energy Algae Prize Competition.

2022

100%-Online Bachelor's Degrees

PUPR launches the 100%-online Computer Science program.

ACI Award

PUPR receives an award from the American Concrete Institute (ACI) – the only higher education institution in Puerto Rico to receive such recognition. PUPR has been awarded this reputable distinction on seven different occasions between 2013 and 2018.

1980

MSCHE Accreditation

PUPR is accredited by the Middle States Commission on Higher Education for its first academic programs: Industrial Engineering, Electrical Engineering, Mechanical Engineering, and Business Administration.

1986

Acquisition of the Juliá Building

PUPR acquires the iconic building known as Clínica Juliá, located at the heart of Hato Rey.

2001

Miami Campus

At the turn of the millennium, the Polytechnic University expands to Miami, offering the same academic excellence to students in the U.S.

1992

First Graduate Program

The institution is authorized to offer a graduate program for the first time.

2014

Doctorate Degree & High-Power Rocket Launch

PUPR introduces the first laboratory and doctoral degrees in Engineering and Applied Sciences in Puerto Rico. It also became the first local university to develop and launch a high-power rocket.

2015

Formula Car

PUPR becomes the first university in Puerto Rico to develop an electric Formula car to compete in the Formula SAE West event.

2021

100%-Online Bachelor's Degrees

PUPR launches 100% online degree programs in Biomedical Engineering, Industrial Engineering, Environmental Engineering, and Computer Science Engineering.

2016

Biomedical Engineering

The first Bachelor of Science in Biomedical Engineering is instituted in Puerto Rico.



IV

STRATEGIC PLANNING

Since 2002, the Polytechnic University of Puerto Rico has conducted a systematic institutional strategic planning process. A Strategic Planning Committee led by the president of the institution, Ernesto Vázquez Martínez, developed this plan.

The Strategic Plan Team, comprised by representatives of the university's various internal organizations and interest groups, supports this committee. Consultants and external experts also assist the Committee when needed. This strategic planning cycle is based on the methodology recommended by the Society for College and University Planning (SCUP)¹, which analyzes the environment, reviews the institution's mission and vision, sets goals, and establishes strategic objectives.

From late 2021 and through the first half of 2022, a series of meetings and workshops were held to collect and analyze supporting data and develop content for this plan. We followed the STEEP analysis framework to assess our external sociological, technological, economic, environmental, and political factors.

We also performed an analysis of the higher education sector to identify trends and challenges that the organization should take into consideration for future planning. Additionally, an internal investigation was conducted to evaluate PUPR's tangible and intangible resources, as well as its organizational capabilities.

¹A Practical Guide to Strategic Planning in Higher Education, Second Edition. Karen E. Hinton, PhD

INSTITUTIONAL PHILOSOPHY



MISSION

The Polytechnic University of Puerto Rico provides opportunities to individuals from diverse backgrounds to cultivate their potential for leadership, productivity, and competitiveness with the aim of contributing to society.

PUPR achieves its mission by serving individuals from different academic, economic, geographical, and ethnic contexts through exposure to intellectual, scientific, humanistic, and technological advancement, and by applying innovative methods of delivery.

VISION

The Polytechnic University of Puerto Rico will be recognized as a regional benchmark, in the formation of professionals in engineering, architecture, business administration, and related fields, committed to providing tangible solutions to the social challenges of our time. The institution will strive to become a key catalyzer of the symbiotic relationship between the United States and Latin America.

INSTITUTIONAL GOALS

01

Contribute to regional and global socioeconomic development, supported by a capable and committed faculty, through the training of competent professionals in Architecture, Applied Sciences, Business Administration, Engineering, Mathematics, and Science Education.

02

Facilitate access to higher education through in-person and online academic programs, following a comprehensive set of quality standards and indicators.

03

Instill in PUPR graduates a genuine interest in seeking solutions to the challenges arising from society's demands and expectations.

04

Encourage the dissemination of knowledge through publications and the education process, and foster an interest in applied research.

05

Adapt existing academic programs and develop new ones to respond to the needs and realities of PUPR's constituents and society in general.

06

Promote alliances between PUPR and the industry, government, businesses, professional associations, and other universities.

07

Promote the best teaching and learning practices with the support of state-of-the-art technology.

08

Achieve long-term sustainable growth of financial resources.

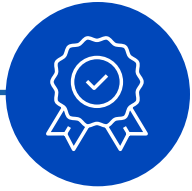
09

Promote the global and socio-cultural involvement of the PUPR community.

10

Constantly seek innovative ways to increase student retention and graduation rates and reduce the time it takes to earn a degree.

VALUES



EXCELLENCE

We provide the PUPR community with high-quality services, integrating the best practices of the higher education sector into our standard procedures.



INTEGRITY:

We are guided by honesty, respect, and truthfulness in our thoughts, words, and actions within the institutional framework.



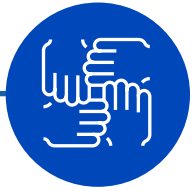
SOCIAL RESPONSIBILITY

We are committed to the development of a more just and equitable society, as well as the protection of the environment.



INNOVATION

We cultivate an attitude of continuous improvement in all our constituents to develop and offer innovative solutions to society's greatest challenges.



DIVERSITY

We embrace the inclusion of people from different cultures, genders, races, preferences, and opinions, hoping to bring different perspectives to the community.



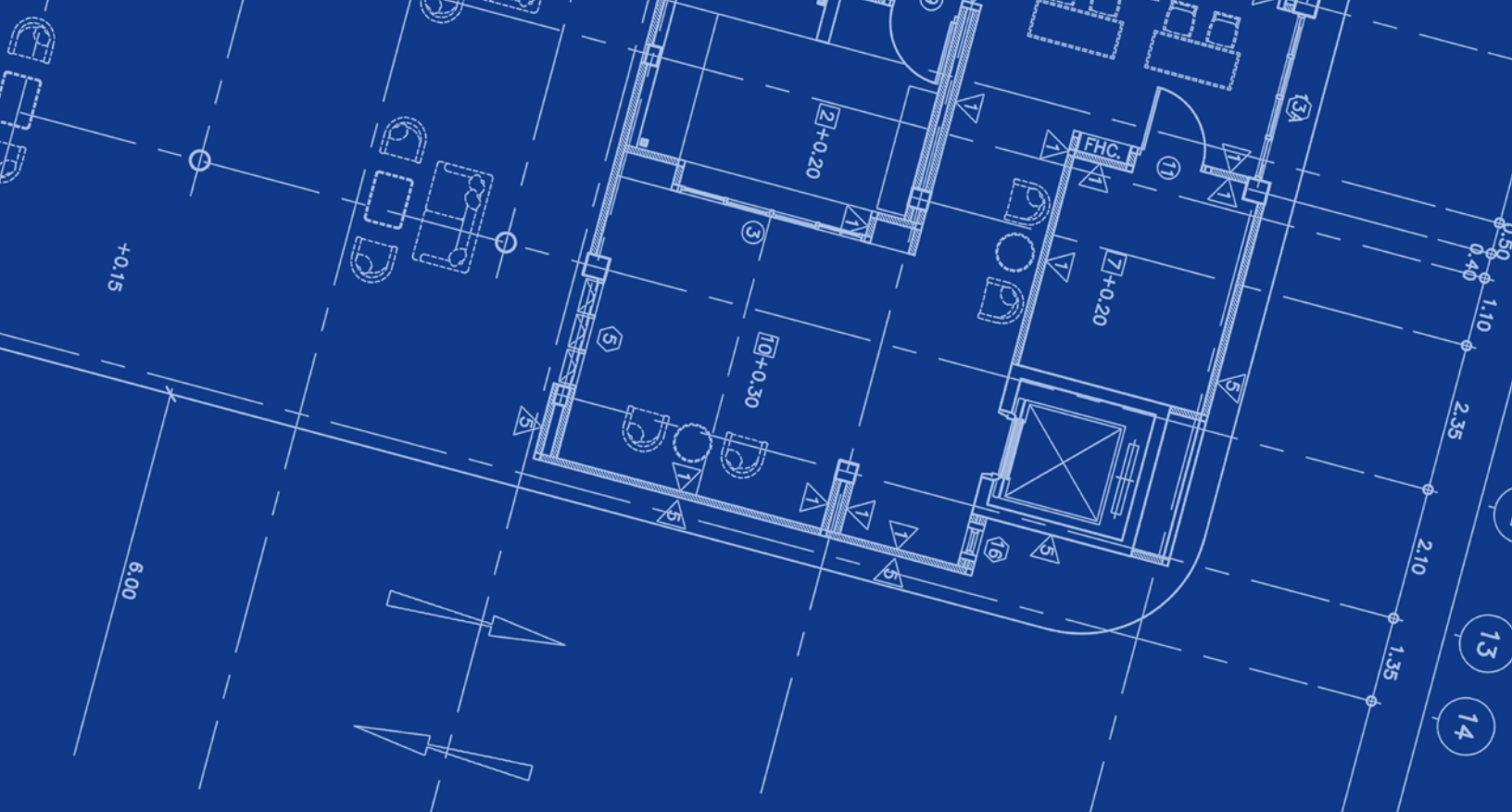
SERVICE

We promote a permanent attitude of collaboration and support towards each and every one of the university's community members.



