

UNIVERSIDAD POLITÉCNICA DE PUERTO RICO
SELF-STUDY REPORT
SUBMITTED TO THE MIDDLE STATES COMMISSION ON HIGHER EDUCATION

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ACRONYMS

AAP.....	Affirmative Action Programs	JIPs.....	Board of Postsecondary Institutions
ABET.....	Accreditation Board for Engineering and Technology	ISP.....	Institutional Strategic Plan
ADA.....	Americans with Disabilities	KSA.....	Knowledge, Skills, and Abilities
ADP.....	Always Designing for People	LAAB.....	Landscape Architectural Accreditation Board
AI.....	Artificial Intelligence	LAI.....	Interuniversity Athletic League
AIAS.....	American Institute of Architecture Students	MSCHE.....	Middle States Commission on Higher Education
ALO.....	Accreditation Liaison Officer	NAAB.....	National Architectural Accrediting Board
ASCE.....	American Society of Civil Engineers	NCAE-C.....	National Center of Academic Excellence in Cybersecurity Defense Education
ASME.....	American Society of Mechanical Engineers	NCHC.....	National Collegiate Honors Council
ATUL.....	Adjustment to University Life	NC-SARA.....	National Council for State Authorization Reciprocity Agreements
AUPH.....	Puerto Rico Honor Program University Association	PESTA.....	Political, Economic, Social, Technological, and Environmental
BCU.....	Blackboard Collaborate Ultra	PR.....	Puerto Rico
BS.....	Bachelor of Science	PRCR.....	Puerto Rico Cloud Repository
BT.....	Board of Trustees	PROMESA...	Puerto Rico Oversight, Management, and Economic Stability Act
CARES Act...	Coronavirus Aid, Relief, Economic, and Security Act	PSE.....	Student Support Services Program
CAVE.....	Computer Assisted Virtual Environment	PUPR.....	Polytechnic University of Puerto Rico
CEDUP.....	Distance Education Center of the Polytechnic University	SAE.....	Society of Automotive Engineers
CEPA.....	Professional Education and Training Center	SCUP.....	Society for Colleges and University Planning
CESI.....	Center for Integrated Studies	SHPE.....	Society of Hispanic Professional Engineers
CIARE.....	Center of Information Assurance for Research and Education	SLA.....	Student Learning Assessment
COOP.....	Career and Internship Programs	SOHU.....	Socio-humanistic Studies
CPU.....	Center for Academic Progress	SLOs.....	School/Area Learning Outcomes
CTE.....	Educational Technology Center	SPHS.....	Special Program for High School Students
EDS.....	EBSCO Discovery Service	SS.....	Self-Study
EEO.....	Equal Employment Opportunity	SSD.....	Self-Study Design
ERP.....	Enterprise Resource Program	STEM.....	Science, Technology, Engineering & Math
ESL.....	English as a Second Language	SWE.....	Society of Women Engineers
FAFSA.....	Free Application for Federal Student Aid	SWOT.....	Strengths, Opportunities, Weaknesses, and Threads
FAQ.....	Frequently Asked Questions	TEC.....	Tecnológico de Monterrey
FERPA.....	Family Educational Rights and Privacy Act	TIRC PDPTII	Professional Development Programs in Transportation
FY.....	Fiscal Year	PUPR/ACI...	Infrastructure Inspection
GED.....	General Educational Development Test	TU.....	San Juan Railway System
HR.....	Human Resources	UPPR.....	Universidad Politécnica de Puerto Rico
HIS STEM....	Hispanic-Serving Institutions - Science, Technology, Engineering, or Mathematics	URP-HOS.....	Undergraduate Research Program for Honor and Outstanding Students
IDEA.....	Institutional Development, Employment & Alumni	URP-HS.....	Undergraduate Research Program for Honor Students
ILOs.....	Institutional Learning Outcomes	USA.....	United States of America
INS.....	Immigration and Naturalization Services	VaRLab.....	Virtual and Augmented Reality Laboratory
INTEC.....	Technological Institute of Santo Domingo	VEIL.....	Virtual Education and Innovative Learning Center
IPEDS.....	Integrated Postsecondary Education Data System	VR.....	Virtual Reality
IT.....	Information Technology	VP.....	Vice President

EXECUTIVE SUMMARY

OVERVIEW

In November 2021, the president of Universidad Politécnica de Puerto Rico (UPPR), Dr. Ernesto Vázquez Barquet, sent a letter to the university community announcing the beginning of the institutional self-study process for re-accreditation from the Middle States Commission on Higher Education (MSCHE). After consulting with members of the administration, such as deans, and department chairpersons, the president appointed a Steering Committee and seven Steering Committee chairpersons. After analyzing the two possible approaches to guide the institutional self-study to be presented to MSCHE, the Self-Study Committee and the President of UPPR selected the standards-based approach because the institution adopted it in the last four self-studies and had extraordinary results in the accreditation process.

In its first meeting, the Steering Committee decided that each of the seven chairpersons would preside over a working group representing the seven MSCHE standards. The chair of each Working Group invited faculty, administrative personnel, non-teaching personnel, and students to become members of their respective working groups. It was also decided that a faculty member serves as co-chairperson in each Working Group to assure faculty participation. The president of UPPR appointed the Vice President for Academic Affairs and Accreditation Liaison Officer (ALO), Dr. Miguel A. Riestra, to preside over the Steering Committee. The ALO designated the Dean of School of Architecture, Diana Rivera, as chair of the Steering Committee, and the mathematics professor Mildred Agosto as co-chair. (See Appendix A on page 101)

When the Self-Study Design was submitted and approved by MSCHE in June 2022, the interim president Eng. Ernesto Vázquez Martínez was in charge of continuing the process and responsibilities of the Self-Study Report. In September 2022, the Board of Trustees officially appointed him as president of UPPR.