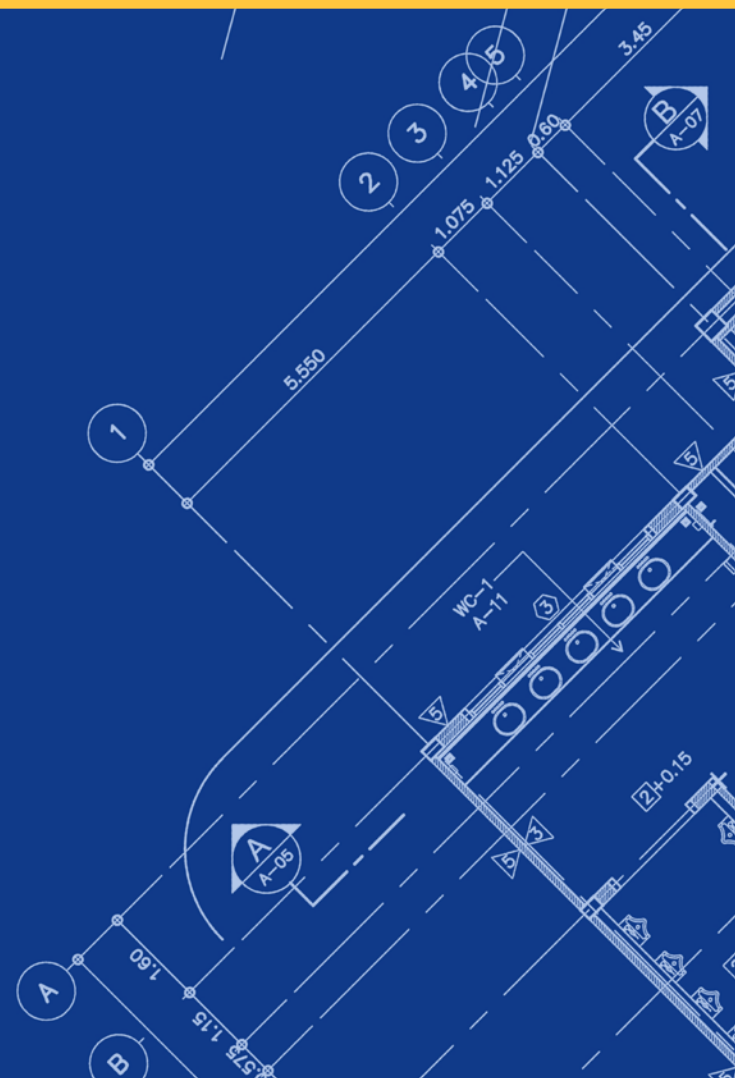
SUSTAINABILITY

We adopt practices that simultaneously promote the quality of life, the conservation of natural resources, and the profitability of operations.



VI

ANALYSIS OF EXTERNAL FACTORS



CONTEXT



Encuentro-Unión-Evolución (1993)

Sculptor: Naldo de la Loma

Located in the Fifth Centenary Square, Polytechnic University, Hato Rey, Puerto Rico

The external factors the university must consider in its analysis to make strategic decisions for the institution's future are based on its context, its environment, and recent events that have caused an impact. In Puerto Rico's case, the last five years have been characterized mainly by the recovery processes from the damages and other effects caused by hurricanes Irma and María in September of 2017. These phenomena exacerbated the island's economic, social, demographic, and governmental challenges and fueled the high rates of crime and unemployment that were already a problem since the early 2000s.

THE HIGHER EDUCATION INDUSTRY

According to *Excelencia in Education*, Puerto Rico has over 80 campuses, most of which offer 4-year undergraduate programs. Public universities within that group are more selective than private non-profit universities. In the last 20 years, there has been a 40% increase in the total number of academic certificates and degrees awarded (from 31,469 to 44,137). The cost of attending college has increased across all sectors. There is a significant gap between the amount it costs a student to attend college and the financial aid they receive. Private institutions have relied on tuition as their main source of income, while public institutions have relied primarily on state and local funding. The expenditures of public institutions are significantly higher than private institutions. Most students receive Federal Pell Grants, which have increased in amount over the past decade.



²Labandera, E., Santiago, D., and Laurel, J. (May 2021). Washington, D.C.: Excelencia in Education.

FIGURE 1 Higher Education in Puerto Rico: Conditions and Context Influencing Institutional Resilience



The total K -12 population has declined, thus affecting the amount of college applicants.



Graduation rates have risen in private institutions, while remaining stagnant in public institutions.



Full-time retention rates have increased, but the number of enrollments in institutions of higher education has decreased.



The unemployment rate in Puerto Rico is high considering the amount of people who have earned postsecondary degrees.



There is a significant gap between the student's increased cost of attendance and the grant aid they receive.

Note: Adapted from: Higher Education in Puerto Rico: Conditions and Context Influencing Institutional Resilience of Excellence in Education 2021. (<https://www.edexcelencia.org/research/infographics/higher-education-puerto-rico-conditions-and-context-influencing-institutional>).

TABLE 1 Tuition Cost Comparison with Higher Education Institutions in Puerto Rico

University	Location	Category	P.R. Resident Enrollment	Non-P.R. Resident Enrollment
Polytechnic University of Puerto Rico	Hato Rey, PR	Private Non-Profit	\$8,328*	\$8,640*
EDP University of Puerto Rico	San Juan, PR	Private Non-Profit	\$6,200	\$6,200
Ana G. Mendez University	Gurabo, PR	Private Non-Profit	\$5,820	\$5,820
Interamerican University	San Juan, PR	Private Non-Profit	\$5,292	\$8,517
University of Puerto Rico	Mayagüez, PR	Public	\$4,840	\$4,840

Note: Data obtained from College Tuition Compare. (<https://www.collegetuitioncompare.com/compare/tables/?state=PR°ree=Undergraduate&type=Public&level=4-year-or-high>, accessed on: October 10, 2023).

*Annual increase based on quarters, which implies more credits per year.

ENVIRONMENTAL FACTORS



Hurricanes Irma (Category 5) and María (Category 4) made landfall just two weeks apart, causing the collapse of Puerto Rico's entire electrical system. This left the island's population —3.2 million people— in the dark and most without drinking water. Related damages amounted to more than \$94 billion and a death toll of 2,975. Likewise, in December of 2019 and January of 2020, a series of earthquakes of considerable magnitude shook Puerto Rico's southern region, leaving a significant part of the island without power or safe shelter. In September of 2022, Hurricane Fiona battered the island with winds of up to 85 mph, which led to substantial damages in the electric power grid and disruptions in the water service. Much of Puerto Rico remained without electricity for over a week after the hurricane's impact.