SELF-STUDY PROCESS

More than 90 members of UPPR's faculty, staff, and administration of San Juan and Florida campuses, along with a group of students have been engaged in the planning, drafting and review of the contents of this report. Periodic changes in the organizational structure of the working groups were needed due to changes in the composition of the standards, especially in Standard V, which mostly depends on the *Institutional Student Learning Assessment Committee* members. Some research regarding specific concerns of the Self-Study document was made, such as selecting Self-Study designs and reports presented by other higher education institutions that were successfully accredited and could serve as models. Changes in standards from 14 to seven (7) represented a challenge. MSCHE webinars provided guidance for the whole accreditation Self-Study process. A course on the Blackboard Platform was designed for delivering information to the members of the Steering Committee and its working groups. It was also an effective mechanism for communication and providing virtual access to face-to-face meetings. This Self-Study report needed to contain the most accurate information, well written in English, technologically crafted as a pdf containing bookmarks, and uploaded to MSCHE Portal, with all the evidence inventory as well. The Evidence Inventory Committee complied with MSCHE request of an open website and served also to certify the evidence documents prior to uploading them to the MSCHE Portal.

(See Appendix E on page 135) For each standard, working groups provided areas of strength, observations, and success stories of continuous improvement. (See Appendix B on page 107)

STANDARD I: MISION AND GOALS

Universidad Politécnica de Puerto Rico meets Standard I by establishing, updating, and disseminating the mission and goals, which have been collaboratively forged and periodically revised. The institutional strategic plan and the campus development plan as well as its long-term planning and goals are aligned with the mission. The President of the university appointed three professionals to restructure all aspects that correspond to the new mission, its goals, and objectives. The institutional priorities (student-centered culture that promotes their success, ecosystem of creativity, innovation, research, and entrepreneurship, a comprehensive institutional agenda for internationalization, relations with community, industry, and government, financial position, sustainability, and responsible management of institutional resources) set benchmarks for UPPR plans and actions. Institutional priorities and annual goals are disseminated to the university constituencies, administrators, faculty, and students through various methods of communication. Each one of the offices of the institution prepares an implementation plan including objectives, action plans, costs, and results. Thus, the degree of accomplishment of the goals and the objectives of the university are systematically evaluated each year in conjunction with the institutional strategic plan. The mission-driven practices address elements of excellence in teaching, technological competence, lifelong learning, ethical and social responsibility, and diversity, and the resource management includes responsible allocation of finances, personnel, facilities, and services. In support of student success, UPPR provides free tutoring services and counseling. Moreover, UPPR defined its institutional values and disseminated them throughout the community.

STANDARD II: ETHICS AND INTEGRITY

Supporting protection and transparency that ensure academic freedom, intellectual freedom, freedom of expression and respect for intellectual property rights, the UPPR has several policies and procedures that preserve the respect and commitment of members of the university community. The Human Resources office delivers document policies to the employees with an acknowledgement, as needed, through the ADP system. The procedures for recruitment, hiring, promotion, evaluation, disciplinary measures, and termination of employment are conducted in a fair and impartial manner, in accordance with state and federal laws and procedures. Grievance policies are defined and discussed in meetings and communicated in the Faculty Handbook, Administrative Handbook, and Student Handbook, including rules and regulations. The technology provided by the virtual platform and VEIL allows the faculty to have confidence in the academic integrity of the virtual assessments. Since 2016, a conflict-of-interest policy was established in the institution.

STANDARD III: DESIGN AND DELIVERY OF THE STUDENT LEARNING EXPERIENCE

UPPR offers certificate, associate, bachelor, and graduate degree programs (masters and a PhD), which include diverse backgrounds. Also, emphasizes the development of intellectual, scientific, humanistic, and technological experiences across all modalities to prepare students for successful lives after completing their degrees. The diverse student population is present on three campuses: San Juan, Orlando, and Miami, the international academic alliance with the INTEC campus, Santo

Domingo in Dominican Republic, and the local academic alliance with Boston Scientific in Dorado, PR. The institution engages in expanding the Hispanic professionals in the United States with robust academic preparation in the areas of Engineering, Architecture, Business, and Education. The general education program is a strong foundation for all academic disciplines. The faculty is well prepared and participates in on-campus workshops conducted by UPPR staff and others by professionals invited by the institution. UPPR has a solid academic support service, including counseling, undergraduate and graduate research programs, an honor program, and career and internship programs.

STANDARD IV: SUPPORT OF THE STUDENT EXPERIENCE

UPPR meets the multi-faceted needs of contemporary students using a holistic approach by evaluating their admission file. Students can be exempted from taking developmental courses by demonstrating their level of skills in the subjects, considering the following factors: rigor of the program of study from high school or homeschooling, transcript of high school credits, activities that demonstrate student's leadership, letters of recommendation, interviews with the academic director, UPPR placements tests, standardized tests results, and grade point average. UPPR provides a schedule of accurate, comprehensive, and accessible information regarding expenses, financial aid, scholarships, grants, loans, repayment, and refunds. The students are required to enroll in a course to help them adjust to university life. Details of many of the counseling services, documented in Chapter Four, reveal support of the student experience along a continuum. The student is guided from the moment of admission to the first year with follow up, and so on, with academic advising, tutoring, and counseling services. The VP Office of Enrollment Management and Students Services keeps close communication with Deans, Academic Directors, and faculty members and holds meetings frequently to manage student admission, enrollment and student services complaints, grievances process, reasonable accommodation, disciplinary cases, and student affairs that affect their academic performance. A survey was implemented as an assessment tool including demographic information and feedback from students regarding the services offered during their university career, especially those services regarding student life. Moreover, every year the VP Office of Enrollment Management and Students Services coordinates activities with the academic departments and support offices to enhance and promote retention efforts. As an example, the institutional retention rate for the 2017-2021 period resulted in an average of 79%.