DEMOGRAPHIC

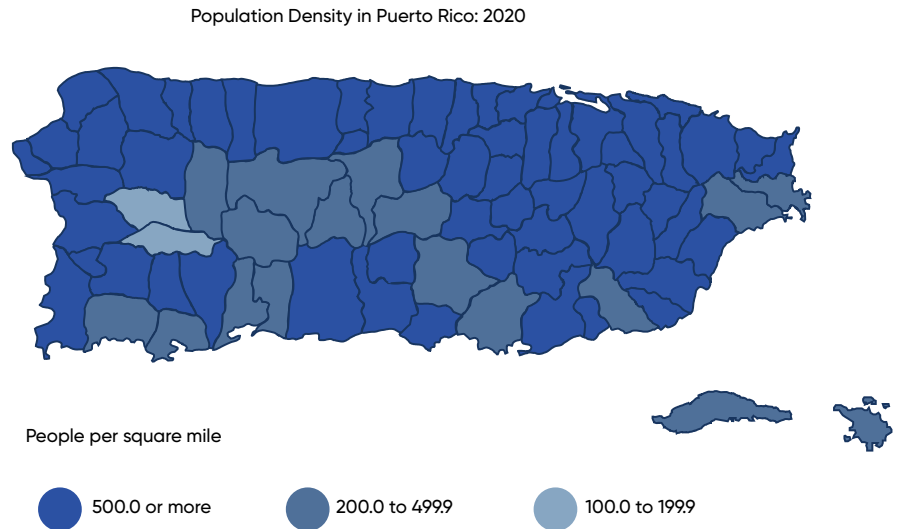
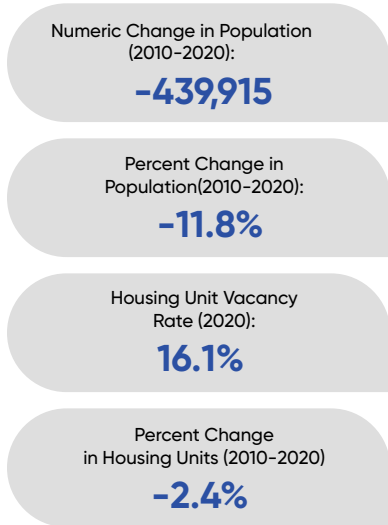
The marked decline in student enrollment in universities across Puerto Rico is a trend worth noting. Between academic years 2016–2017 and 2020–2021, the total number of university students decreased by 18.62%, from 227,255 to 184,921. This decrease is linked to the population decline registered in the island. The 2020 Census of Puerto Rico shows a decrease of 11.8%, equivalent to 493,915 people, which is related to the migration waves observed over the last decade, the consequent reduction in birth numbers, and a decline in average birth rate.



³Instituto de Estadísticas de PR. Compendio Estadístico sobre la Educación Superior de Puerto Rico, Años académicos 2001-2002 al 2020-2021.

FIGURE 2

Visualizations from the U.S. Census Bureau: Results and Main Changes in the Population of Puerto Rico



Note: Reproduced from the 2020 Census for Puerto Rico and its Municipalities from the Puerto Rico Institute of Statistics, 2020. (<https://censo.estadisticas.pr/node/499>)

Institute of Statistics of P.R. Statistical Compendium on Higher Education in Puerto Rico, Academic Years 2001-2002 to 2020-2021.

Between January 1, 2021 and December 31, 2021, only 18,439 births were registered, making it the lowest birth rate in Puerto Rico’s history, at least since the 19th century. In the last five years, there have been 103,661 births in Puerto Rico (2017 – 24,395; 2018 – 21,292; 2019 – 20,441; 2020 – 19,094; 2021 – 18,439). To put this in perspective, in 2000, there were 293,004 children in Puerto Rico under the age of 5. In 2010, the amount reduced to 223,328, a 24% decrease in children under 5 during this period. There was a 54% decrease in the amount of children under 5 between 2010 and 2021, and a 65% decrease if we compare the amount of children under 5 in Puerto Rico in 2000 with the amount in 2021.

SOCIO-CULTURAL FACTORS & THE PANDEMIC

Long before the onset of the COVID-19 pandemic, there was already concern about the increase in mental health issues in the U.S. and the need for professional emotional support for college students. A 2018 study by the American College Health Foundation found that, at any time within 12 months, 41% of students felt so depressed they found it difficult to work, and 62% felt overwhelming anxiety. In Puerto Rico, conditions had already reached critical levels due to decades of financial struggles, devastating destructions caused by the 2017 hurricanes, the massive explosion in the island's main electrical substation in 2018, and significant earthquakes in 2019 and 2020. For a whole year after the hurricanes, power blackouts remained so prevalent in Puerto Rico that a state of disaster preparedness felt like the new and permanent norm. Going back to business as usual in the island seemed impossible in such uncertain conditions, which consequently affected the mental health of its residents.

TABLE 2 AMSSCA, Statistical Report of Clients Served until June of Fiscal Year 2019-2020

Service	People
Integrated Crisis Intervention Program - PAS Line (calls received)	310,655
Mobile Crisis Response Team ¹	268
Emergency Room of the General Psychiatric Hospital of Rio Piedras	1,374
Emergency Room for Children and Adolescents of the CSMC of Bayamón ²	601

1. The program stopped offering services in March of 2020, since the governor of Puerto Rico issued an executive order in response to the COVID-19 pandemic control. As of May 5, 2020, the due date for the monthly report, the program has not yet resumed services. The data shown is for March 2020.

2. The Emergency Room of the CSMC of Bayamón closed operations in March of 2020. The data shown is for March 2020.

Note. Adapted from Monthly statistical report of clientele served in the ASSMCA service programs until June of 2020. AMSSCA, 2023. (<https://assmca.pr.gov/estadistica/Ao%20Fiscal%2020192020/Clientela%20Atendida%20ASSMCA%20AF%2019-20.pdf>).

³<https://remezcla.com/lists/culture/puerto-rico-mental-health-crisis/>



The forced isolation and social distancing implemented as part of the measures to reduce the health risks of the pandemic further strained the mental health of college students. In a recent national survey among university students, an overwhelming majority (85%) said they had experienced increased stress or anxiety due to COVID-19. Additionally, researchers at Johns Hopkins University found that 24% of young adults (18 - 29 years old) reported severe psychological distress, up from 4% in April of 2018. These challenges were even more difficult for those students at the Polytechnic University that were already struggling before the onset of COVID-19. Today, experts say mental health among Puerto Rico's youth is declining at an alarming rate.

In March of 2020, due to the COVID-19 pandemic and in an effort to mitigate health risks, the government of Puerto Rico issued an island-wide order to cease all in-person operations, which was extended until July of 2021. Currently, as the nation slowly starts working to regain normalcy, Puerto Rico has fallen significantly behind in pandemic recovery efforts and continues to suffer the ravages of natural phenomena.

³ <https://www.rand.org/blog/2020/10/college-students-need-mental-health-support.html>

⁵ <https://www.latinorebels.com/2022/08/22/mentalhealthpuertoricoyouth/>

⁶ <https://www.rand.org/blog/2020/10/college-students-need-mental-health-support.html>

POLITICAL CONTEXT

Puerto Rico’s political context from 2017–2021 is characterized by the governor’s resignation in August of 2019. An extraordinary popular uprising and a looming impeachment process derailed his term in office. The attorney general at the time was appointed as acting governor and served for the remainder of the term. On November 3, 2020, Puerto Rico elected a new governor in general elections and swore him into office on January 2, 2021.

As for the political context in the U.S., the presidency during 2017–2021 was held by a member of the Republican Party. Then, in the 2020 presidential elections, the nation opted for a change of political party and chose a Democrat, whose presidency began on January 20, 2021.



INFUSION OF FEDERAL FUNDS



The Democratic Party's administration established a budget that includes substantial increases to existing priorities in higher education, as well as significant investments in new programs, which have been outlined in the Build Back Better Act. The maximum Pell Grant amount is expected to increase by \$2,175 over the current amount, raising the annual maximum to \$8,670. The end goal is to double the maximum Pell Grant by 2029.

The plan also extends federal student aid to cover Pell Grant eligibility for Deferred Action for Childhood Arrivals (DACA) recipients, commonly known as Dreamers. It also increases funding for a more inclusive higher education, providing \$752 million more than the amount allocated in 2021. This funding includes a \$450-million initiative to expand research and development infrastructure at 4-year Historically Black Colleges and Universities (HBCU), Tribally Controlled Colleges and Universities (TCCU), and Minority Serving Institutions (MSI).