STANDARD V: EDUCATIONAL EFFECTIVENESS ASSESSMENT

UPPR practices ongoing assessment that includes required measurements of outcomes for accreditation, work groups reports and data gathering and interpretation. Those actions are guided by the Vice President of Academic Affairs, the deans of each school, the Office of Institutional Research, and the *Institutional Student Learning Assessment Committee*. It is a fact that all academic programs at Universidad Politécnica de Puerto Rico (UPPR) have been licensed to operate under the Board of Post-Secondary Institutions of Puerto Rico and those in Florida by the State Commission for Independent Education. UPPR graduates are expected to attain the following competencies that are the institutional learning goals: effective communication, scientific and quantitative reasoning, critical thinking, technological competence, information literacy, lifelong learning, ethical and social responsibility, and teamwork. The four (4) stages cycle described in Chapter Five assures a thorough exhaustive process, regarding the learning student assessment. The institution is focused on continuously improving academic and administrative services for a better student experience.

STANDARD VI: PLANNING, RESOURCES, AND INSTITUTIONAL IMPROVEMENT

UPPR is mission-driven and focused on the institutional strategic plan. Clearly, directs its planning, resources, and strategies to continuously develop and improve service to support the student success. The plans and budget are aligned with the mission and goals. All units have in place multi-year strategies that guide divisional and institutional improvement over time. The unit annual work plan is the basis for the annual budget proposal that is submitted by each institutional unit to the Budget and Finances Coordinator. The institution has historically been successful in managing and aligning its planning, resource allocation and assessment processes to ensure alignment of resources with UPPR strategic plan, goals, and priorities. This process allows for both long- and short-range planning, assessment, and development of objectives with measurable outcomes. It should be noted that other Puerto Rican universities have experimented a dramatic student population decline, while UPPR has managed to retain a stable enrollment in San Juan campus for the past eight (8) years. This is the result of effective combined strategies including the addition of new and attractive academic programs, as well as an increased significant number of online courses available to students.

STANDARD VII: GOVERNANCE, LEADERSHIP, AND ADMINISTRATION

In 2022, UPPR passed through a transitional stage from one President to the current President. In collaboration with the administration, faculty members, and the input of the Student Council and various staff units, the stability of the institutional areas, such as academic offerings, student success, financial strength, and service was ensured. UPPR has benefited from a stable, highly qualified, experienced, and cohesive leadership team. The Board of Trustees is the governance body establishing policies and the President is the leadership body with his administrative staff implement these policies. The Board of Trustees is constituted of nine (9) members and the President of the university, who acts as an ex-officio member. The Administrative Board consists of 11 members representing administration and faculty. It constitutes the university community forum through which the administrative policy of the institution is recommended to the Board of Trustees. The faculty collaborates extensively with the Academic Council. Its regulations state the inclusion of two professors from each undergraduate school, one from the graduate school, and one selected from all the academics units. All its subcommittees are formed by faculty members to guarantee their participation in the decision-making process. The seven (7) students who participate in the Academic Council must be selected by the Student Council. The Administration is composed of the President, four (4) vice presidencies, Legal Counsel, Information Technology, Florida Campuses, Additional Location and Instructional Site, Human Resources, Communications, Institutional Development, and Virtual Education and Innovative Learning. All the bodies that compose the Governance, Leadership, and Administration structure have adequate written regulations and bylaws. The students can participate in the Academic Council committees, promoting a healthy dialogue and discussion of ideas resulting in a balanced academic system. The MSCHE inventory rubric was used for a survey that was administered as a “Voice of the Customer” to the Board of Trustees, the President, the Administrative Board, the Academic Council and a sample of faculty, staff, and students. The results are documented in Chapter Seven.

INTRODUCTION

INSTITUTIONAL OVERVIEW

Before we start providing specific information about UPPR and its Self-Study (SS), it is relevant to share with the team of evaluators and other readers from the MSCHE, an overview of external factors affecting Puerto Rican education as a whole and specifically higher education.

The expression of Mr. James K. Glassman quoted in the last UPPR Self-Study, *“Puerto Rico’s economy is a shamble”*, is more real at present than in 2015. Puerto Rico (PR) has been in an economic recession since 2008.

In fact, since PR owes more than 70 billion dollars to investors, the Congress of the United States of America (USA) enacted a federal law in 2016 called Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA). The purpose was to establish a financial oversight board, a process for restructuring debt, and expedited procedures for approving critical infrastructure projects to combat the Puerto Rican government-debt crisis. That commission should oversee and approve PR annual budget and supervise all economic transaction initiated by the Puerto Rican government. In other words, PROMESA runs Puerto Rico’s economy over the legislature and the governor.

However, there are other relevant events that should be mentioned to understand the critical position that characterizes Puerto Rico at the present time.

1. Since 2009, PR has suffered an emigration to the USA of approximately one million persons. A considerable number of the emigrants were potential university students.
2. In 2017, PR was hit by the most destructive hurricanes in its history (Irma and María).
3. In 2020, a series of earthquakes affected most of the southern towns of PR.
4. The COVID-19 pandemic paralyzed Puerto Rico’s development for more than a year.
5. Major changes in birth rates in PR since 1960 account for the demographic inverted pyramid; there is a substantial decrease of young people and a continuous increase in the number of older people.
6. PR per capita income is 50% lower than the poorest state of the USA.
7. PR has one of the highest numbers of colleges and universities per square mile in the world. In addition, PR is becoming a preferred place to establish distance learning programs by USA and foreign institutions. In conclusion, there are approximately 200 institutions trying to recruit approximately 30,000 high school graduates per year. A considerable amount of those graduates do not pursue further higher education studies while another large segment moves to the USA mainland for their college education.
8. During 2022, PR was hit by hurricane Fiona. All the rivers flooded and destroyed many homes of the poorest population.
9. Since the Institution is an open admission university, a substantial number of the students must take 30 credits in developmental courses and two courses in English as a second language. Thus, it takes them more than four years to graduate.
10. Most of the students register less than 12 credits per trimester. After the first year of studies, students usually work; therefore, registering in less courses than those required by the program’s curriculum in four years.

11. In 2023, one Puerto Rican university closed due to lack of enrollment of students.

Despite the facts mentioned above, UPPR has been able not only to survive and keep the enrollment at approximately 4,200 students, but also:

Develop new programs of study:

Since 2015, the last MSCHE accreditation date, UPPR has developed the following programs:

- **2016** – Bachelor of Science in Biomedical Engineering and Master in Electrical Engineering with specialization in Power Systems and Renewable Energy
- **2019** – Associate Degree in Product Design, Bachelor in Architecture with major in Urban Planning, and Master in Architectural Conservation and Rehabilitation.
- **2021** – Bachelor of Science in Industrial Engineering (online), Bachelor of Science in Biomedical Engineering (online), and Graduate Certificate in Medical Devices Industry Essentials
- **2022** – Bachelor of Science in Environmental Engineering (online) and Bachelor of Science in Computer Sciences (online)
- **2023** – Bachelor of Science in Computer Engineering (online)

Distance Learning Improvements:

In 2015, UPPR received a grant from the US Department of Education (USDE) to develop the online modality of the general engineering courses. Over the next five years, 60 online courses were developed.

In 2018, the Distance Education Center of the Polytechnic University (CEDUP) became the Virtual Education and Innovative Learning Center (VEIL). Also, UPPR adopted Respondus Lockdown Browser and Monitor to enforce academic integrity of remote instruction and non-proctored exams.

During 2019, the following events took place:

- VEIL Center incorporated the position of Lead Learning Technologist
- The department of Math and Sciences adopted e-books in the majority of the courses
- Physics and Chemistry online courses were incorporated using e-Science Lab kits sent via mail to students' home
- VEIL began exploration of Virtual Reality technology as an educational support
- VEIL incorporated Lightboard as a tool for producing educational videos

In 2019, UPPR became affiliated to the National Council for State Authorization Reciprocity Agreements (NC-SARA).

In 2020, due to COVID-19 pandemic, the Board of Postsecondary Institutions (as its acronyms in Spanish JIPs) authorized to utilize alternative methods to offer distance learning courses. UPPR was granted permission to offer the following Bachelor of Science (BS) online programs:

1. BS in Biomedical Engineering
2. BS in Industrial Engineering
3. BS in Computer Engineering

4. BS in Computer Science
5. BS in Environmental Engineering

On March of 2020, UPPR reverted on-campus courses to synchronous remote instruction via Blackboard Collaborate Ultra (BCU). All faculty members received training on how to use BCU. VEIL designed a Basic Level Certification Program on the basics of Blackboard Learn to support synchronous instruction, as well as on how to effectively use Collaborate Ultra. Faculty received formal training and support during the following six months. All faculty members were required to approve online certification evaluations to receive academic teaching load for the Winter 2020 term and on.

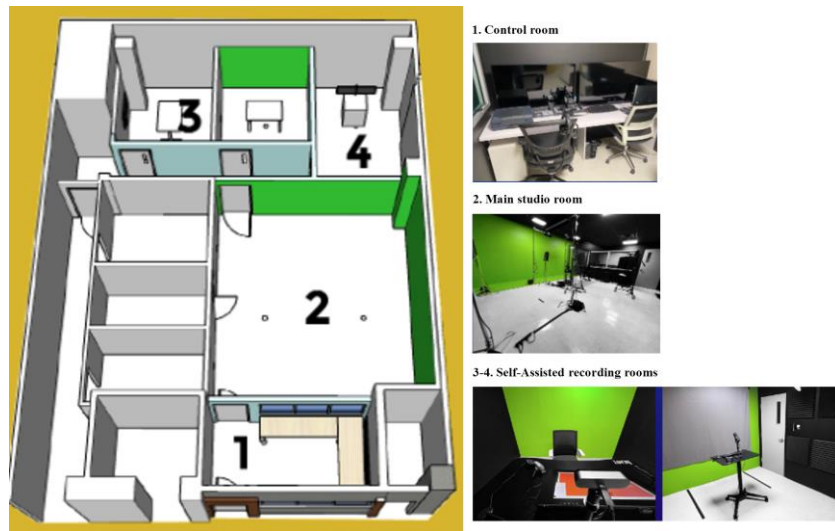
Also, during 2020, *Module 0 – Read me first* was incorporated in every online and hybrid course. This module shows students how to navigate an online course and where to look for specific course information, such as course schedule, grading criteria, and instructor’s contact information. The student also finds federal and institutional policies associated with online education, technological requirements to access and to navigate UPPR online courses, interaction, and digital communication guidelines, as well as instructive manuals and management of the Blackboard platform. The student also finds Frequently Asked Questions (FAQ) regarding Blackboard Tools, as well as Blackboard Tutorials.

During 2021 VEIL Center designed an Intermediate Level Certification Program. This certification program is focused on training faculty in tools that promote academic integrity in courses within the Blackboard platform. Safe Assign tools, Creating Test Question Pools, and using the Respondus Lockdown Browser and Monitor were covered. Also, collaboration and communication tools such as discussion forums, blogs, journals, and wikis were covered. Faculty were required to approve intermediate level certification evaluation to receive academic teaching load for the Fall 2020 term and on.

In 2021, 65 classrooms were converted to smart or intelligent rooms at the San Juan Campus. At present, there are a total of 101 completed and 16 in progress. In addition, there are three smart classrooms at the Orlando Campus, which also supports faculty of the Miami Campus through that technology. Those intelligent rooms enabled faculty to reach on-site and remote students through synchronic sessions, which may be recorded for the students’ benefit.