The current president has also proposed to create a new educational track aimed at career readiness. Its budget envisions an initial investment of \$200 million in Career-Connected High Schools, an initiative that involves awarding competitive grants to alliances between local education agencies, higher education institutions (including community colleges), and employers, to support early enrollment in postsecondary education and career-related courses; work-based learning opportunities; and academic and career-related training during the last two years of high school and the first two years of postsecondary education. It also includes substantial increases for TRIO, GEAR UP, and other programs designed to improve student retention and graduation; an additional \$800 million to improve services for student loan borrowers; and significant funding increases for agencies that support university research, such as the National Institutes of Health and the National Science Foundation.

VII

ANALYSIS OF INTERNAL FACTOR

INSTITUTIONAL PROFILE

The Polytechnic University of Puerto Rico (PUPR) is a private, non-profit institution of higher education.

It is the island's largest private Hispanic-Serving Institution (HSI) specializing in engineering.

With its main campus in San Juan, Puerto Rico, PUPR is an urban university nestled in the heart of the financial district (also known as Milla de Oro). Since its inception, PUPR has specialized in the technical professions of Engineering and Land Surveying, as well as Architecture since 1995. It also offers undergraduate and graduate programs in Business Administration and Education. In 2001, PUPR expanded its offering, establishing two campuses in the cities of Orlando and Miami, in Florida.



RECOGNITIONS AND ACCREDITATIONS

PUPR is accredited by the Middle States Commission on Higher Education (MSCHE) and authorized by the Board of Postsecondary Institutions of Puerto Rico (JIP, by its acronym in Spanish). The university now offers 47 academic degree options, including four associate degrees, 20 bachelor's degrees, 22 master's degrees, and a doctoral degree. Approximately 80% of all PUPR students are enrolled in one of its eight engineering and surveying programs, all of which have been accredited by the Accreditation Board for Engineering and Technology (ABET), making PUPR the largest provider of ABET-accredited programs among all institutions in Puerto Rico, as well as the leader in the production of Hispanic engineers among private institutions.



PUPR has also been recognized by the American Society for Engineering Education (ASEE) as a leading engineering degree-granting institution for Hispanics and has ranked 3rd every year since 2013 among the 350 postsecondary institutions in the U.S. that grant engineering degrees to Hispanics (as well as 1st among the private institutions). ASEE ranks PUPR among the main institutions that award Bachelor of Science Degrees in Industrial, Electrical, and Computer Engineering regardless of student ethnicity. In 2021, the JIP authorized PUPR to offer the Industrial Engineering and Biomedical Engineering programs fully online. This milestone made us one of the few institutions worldwide to offer an entirely online ABET-accredited Bachelor of Science in Industrial Engineering.

INTEGRATING AND EMPOWERING EDUCATIONAL TECHNOLOGY



In recent years, PUPR has invested significant resources to expand its online education and student support capabilities, allowing the university to weather the unprecedented COVID-19 pandemic better than many other postsecondary institutions. In fact, in the fall of 2020, when many institutions were experiencing overwhelming drops in student enrollment, PUPR experienced an increase..

In March of 2020, PUPR converted all in-person courses to synchronous remote lectures through Blackboard Collaborate Ultra.

Faculty members received formal training on the basics of Blackboard Learn, including the effective use of Blackboard Collaborate Ultra, to assist them in synchronous teaching. Moreover, the advanced training focused on active learning strategies and technology-enhanced student-centered learning techniques. All faculty members were required to approve their evaluations as part of a certification process conducted at three levels: basic, intermediate, and advanced.

As part of this process, all student support services were made available online, including, but not limited to: Admissions, Registration, Financial Assistance, Treasury, Counseling, Library, and COOP. This also included online tutoring in Mathematics, Economic Engineering, and Probability and Statistics.

In 2021 and early 2022, further progress was made by converting 100 traditional classrooms into smart classrooms. These smart rooms allow professors to reach students, both remotely and in-person, through synchronous sessions, which can be recorded for their benefit. Upon completion of this project, the university will have a total of 110 of these smart rooms, including several lecture halls.

The hasty transition of our education services to a fully remote modality in March of 2020 also revealed infrastructure gaps that needed to be addressed. Now more than ever, PUPR understands that holding its place as one of the top Engineering schools among Hispanic-serving institutions will require expanding and upgrading its distance learning capabilities, investing in innovative educational technology, and diversifying student support services. The need to forge ahead with proactive efforts to make STEM educational programs more accessible to underrepresented minorities has never been greater, and few institutions are as prepared as PUPR to take on this challenge

.

STUDENT PROFILE



The data show that our student profile (72% male) still reflects the goals inspired the foundation of this institution. The focus continues to be local and active students (32% over 24 years old) who have significant responsibilities in their family and work environment and wish to complete their studies. These students look for flexible academic offerings (schedule and distance), as well as financial assistance. High school students (79% with a GPA of 3.00 to 4.00) want to pursue undergraduate studies with the financial support, infrastructure, technology, and academic services that will help them complete their degree.

Regarding financial assistance, for fall 2021, 62.8% of students received federal financial aid in the fall of 2021 and 75.5% received some need-based assistance, with 99.3% self-identifying as Hispanic or Latino. PUPR prioritizes access for high-need students in all of its academic programs. A significant percentage of these students are low-income and receive need-based assistance, and approximately 80.0% attend PUPR's evening and weekend classes, as well as online and hybrid courses. PUPR plays a unique role in Puerto Rico, allowing low-income students to access high-quality education

Our students also have great interest in flexible schedules, which is reflected in an increase in the use of online courses. Undergraduate students have access to a combination of in-person and online courses, but graduate students prefer the online modality.

Enrollment Data

Table 4 shows that the Polytechnic University's total undergraduate enrollment for fall 2021 was 3,687 students, of which 80.2% were enrolled in Engineering programs. However, among graduate students, a total of 565 (47.8%) were enrolled in Engineering programs during this same period.

The total admittance for this term was 626 students, including new admissions (440) and transfers (226). Newly admitted students represented the highest percentage, 70.2%, versus transfers, which amounted to 29.8%. According to the data on newly admitted students who just graduated high school, the majority of new students came from private school (55.0%). The geographic region shows interesting contrasts as well. Table 3 shows that, among students from private schools, a higher percentage comes from the Metropolitan Area. This is not the same among students from public schools who come primarily from schools outside of the metropolitan area of San Juan.

Polytechnic University Student Profile Graphs and Charts

TABLE 3

Comparison of Newly Admitted Students in the San Juan Campus: Public School vs Private School

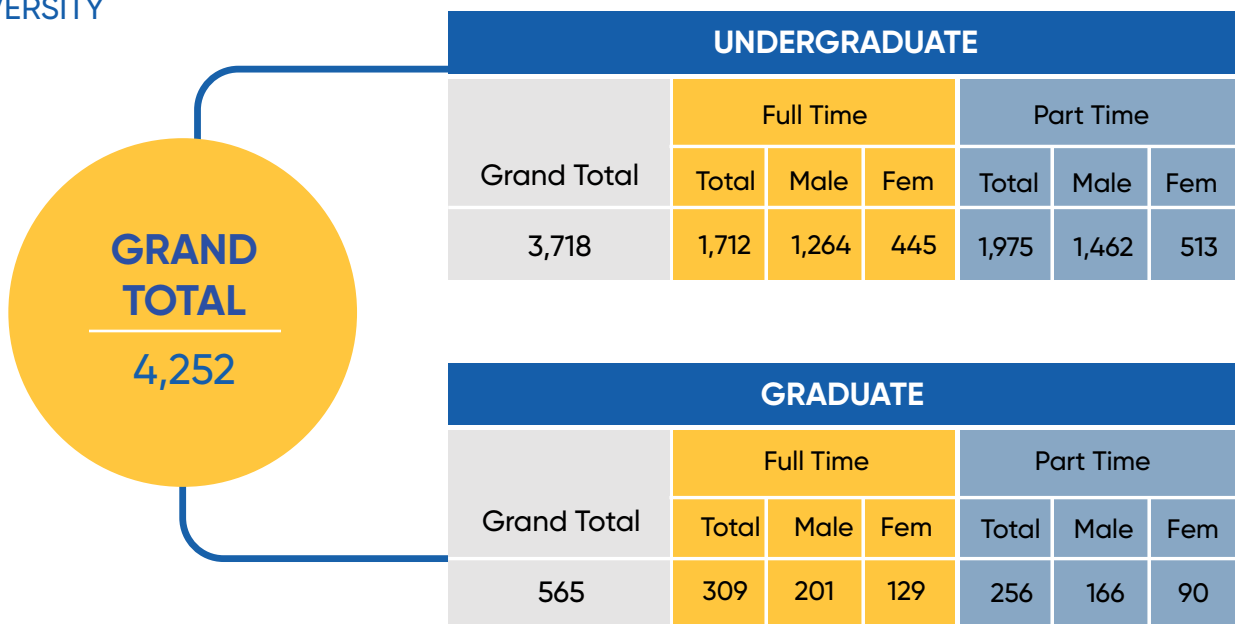
Student School	Area	Quantity	Total
PRIVATE	Metropolitan	133	240
	Non-Metropolitan	107	
PUBLIC	Metropolitan	66	200
	Non-Metropolitan	134	

Note: Information obtained from Fall 2021 data compiled by the Vice Presidency of Enrollment Management and Student Services.

TABLE 4

Enrollment by Level, Sector, Task, and Gender in All Three Campuses (1st academic session 2021-2022)

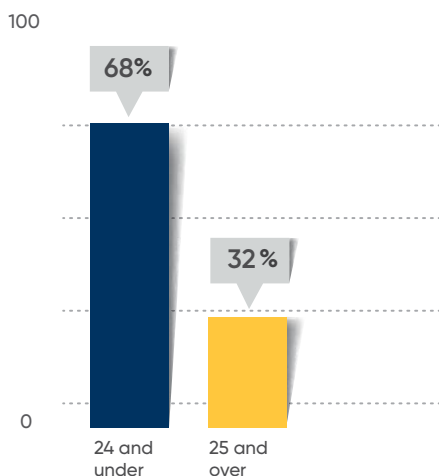
POLYTECHNIC UNIVERSITY



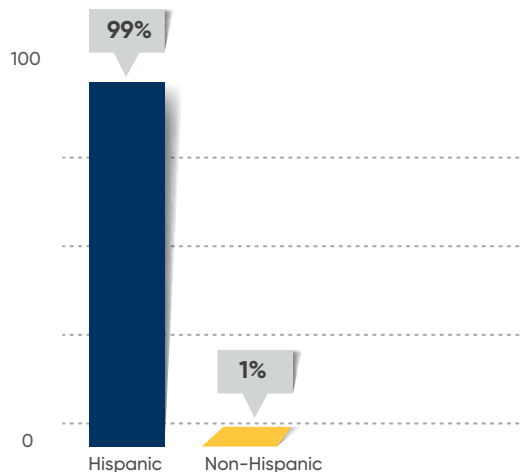
Note: Reproduced from Enrollment Fall 2021 from IES NCES National Center for Education Statistics, 2022. (<https://nces.ed.gov/collegenavigator/?q=Puerto+Rico&s=all&pg=3&id=243577#enrolmt>)

FIGURE 3 Age of Students at Polytechnic University, San Juan Campus

UNDERGRADUATE STUDENT AGE



UNDERGRADUATE STUDENT RACE

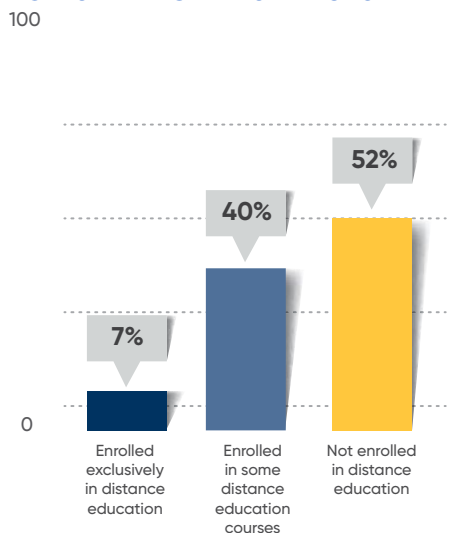


Age data are reported for Fall 2021. Residence data are reported for first-time degree/certificate-seeking undergraduates.

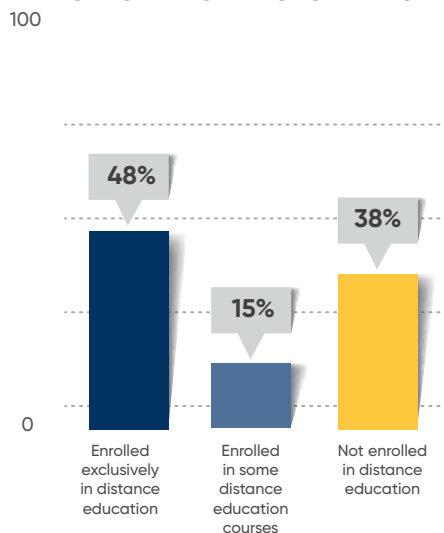
Note: Reproduced from Enrollment Fall 2021 from IES NCES National Center for Education Statistics, 2022. (<https://nces.ed.gov/collegenavigator/?q=Puerto+Rico&s=all&pg=3&id=243577#enrolmt>)

FIGURE 4 Education modality selected by students, Puerto Rico Campus

DISTANCE EDUCATION STATUS FOR UNDERGRADUATE STUDENTS



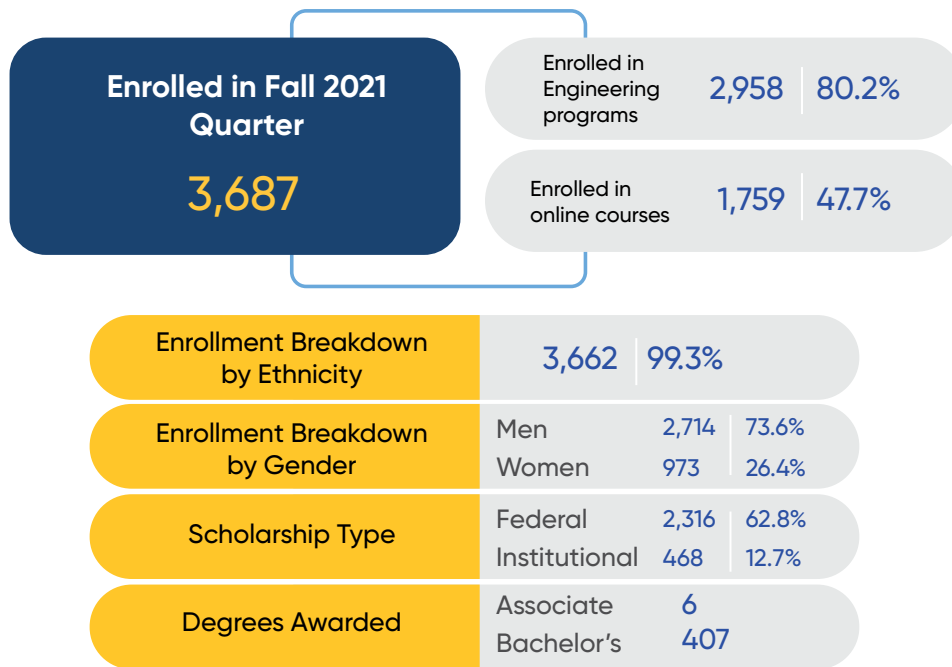
DISTANCE EDUCATION STATUS FOR GRADUATE STUDENTS



The information origin is reported for first-time, degree seeking undergraduate students, for Fall 2020