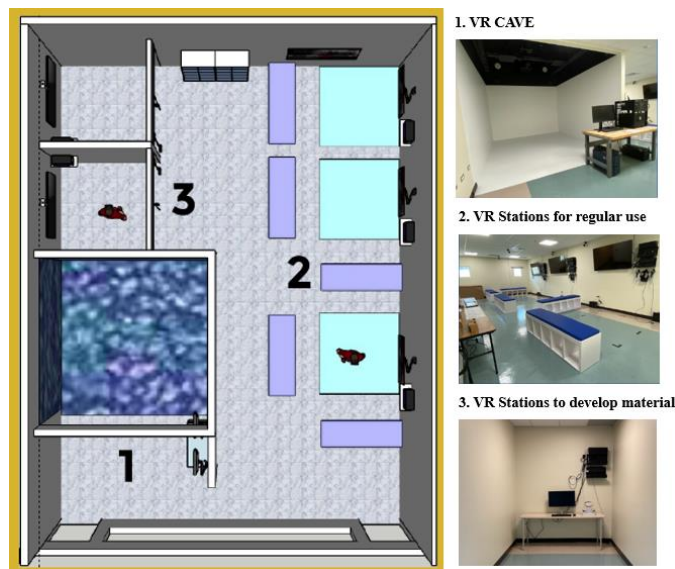
Through the academic year 2021-2022 faculty has participated in a five-module focused on Learner-Centered Education/Active Learning strategies supported by technology as part of the advanced certification level-1 certificate program. Participation in this certification program was required for faculty members to receive academic teaching load for the Fall 2021 term and on. In the academic year 2021-2022, VEIL had been developing the Recording Studio facilities and the Virtual and Augmented Reality lab facilities. (**Figure 1**)

Figure 1: Recording Studio - San Juan Campus



The UPPR Virtual and Augmented Reality Laboratory (VaRLab) is a cutting-edge technology project that integrates the power of 3D visualization with content production for online and on-campus courses. The VaRLab combines the power of Virtual and Augmented Reality to create and manipulate information that could not be presented in a classroom, making high costly detailed learning experiences available for all students. (Figure 2)

Figure 2: VaRLab - San Juan Campus



Aligned with its institutional mission, UPPR seeks to become accessible to students of any economic level throughout the USA and its territories. To accomplish its mission, UPPR is developing its online academic offering in both English and Spanish. Beginning with the Summer 2022 term, UPPR started promoting its online courses to English speaking students throughout the USA and its territories. UPPR expected to begin promoting fully online programs in English in 2023 beginning with the BS programs in biomedical, industrial and computer engineering.

Furthermore, UPPR fully online academic offerings in both English and Spanish enables our institution to reach out and become as “*a key catalyzer of the symbiotic relationship between the United States and Latin America*”.

Significant increase in external grant funding

Since 2015, UPPR has been extraordinarily successful in obtaining external grants. Approximately, \$53M were acquired through federal grants such as Regular ESL, Science, Technology, Engineering & Math (STEM), and Student Support Proposals, Cyber Security, Hispanic Service Institution, Science, Technology, Engineering, and Mathematics.

In conclusion, UPPR obtained 40 grants in the last eight years. These grants made it possible for the institution to create scientific laboratories with appropriate equipment and supplies for the Biomedical Engineering Program, and for the Orlando Campus laboratories, in its new lab and main buildings, the latter shown in **Figure 3** and **Figure 4**.

Figure 3: Integrated Student Services Center in Orlando Campus



Figure 4: Learning Center - Library in Orlando Campus



Modernized laboratories and creation of new ones

- **Mathematics and Science Department** - Two modern biology laboratories were built at the San Juan Campus with an investment of a total of \$122,431 in the purchase of equipment. In addition, it has 12 technology classroom system for students taking physics and chemistry labs. There are a total of 61 computers with Virtual Desktop Infrastructure (VDI) system which is a cloud-based desktop and app virtualization service that provides a multi-user Windows 10 experience.
- **Biomedical Engineering Department** - The Bioimpedance and Tissue Engineering Laboratory is a modern laboratory at the San Juan Campus. The laboratory provides an aseptic and controlled environment for cell culture and the creation of living tissue

constructs. It facilitates autologous tissue culture across the entire spectrum of the research field. It improves the technical knowledge of undergraduate students at UPPR following active learning strategies and STEM projects. The Gait and Movement Analysis Lab was also equipped.

- **Computer Lab at Orlando Campus** - A computer lab was developed at the Orlando campus which included 20 workstations with VDI system. In summary, VDI allows UPPR to deploy Windows virtual machines that can be accessed from anywhere, at any time, making it an ideal solution for remote students. This in turn allows students to access software apps and packages via remote access.

New physical facilities

The improvements to San Juan Campus facilities completed in 2013 are shown in **Table 1**:

Table 1: Improvement to Facilities at San Juan Campus (2013-2021)

FACILITY	YEAR	AMOUNT
The School of Architecture building was remodeled.	2013	\$10.5M
The Orlando Campus building Lab was built.	2015	\$2.5M
The Main Building (Student Center) was remodeled.	2017	\$1.039M
A nine-story building (three (3) floors are student dorms) was purchased.	2017	\$7.8M
The Graduate School was renovated and updated to establish the new Graduate Teaching and Learning Center (GTLC).	2021	\$1M

Students’ competitions

These accomplishments made it possible for the students from different departments such as Mechanical Engineering, Civil and Environmental Engineering, and Chemical Engineering participated in national and international academic competitions. Since 2016 at present, the students obtained first, second, and third awards in different categories. (See Appendix D on page 129)

HISTORY

UPPR is a private non-profit, co-educational institution specializing in Engineering, Architecture, Land Surveying and Mapping, and Business Administration. Founded in September 1966, the campus is conveniently located in San Juan’s financial district. In 2003, UPPR established a branch campus at Miami and another at Orlando, Florida in 2004. It also has an additional location at the Dominican Republic (INTEC – Technological Institute of Santo Domingo or Instituto Tecnológico de Santo Domingo, as its Spanish acronym) and an instructional site (Boston Scientific) at Dorado, Puerto Rico.