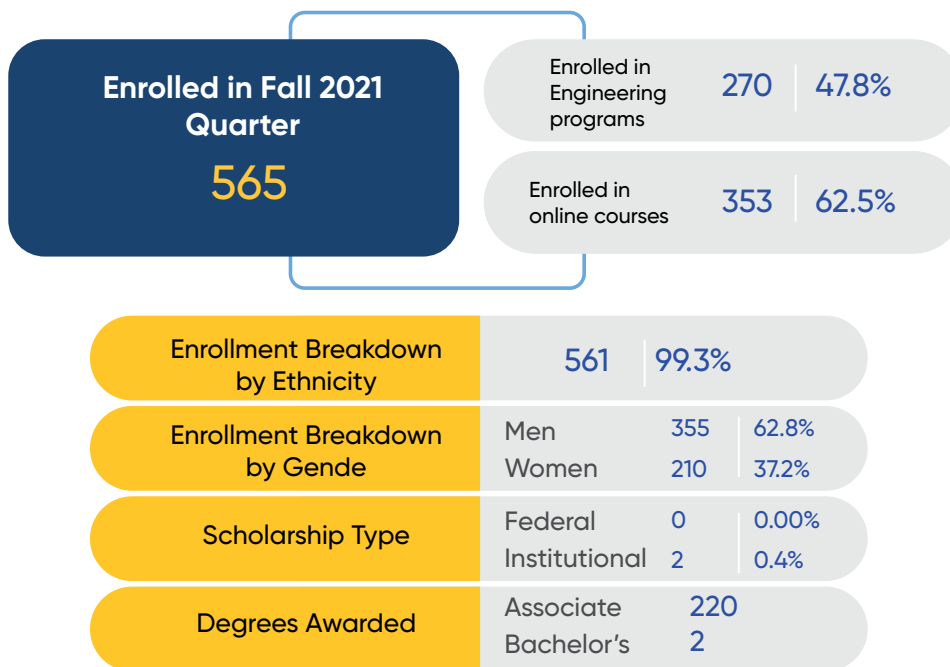
Note: Reproduced from Distance Education Status from IES NCES National Center for Education Statistics, 2022. (<https://nces.ed.gov/collegenavigator/?q=Puerto+Rico&s=all&pg=3&id=243577#enrolmt>).

TABLE 5 PUPR San Juan Campus Undergraduate Student Profile: Fall 2021



IPEDS 2022; PUPR Institutional Data, 2021-2022

TABLE 6 PUPR San Juan Campus Student Profile: Fall 2021



IPEDS 2022; PUPR Institutional Data, 2021-2022

FACULTY PROFILE



Faculty Members: Alex Vélez (Biomedical Engineering) Dr. María Sandoval (Industrial Engineering), Omar Movil (Chemical Engineering), Diolinete Gerena (Mechanical Engineering), Dr. Héctor Cruzado (Environmental Engineering)

The PUPR full-time faculty have academic responsibilities that perfectly align with their professional qualifications. Approximately 38% of faculty members have doctoral degrees, and 58% hold master's degrees. A significant percentage of the faculty speaks Spanish and English fluently, and 97% are Hispanic. PUPR is also fortunate to benefit from the specialized expertise of assistant professors, who are active professionals in various fields of Engineering, Business Administration, and Science.

TABLE 7 Faculty Profile: Fall 2021

PUPR Faculty Profile - Fall 2021			
Schools	Full-Time Faculty	Part-time Faculty	Total
Engineering	74	60	134
Architecture	13	21	34
Business Administration	11	12	23
Arts and Sciences	43	15	58
Total	141	108	249

Note: IPEDS 2022; PUPR Institutional Data, 2021-2022



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VIII

PUPR'S STRATEGIC PLAN

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THE POLYTECHNIC UNIVERSITY'S PATH TO SUCCESS

GOALS OF THE 2022-2027 STRATEGIC PLAN

01

Develop a student-centered culture that promotes their success
9 OBJECTIVES

02

Foster an ecosystem of creativity, innovation, research, and entrepreneurship
8 OBJECTIVES

03

Advance a comprehensive institutional agenda for internationalization
9 OBJECTIVES

04

Expand our relations with the community, the industry, and the government
6 OBJECTIVES

05

Strengthen our financial position, sustainability, and the responsible management of institutional resources
9 OBJECTIVES

MISSION

The Polytechnic University of Puerto Rico provides opportunities to individuals from diverse backgrounds to cultivate their potential for leadership, productivity, and competitiveness with the aim of contributing to society.

PUPR achieves its mission by serving individuals from different academic, economic, geographical, and ethnic contexts through exposure to intellectual, scientific, humanistic, and technological advancement, and by applying innovative methods of delivery.

VISION

The Polytechnic University of Puerto Rico will be recognized as a regional benchmark, in the formation of professionals in engineering, architecture, business administration, and related fields, committed to providing tangible solutions to the social challenges of our time. The institution will strive to become a key catalyzer of the symbiotic relationship between the United States and Latin America.

STRATEGIC GOAL I

DEVELOP A STUDENT-CENTERED CULTURE THAT PROMOTES THEIR SUCCESS

- 1.1 Formalize and promote the Polytechnic University learning model
- 1.2 Develop and implement the structure for an institutional student retention and advancement program
- 1.3 Establish a faculty development program
- 1.4 Establish and strengthen performance management systems (faculty, administrators, and staff)
- 1.5 Update our classrooms and academic facilities to support the university learning model
- 1.6 Expand our academic offering with a special focus on micro-credentials
- 1.7 Upgrade and expand the network of career opportunities for our students
- 1.8 Encourage our students and alumni in regulated fields to obtain their professional licenses
- 1.9 Establish a recruitment program to find outstanding students

STRATEGIC GOAL II

FOSTER AN ECOSYSTEM OF CREATIVITY, INNOVATION, RESEARCH, AND ENTREPRENEURSHIP

- 2.1 Build interdepartmental academic networks of faculty and students
- 2.2 Promote the establishment of multidisciplinary research and development events
- 2.3 Recruit/Support the development of research professors
- 2.4 Build facilities that support research and innovation
- 2.5 Promote, incentivize, and support the development of patents
- 2.6 Establish a recognition system for peer-reviewed publications
- 2.7 Create an accelerator-incubator business program
- 2.8 Develop flexible curricular alternatives that will promote specializations, entrepreneurship, and research

STRATEGIC GOAL III

ADVANCE A COMPREHENSIVE INSTITUTIONAL AGENDA FOR INTERNATIONALIZATION

- 3.1** Incorporate international and intercultural aspects into our teaching, research, and service activities
- 3.2** Develop fully bilingual (Spanish/English) academic offerings
- 3.3** Actively participate in international higher education rankings (both general and discipline-specific, e.g., Q.S. and Financial Times)
- 3.4** Accredit our academic programs
- 3.5** Establish international alliances/consortia with partner universities
- 3.6** Develop and promote our academic offerings internationally (Florida campuses, Caribbean, online)
- 3.7** Create an international student recruitment and service program (in-person/remote)
- 3.8** Increase the recruitment of international professors
- 3.9** Encourage faculty exchanges (incoming and outgoing) by establishing of a visiting professor program

STRATEGIC GOAL IV

EXPAND OUR RELATIONS WITH THE COMMUNITY, THE INDUSTRY, AND THE GOVERNMENT

- 4.1** Revitalize and strengthen the alumni association
- 4.2** Build alliances/consortia with partner companies (locally and internationally) and government agencies
- 4.3** Develop customized training program services for corporations and government agencies
- 4.4** Stimulate an alignment between students' capstone and research projects and the problem-solving needs of the community, the industry, and the government
- 4.5** Create programs to encourage community participation in cultural, educational, and sports activities
- 4.6** 4.6 Establish alliances with specialized schools

STRATEGIC GOAL V

STRENGTHEN OUR FINANCIAL POSITION, SUSTAINABILITY, AND THE RESPONSIBLE MANAGEMENT OF INSTITUTIONAL RESOURCES

- 5.1** Implement a debt burden reduction program service
- 5.2** Create a commercial and campus services office
- 5.3** Strengthen the fundraising office
- 5.4** Formalize and develop an organizational culture of continuous improvement
- 5.5** Establish a development plan for human resources (managers and staff)
- 5.6** Implement a balanced scorecard management system
- 5.7** Reengineer and continuously improve business processes
- 5.8** Implement a sustainability program
- 5.9** Improve the resources of the Sponsored Research Office to attract external funds

STRATEGIC GOAL



DEVELOP A STUDENT-CENTERED CULTURE THAT PROMOTES THEIR SUCCESS

The Polytechnic University of Puerto Rico recognizes that societies are in constant transformation, which results in significant changes in the way that students learn. To achieve this goal, we focus on shifting our classrooms from a traditional learning structure to a student-centered culture. This approach will allow us to implement an academic philosophy that places learners at the center of our institutional processes. This requires leaving behind traditional content-focused techniques where students were mere receivers of the information. All our students will become the centerpiece of their learning processes and actively participate in their education.

STRATEGIC GOAL

DESCRIPTION

1.1 FORMALIZE AND PROMOTE THE POLYTECHNIC UNIVERSITY LEARNING MODEL

This focuses on the development of an academic document outlining the cognitive models and theoretical constructs, derived from educational and learning theories, that help implement specific teaching and learning strategies in accordance with Polytechnic University's philosophy on education. This document should cover the different aspects involved in the teaching-learning cycle and provide tools for educators to use as part of their instructional practice to enhance their effectiveness.

1.2 DEVELOP AND IMPLEMENT THE STRUCTURE FOR AN INSTITUTIONAL STUDENT RETENTION AND ADVANCEMENT PROGRAM

This initiative will integrate support programs and services that complement the student's college life and academic experience. The program center's main objective will be to boost satisfactory academic progress and the integral development of students, positively impacting retention, persistence, and graduation rates.

1.3 ESTABLISH A FACULTY DEVELOPMENT PROGRAM

This program will coordinate a series of activities designed to help faculty members improve their professional and teaching skills, which are vital to the performance of their teaching, research, and administrative duties.

1.4 ESTABLISH AND STRENGTHEN PERFORMANCE MANAGEMENT SYSTEMS (FACULTY, ADMINISTRATORS, AND STAFF)

This initiative endeavors to establish a systematic approach to measuring the performance of both faculty and administrative employees. It must align the institution's mission, vision, goals, and objectives with the available resources, systems, and established priorities.

1.5 UPDATE OUR CLASSROOMS AND ACADEMIC FACILITIES TO SUPPORT THE UNIVERSITY LEARNING MODEL

This includes performing the necessary adaptations and upgrades in our learning spaces and classrooms to guarantee that they meet the requirements to implement the institution's educational model.

1.6 EXPAND OUR ACADEMIC OFFERING WITH A SPECIAL FOCUS ON MICRO-CREDENTIALS

This project seeks to identify the new academic offerings in demand by the labor market in Puerto Rico, the United States, and the rest of the region, as well as the interests of their respective populations.

1.7 UPGRADE AND EXPAND THE NETWORK OF CAREER OPPORTUNITIES FOR OUR STUDENTS

This project will seek to expand the network of PUPR's partner companies and institutions offering internship and employment opportunities for our students and alumni.

1.8 ENCOURAGE OUR STUDENTS AND ALUMNI IN REGULATED FIELDS TO OBTAIN THEIR PROFESSIONAL LICENSES

This initiative will coordinate information and orientation sessions, courses, and practical workshops to inform our students in regulated fields about all the requirements and strategies to obtain their professional licenses as soon as possible.

1.9 ESTABLISH A RECRUITMENT PROGRAM TO FIND OUTSTANDING STUDENTS

This program will aim to establish the institutional mechanisms necessary to attract, recruit, and retain high-performing students.

STRATEGIC GOAL



FOSTER AN ECOSYSTEM OF CREATIVITY, INNOVATION, RESEARCH, AND ENTREPRENEURSHIP

Universities play a decisive role in the human, technological, and financial development of their respective countries. Their contributions to society largely depend on the drive that higher education institutions manage to generate among their stakeholders (students, teachers, and administration). Therefore, part of our efforts over the coming years will focus on establishing the necessary infrastructure to encourage the interaction and collaboration between teachers and students from different fields, departments, and schools. The Polytechnic University of Puerto Rico believes that these interactions will lead to a significant increase in the number of innovative multidisciplinary projects to deliver practical solutions for the challenges faced by modern society.

STRATEGIC GOAL

DESCRIPTION

2.1 BUILD INTERDEPARTMENTAL ACADEMIC NETWORKS OF FACULTY AND STUDENTS

This initiative will develop multidisciplinary communities of practice, involving faculty members from different schools and departments in assigning collaborative academic projects to their students.

2.2 PROMOTE THE ESTABLISHMENT OF MULTIDISCIPLINARY RESEARCH AND DEVELOPMENT EVENTS

This initiative will develop multidisciplinary communities of research and development, involving faculty members from different schools and departments to collaborate in research and development projects for patentable inventions.

2.3 RECRUIT/SUPPORT THE DEVELOPMENT OF RESEARCH PROFESSORS

This program will serve as an incentive for an increasing number of faculty members to conduct research activities. It will also support and promote the training of faculty members who wish to develop their research skills as well as the recruitment of new faculty members with a strong background in academic research.

2.4 BUILD FACILITIES THAT SUPPORT RESEARCH AND INNOVATION

This initiative will identify external and internal resources to develop new research and development facilities aligned with the institution's strengths.

2.5 PROMOTE, INCENTIVIZE, AND SUPPORT THE DEVELOPMENT OF PATENTS

This program will promote the development of patentable inventions by providing guidance on the requirements and processes of registering a patent.

2.6 ESTABLISH A RECOGNITION SYSTEM FOR PEER-REVIEWED PUBLICATIONS

This initiative will allow the institution to publicly recognize faculty members who successfully publish their work in peer-reviewed scientific journals.

2.7 CREATE AN ACCELERATOR-INCUBATOR BUSINESS PROGRAM

This project will create a space to support our students, alumni, and community members in Hato Rey who wish to receive advice and tools for creating and developing a business.

2.8 DEVELOP FLEXIBLE CURRICULAR ALTERNATIVES THAT WILL PROMOTE SPECIALIZATIONS, ENTREPRENEURSHIP, AND RESEARCH

This initiative will create new areas of curricular emphasis and promote the integration of our existing offerings, seeking a comprehensive education for our graduates.

STRATEGIC GOAL



ADVANCE A COMPREHENSIVE INSTITUTIONAL AGENDA FOR INTERNATIONALIZATION

Globalization has brought opportunities and challenges to higher education institutions all around the world. In the case of Puerto Rico, it has introduced a new challenge to the sustainability of its local institutions due to the rising global competition in terms of academic offerings that are appealing to new students. In view of this, the Polytechnic University of Puerto Rico has decided to develop projects to capitalize on the opportunities that globalization brings to higher education. These projects entail opening our scope, which is currently focused on a local region (i.e., Puerto Rico), to a broader international landscape, with the main goal of being recognized as a leading technical university in the Caribbean.

STRATEGIC GOAL

DESCRIPTION

3.1 INCORPORATE INTERNATIONAL AND INTERCULTURAL ASPECTS INTO OUR TEACHING, RESEARCH, AND SERVICE ACTIVITIES

The objective is to conduct our curricula, research projects, and institutional services while acknowledging and showing particular respect for the cultural differences inherent in a globalized work environment.

3.2 DEVELOP FULLY BILINGUAL (SPANISH/ENGLISH) ACADEMIC OFFERINGS

This project will develop offerings for different academic levels, 100% in both Spanish and English, to serve the Hispanic and English-speaking markets.

3.3 ACTIVELY PARTICIPATE IN INTERNATIONAL HIGHER EDUCATION RANKINGS (BOTH GENERAL AND DISCIPLINE-SPECIFIC, E.G., Q.S. AND FINANCIAL TIMES)

This initiative will place the university in the international rankings that define us on equal terms of academic quality as our competitors in the region.

3.4 ACCREDIT OUR ACADEMIC PROGRAMS

This initiative will seek specialized professional accreditation of all our academic programs.

3.5 ESTABLISH INTERNATIONAL ALLIANCES/CONSORTIA WITH PARTNER UNIVERSITIES

This initiative seeks to establish operational academic alliances of institutional interest, in alignment with our mission and vision.

3.6 DEVELOP AND PROMOTE OUR ACADEMIC OFFERINGS INTERNATIONALLY (FLORIDA CAMPUSES, CARIBBEAN, ONLINE)

This project will address the need to promote our academic offerings in other markets.

3.7 CREATE AN INTERNATIONAL STUDENT RECRUITMENT AND SERVICE PROGRAM (IN-PERSON/REMOTE)

This program will aim to recruit, serve, and provide quality education to international students, both in-person and remotely.

3.8 INCREASE THE RECRUITMENT OF INTERNATIONAL PROFESSORS

This initiative will seek to recruit faculty members of different national origins, thus strengthening the diversity of our academic perspectives and of the university community.

3.9 ENCOURAGE FACULTY EXCHANGES (INCOMING AND OUTGOING) BY ESTABLISHING OF A VISITING PROFESSOR PROGRAM

This initiative will promote the exchange of faculty members in both ways –to and from partner institutions,– seeking to enrich our teaching practices.