It is imperative to inform the reader that three years ago, the Academic Council of UPPR appointed an ample committee to unify the curriculum and all academic and administrative institutional policies of all the campuses, additional location, and instructional site. In other words, for all purposes, UPPR is one institution that offers its programs in addition to its main Campus at San Juan, at Orlando and Miami, Florida, USA. It also offers one of its graduate programs in the

Dominican Republic and three programs at Boston Scientific in Dorado. Therefore, our MSCHE Self-Study includes San Juan, Orlando, Miami, the additional location in the Dominican Republic and the instructional site in Dorado. It should also be expressed that the above-mentioned campuses are represented in each Self-Study Working Group by one professor. The additional location and the instructional site are represented by the dean of the Graduate School. The main institutional policies have also been revised and synchronized. To conclude, UPPR mission and goals are the same for all the campuses, additional location, and instructional site.

Within the USA and its territories, the UPPR is the largest non-profit private Hispanic university specializing in engineering and technology. The article *The Top Producers of Hispanic Engineers* from the *Hispanic Engineering and Information Technology Magazine* states: ***“Texas, California, Puerto Rico, and Florida account for the majority of Hispanic engineering students at the 25 schools at the top in enrollment of Hispanic engineering majors in the U.S. The largest, the Polytechnic University in San Juan, has more than double the number of Hispanic students than those enrolled in the next engineering school”***.

UPPR is accredited by the Middle States Commission on Higher Education (2015). All of the Engineering and Land Surveying and Mapping Programs are accredited by the Accrediting Board for Engineering and Technology (ABET). Furthermore, in 2019 our Architecture Program was accredited by the National Architecture Accrediting Board (NAAB). Finally, our graduate Landscape Architecture Program was accredited in 2019 by the Landscape Architecture Accreditation Board (LAAB).

MISSION AND VISION

The Board of Trustees, following the recommendation of the Accreditation Steering Committee, approved the revision of the Institutional Mission and Vision Statements.

The revised mission is:

“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.”

The revised vision is:

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

DESCRIPTION OF STUDENT POPULATION AND ENROLLMENT TRENDS

For the year 2015 the enrollment was 4,291 students, divided into 3,493 for undergraduate level and 798 at the graduate level. **Table 1** displays the fluctuations in enrollment between Fall 2015 to Fall 2022 terms.

Table 1: Enrollment - San Juan Campus

Enrollment	FA15	FA16	FA17	FA18	FA19	FA20	FA21	FA22
Undergraduate	3,493	3,357	3,494	3,514	3,690	3,718	3,687	3,665
Graduate	798	871	821	717	670	649	565	579
Total	4,291	4,228	4,315	4,231	4,360	4,367	4,252	4,244

Source: Integrated Postsecondary Education Data System (IPEDS) – Fall Enrollment

The difference between FA15 and FA22 in undergraduate level is 172 more students: graduate level shows a student reduction of 219 students. As it is observed in **Table 1**, the student population has remained at the average of 4,286 students in Fall term for those years.

During the 2022-2023 academic year, 1% of enrolled students were in associate degree programs, 85% in bachelor's degrees, 1% in special programs and in graduate certificates, and 14% in graduate programs. In the context of the national territory, the university has the presence of almost 78 municipalities of Puerto Rico. The current out-state student profile is 2% of the enrollment body. In the San Juan Campus, the distribution of residence shows a marked tendency towards living outside the metro area; more than half of the students live outside the metropolitan area (64%). San Juan (16%), Carolina (7%) and Bayamón (7%) are the municipalities with the highest representation. **Table 2**, **Figure 1**, **Figure 2**, and **Figure 3** show the breakdown of the enrollment of San Juan, Orlando, and Miami campuses.

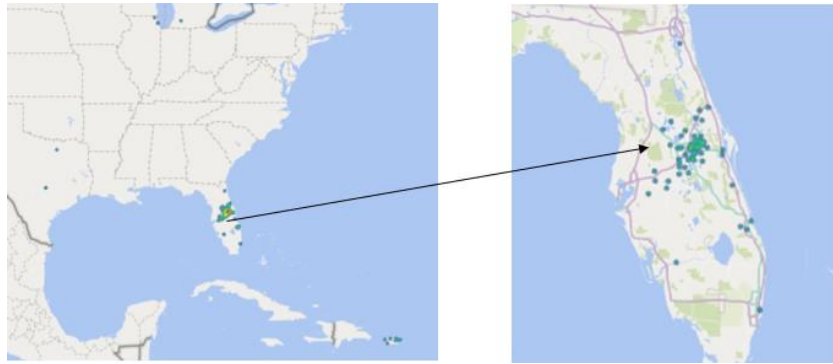
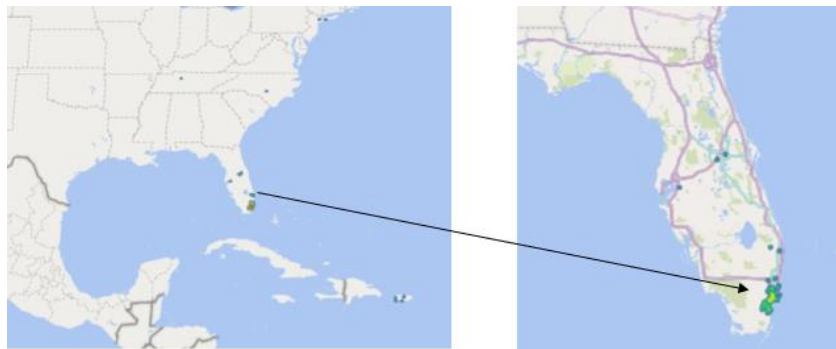
Table 2: Enrollment Distribution by Campus (Fall 2022 Term)

Enrollment	San Juan	Orlando	Miami	Total
Associate degree	46	-	-	46
Bachelor degree	3,603	115	34	3,752
Special Programs and Graduate Certificates	30	-	-	30
Graduate	565	19	27	611
Total	4,244	134	61	4,439

Source: IPEDS – Fall 2022 Term Enrollment

Figure 1: San Juan Campus - Enrollment Distribution by Student Location



Figure 2: Orlando Campus - Enrollment Distribution by Student Location**Figure 3: Miami Campus - Enrollment Distribution by Student Location**

The distribution by gender shows that there are 71% male and 29% female. Sixty-eight percent (68%) of all students are under 25 years old, while 32% are 25 or more. Sixty-four percent (64%) of undergraduate students receive federal aid (PELL grants) while some -graduate students pay for their studies through student loans.