STRATEGIC GOAL

IV

EXPAND OUR RELATIONS WITH THE COMMUNITY, THE INDUSTRY, AND THE GOVERNMENT

The Polytechnic University of Puerto Rico recognizes that organizations are part of a community. We must be good corporate citizens and accept our civic duty of getting involved in the welfare of our community. In the following years, we will redouble the support we provide, as a higher education institution, to our neighboring community. We also recognize that university-industry and university-government relationships are critical to developing a nationwide ecosystem of innovation. Therefore, we will establish programs to bolster our relationships with the different industries and government agencies to continue contributing to Puerto Rico's prospects for development.

STRATEGIC GOAL

DESCRIPTION

4.1 REVITALIZE AND STRENGTHEN THE ALUMNI ASSOCIATION

This initiative will revitalize the Polytechnic Alumni Association, developing a sense of belonging to the university community beyond the campus classrooms.

4.2 BUILD ALLIANCES/ CONSORTIA WITH PARTNER COMPANIES (LOCALLY AND INTERNATIONALLY) AND GOVERNMENT AGENCIES

This initiative seeks to establish operational alliances between academia, business, and the government in alignment with our institutional capabilities and our mission and vision.

4.3 DEVELOP CUSTOMIZED TRAINING PROGRAM SERVICES FOR CORPORATIONS AND GOVERNMENT AGENCIES

This initiative seeks to provide custom-made training services for corporate and government entities.

4.4 ESTIMULATE AN ALIGNMENT BETWEEN STUDENTS' CAPSTONE AND RESEARCH PROJECTS AND THE PROBLEM-SOLVING NEEDS OF THE COMMUNITY, THE INDUSTRY, AND THE GOVERNMENT

This project will establish ongoing collaborations with industrial and governmental entities so that our students may develop capstone projects based on the community's actual needs.

4.5 CREATE PROGRAMS TO ENCOURAGE COMMUNITY PARTICIPATION IN CULTURAL, EDUCATIONAL, AND SPORTS ACTIVITIES

This program will offer cultural, educational, and sports activities for the enjoyment of community residents near our campuses.

4.6 ESTABLISH ALLIANCES WITH SPECIALIZED SCHOOLS

This initiative will implement cooperation agreements with higher education schools specializing in subjects that align with our academic departments.

STRATEGIC GOAL



STRENGTHEN OUR FINANCIAL POSITION, SUSTAINABILITY, AND THE RESPONSIBLE MANAGEMENT OF INSTITUTIONAL RESOURCES

We will maintain and support our processes, on an ongoing and long-term basis, in the best interest of our key stakeholders and society, by implementing initiatives that enable us to simultaneously ensure excellent higher education services, maintain a financially sound institution, and protect the environment. This will require us to be creative in expanding our revenue streams and more efficient in managing our resources, all while instilling in all of our constituents a mindset of continuous improvement and raising awareness among our top executives about our responsibility to society and to future generations.

STRATEGIC GOAL

DESCRIPTION

5.1 IMPLEMENT A DEBT BURDEN REDUCTION PROGRAM SERVICE

This program will identify and develop new sources of income to strengthen the financial health of the institution.

5.2 CREATE A COMMERCIAL AND CAMPUS SERVICES OFFICE

This office will be responsible for identifying the market needs for professional and commercial services that the university could provide (faculty/consulting, infrastructure, laboratories, etc.).

5.3 STRENGTHEN THE FUNDRAISING OFFICE

This initiative will aim to further develop the office in charge of raising funds from external sources.

5.4 FORMALIZE AND DEVELOP AN ORGANIZATIONAL CULTURE OF CONTINUOUS IMPROVEMENT

This initiative will seek to develop the organization's philosophy and tools for continuous improvement.

5.5 ESTABLISH A DEVELOPMENT PLAN FOR HUMAN RESOURCES (MANAGERS AND STAFF)

This endeavor will set out a personnel development plan to keep members up to date with the necessary skills for the performance of their duties and their continuous growth within the organization, in order to improve our staff retention.

5.6 IMPLEMENT A BALANCED SCORECARD MANAGEMENT SYSTEM

This project will develop a balanced scorecard containing our institution's performance indicators to measure and monitor the achievement of our strategic goals and the effectiveness of our operations.

5.7 REENGINEER AND CONTINUOUSLY IMPROVE BUSINESS PROCESSES

This initiative will transform the university's management approach from role-based to process-based. It will seek to detect early opportunities for improvements that contribute to the continuous optimization and increased efficiency of our operations.

5.8 IMPLEMENT A SUSTAINABILITY PROGRAM

This program will develop a sustainability culture in the different interest groups in the university community.

5.9 IMPROVE THE RESOURCES OF THE SPONSORED RESEARCH OFFICE TO ATTRACT EXTERNAL FUNDS

This initiative will provide the Sponsored Research Office with the resources required to increase the volume of proposals submitted to improve our award rate.

ACKNOWLEDGEMENTS

IX

ANALYSTS OF EXTERNAL FACTORS

Dr. Rafael Aragunde Torres
**Analyst of Higher Education
in Puerto Rico**

Dr. Diómedes Christopher Sánchez
**Analyst of Trends in the Higher
Education Sector**

Dr. Ángel R. Rosa Rodríguez
Analyst of Political Context

Gustavo Vélez Pizarro
Analyst of Economic Factors

Obed Borrero Nogueras
Analyst of Technological Factors

Eng. Roberto León
Analyst of Environmental Factors

STRATEGIC PLANNING COMMITTEE

Ernesto R. Vázquez Martínez
**President
Chairperson of the Strategic
Planning Committee**

Dr. Miguel A. Riestra Fernández
**Vice President for Academic Affairs
Vice-Chairperson of the Strategic
Planning Committee**

Dr. Enrique A. Muñoz Gil
**Dean of the School of Business
Administration
Director of the Strategic Planning Committee**

Prof. Carlos A. Pérez Nuñez
**Vice President of Enrollment
and Student Services
Member of the Strategic Planning Committee**

Elsa Zayas
**Associate Vice President of Enrollment
and Student Services
Member of Strategic Planning Committee**

Dr. Miriam Pabón González
**Dean of the Graduate School
Member of the Strategic Planning Committee**

Dr. Carlos González Miranda
**Dean of the School of Engineering,
Surveying and Geospatial Science
Member of the Strategic Planning Committee**

Arch. Diana Rivera Rivera
Dean of the School of Architecture
Member of the Strategic Planning Committee

Prof. Horacio A. García Correa
**Dean of the School of Arts, Sciences,
and Education**
Member of the Strategic Planning Committee

Dr. Luis J. Delgado Cardona
Director of Orlando and Miami Campus
Member of the Strategic Planning Committee

Dr. Cuauhtémoc Godoy Vinaja
**Director of the Virtual Education and
Innovative Learning Center**
Member of the Strategic Planning Committee

Ana E. Castellano Irizarry
Director of Human Resources

Glenda Colón Ramos
**Director of Institutional Development,
Marketing, and Communications**

Rosana Vázquez Medina
**Strategic Plan Implementation
Coordinator**

Sergio Villoldo Campa
Director of Financial Aid

Pablo Salom Portela
Director of External Fund Administration

Dr. Gustavo Pacheco Crosetti
Faculty Representative

Dr. Angie M. Escalante-Santana
Administrative Employee's Representative

Militza Rosaly Meléndez
Logistics Coordinator of the Committee

Rosa M. Acosta Adrover
Secretary

CERTIFICATION

I, Ricardo Lefranc Morales, secretary of the Board of Trustees of the Polytechnic University of Puerto Rico, Inc., a non-profit corporation organized in accordance with the laws of the Commonwealth of Puerto Rico, located at 377 Ponce de León Avenue, in San Juan, Puerto Rico, hereby certify that:

At the regular meeting of the Board of Trustees of the Polytechnic University of Puerto Rico held on November 17, 2023, at its headquarters, duly convened and the corresponding quorum established, the Institutional Strategic Plan 2022-2027 was unanimously approved.

In San Juan, Puerto Rico, November 27, 2023.



Ricardo Lefranc Morales
Secretary



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