Moreover, in the most recent student satisfaction survey with a response rate of 20% of the students, 61% of the participants identified themselves as part-time or full-time employees. In other words, most of our students are employed to pay for their university education. As a result, the student's academic load is 47% full-time and 53% part-time.

The School of Engineering, Surveying, and Geospatial Science, by far the largest, has 3,069 undergraduates. In San Juan, 3,028 undergraduates are pursuing BS degrees in ten programs that include computer science, land surveying, and eight engineering disciplines (biomedical, chemical, civil, computer, electrical, environmental, industrial, and mechanical). The School of Engineering graduated 356 students (344 in San Juan and 12 in Orlando).

As an open admission institution, UPPR offers a mechanism to reduce barriers for students who are disadvantaged or underprivileged. The profile for admitted students often presents the need for further academic preparation. As a result, about more than 95% of our first-time/first-year students take some of the 30 credits in developmental courses and two (2) courses in English as a second language. Thus, it takes most of them more than six years to graduate. As already expressed, most admitted students come from low-income backgrounds, so sixty-four percent (64%) of

undergraduate students receive federal aid (PELL grants). As a result, the students exhausted their federal financial support previously than expected. To complete their academic goal, they need to find other financial sources, causing a reduction in their academic load.

MAIN PROGRAMS OF STUDY

UPPR offers the following state-authorized and accredited programs:

1. **Associate Degrees**
 - a. Associate Degree in Engineering in the Development of Computer Applications
 - b. Associate Degree in Land Surveying
 - c. Associate Degree in Mechanical Engineering
 - d. Associate Degree of Engineering in Supply Chain and Logistic
 - e. Associate Degree in Product Design

2. **Undergraduate Degrees (all degrees are offered at the San Juan campus, except when specified)**
 - a. Bachelor of Science in Land Surveying and Mapping
 - b. Bachelor of Science in Civil Engineering
 - Also offered at the UPPR Orlando campus
 - c. Bachelor of Science in Environmental Engineering
 - Also offered at the UPPR Orlando campus
 - d. Bachelor of Science in Industrial Engineering
 - On-campus and Online modalities
 - e. Bachelor of Science in Electrical Engineering
 - Also offered at the UPPR Orlando campus
 - f. Bachelor of Science in Computer Science
 - Also offered at the UPPR Orlando and Miami campuses
 - On-campus and Online modalities
 - g. Bachelor of Science in Computer Engineering
 - Also offered at the UPPR Orlando campus
 - On-campus and Online modalities
 - h. Bachelor of Science in Mechanical Engineering
 - Aerospace
 - Also offered at the UPPR Orlando campus
 - i. Bachelor of Science in Chemical Engineering
 - j. Bachelor of Science in Biomedical Engineering
 - On-campus and Online modalities
 - k. Bachelor in Business Administration
 - Accounting, Construction Management, Entrepreneurship, General Management, and Marketing
 - Also offered at the UPPR Orlando and Miami campuses (except the Construction Management major)
 - l. Bachelor of Science in Construction Management
 - Only offered at the UPPR Orlando and Miami campuses
 - m. Bachelor in Architecture
 - Urban Planning

- n. Bachelor in Interior Design
3. **Graduate Certificates (all degrees are offered at the San Juan campus, except when specified)**
- a. Graduate Certificate in Digital Forensics
 - b. Graduate Certificate in Information Assurance and Security
 - c. Graduate Certificate in Medical Devices Industry Essentials
 - Only offered at Boston Scientific, Dorado, PR (additional location)
4. **Graduate Degrees (all degrees are offered at the San Juan campus)**
- a. Master in Engineering Management
 - Also offered at the UPPR Orlando and Miami campuses and at INTEC, Santo Domingo, Dominican Republic (additional location)
 - On-campus and Online modalities
 - b. Master of Business Administration
 - General and Interdisciplinary
 - Also offered at the UPPR Orlando and Miami campuses and at Boston Scientific, Dorado, PR (additional location)
 - On-campus and Online modalities
 - c. Master in Environmental Management
 - d. Master of Science in Civil Engineering
 - Structural, Geotechnical, Water Resources and Water Treatment, and Construction Engineering
 - e. Master of Engineering in Civil Engineering
 - Structural, Geotechnical, Water Resources and Water Treatment, and Construction Engineering
 - f. Master of Science in Manufacturing Engineering
 - Industrial Automation, Pharmaceutical Processes, and Quality Management
 - On-campus and Online modalities
 - g. Master of Engineering in Manufacturing Engineering
 - Industrial Automation, Pharmaceutical Processes, and Quality Management
 - Also offered at Boston Scientific, Dorado, PR (additional location) (Industrial Automation)
 - On-campus and Online modalities
 - h. Master of Science in Manufacturing Competitiveness
 - Pharmaceutical Products and Quality Management
 - On-campus and Online modalities
 - i. Master in Manufacturing Competitiveness
 - Pharmaceutical Products and Quality Management
 - On-campus and Online modalities
 - j. Master of Science in Electrical Engineering
 - Communication Systems and Digital Signal Processing
 - k. Master of Engineering in Electrical Engineering
 - Communication Systems, Digital Signal Processing and Power Systems, and Renewable Energy
 - l. Master of Science in Computer Engineering

- Software Engineering and Internet Engineering
- m. Master of Engineering in Computer Engineering
 - Software Engineering and Internet Engineering
- n. Master of Science in Computer Science
 - Knowledge Discovery and Data Mining, and Cybersecurity
- o. Master in Computer Science
 - Knowledge Discovery and Data Mining, and Cybersecurity
- p. Master of Engineering in Mechanical Engineering
 - Aerospace
- q. Master in Geospatial Science and Technology
- r. Master in Landscape Architecture
- s. Master in Architectural Conservation and Rehabilitation
- t. Master of Science in Education in Mathematics and Natural Sciences

5. Doctoral Degree

- a. Doctor of Philosophy in Engineering and Applied Sciences

FACULTY PROFILE

As Fall 2022 term, UPPR faculty is constituted by 247 professors as shown in **Table 1**.

Table 1: Faculty Members by Campus

Campus	Faculty Members
San Juan	200
Orlando	26
Miami	21
Total	247

Source: IPEDS – Human Resources

One hundred thirty-nine (56%) are full-time and 108 (44%) are part-timers. Of the full-time total, 93 (67%) are male while 46 (33%) are female. (**Table 2**) The distribution by gender has a slight difference among part-time teachers, 66 (61%) and 42 (39%), respectively.

Table 2: Faculty Members Gender by Campus

Campus	Male	Female
San Juan	128	72
Orlando	17	9
Miami	14	7
Total	159	88

Source: IPEDS – Human Resources

The general distribution of the academic rank is as follows: Professor, 37 (27%); Associate Professor, 80 (58%); Assistant Professor, 18 (13%); and Instructor, 4 (3%). It is important to acknowledge that 98% of the faculty body self-identified as Hispanic. Finally, forty-two percent (42%) of the faculty have a doctorate as the highest degree, while 54% have earned a master's degree. A smaller percentage, only 4%, hold a bachelor's degree. UPPR faculty is well-educated and equipped to teach at a higher level, with a significant portion having achieved the highest level of academic achievement in their respective fields.

INSTITUTIONAL PRIORITIES

During the last eight years UPPR has maintained an average enrollment of 4,286 students. This stagnation in enrollment is the justification for the following priorities of Self-Study.

1. **Develop a student-centered culture that promotes their success**

With this goal, UPPR recognizes that societies are in constant transformation, and consequently, it impacts how students learn. The Institution's approach related to this goal focuses on transforming our classrooms from the traditional to a learner-centered culture. This approach allows to implement an academic philosophy that positions our learners at the heart of the institutional processes. Therefore, the Institution leaves behind the traditional content-centered techniques where students were mere recipients of the information. All the students become the centerpiece of their learning process and be actively involved in their education.

2. **Foster an ecosystem of creativity, innovation, research, and entrepreneurship**

Universities play a determining role in the human, technological and economic development of their respective countries. Universities' contributions to society depend greatly on the dynamism that higher education institutions manage to generate among their members (e.g., students, faculty, and administration). Therefore, in the coming years, part of our efforts focuses on establishing the infrastructure necessary to achieve an increased interaction and collaboration between faculty and students from different fields, departments, and schools. UPPR believes that this interaction significantly increases the number of innovative multidisciplinary projects that develop realistic solutions aligned with the challenges faced by the current society.

3. **Advance a comprehensive institutional agenda for internationalization**

The advent of globalization has brought both opportunities and challenges to higher education institutions worldwide. In the case of Puerto Rico's higher education institutions, globalization has added a challenge to their sustainability due to the global-wide increasing competition in offerings and how to appeal to new students. Considering the previous scenario, UPPR's management team has determined to establish projects to take advantage of the opportunities that globalization presents to higher education. These projects imply broadening our scope of action from a local (i.e., Puerto Rico) to a more international one, with the primary objective of being recognized as a leading technologically oriented university in the Caribbean.

4. **Expand our relations with the community, the industry, and the government**

UPPR acknowledges that organizations are part of a community and must be good corporate citizens. Hence, UPPR embraced its civic responsibility and active participation in the well-being of the community. In the coming years and as a higher education institution, UPPR is strengthening the support offered to the neighboring community. It is recognized that university-industry and university-government relations are decisive in developing a nationwide innovation ecosystem. Therefore, it is establishing programs that tighten up the bonding with industries and government agencies to continue contributing to Puerto Rico's development aspirations.

5. **Strengthen our financial position, sustainability, and the responsible management of institutional resources**

It is maintaining and supporting the processes continuously and in the long run for the benefit of the key stakeholders and society by implementing initiatives that simultaneously allow us to ensure excellent higher education services, maintain a financially strong institution, and protect the environment. This implicates being creative in broadening the revenue stream sources, being more efficient in the way that the resources are managed, reinforcing in all the constituents a continuous improvement mindset, and developing the management team's awareness about the accountability to society and future generations.

Since its foundation, UPPR recruiting efforts have historically targeted high school students. Given the changes in the demographics of PR, the institutional priorities above are important strategies to increase enrollment.

Worldwide, international student enrollment in higher education is forecasted to grow by 2030. With a robust internationalization plan, UPPR can remain competitive, considering the increased competition and dramatic economic shifts. Moreover, international partnerships can provide new opportunities and experiences in faculty research and study abroad, making the UPPR more competitive. On the other hand, by developing a learner-centered culture and expanding relationships with the community, industry, and government, the University fosters student success by helping students build career-readiness skills. Finally, the literature recognizes the university as a fundamental agent for developing entrepreneurship. Higher education is an ideal venue to develop creativity, innovation, and entrepreneurship in young people to keep pace with the demands of a rapidly growing global society.

STRATEGIC PLAN

The past cycle of the Institutional Strategic Plan (2016-2021) ended in December 2021. In September 2022, an institutional committee representing all segments of the UPPR stakeholders was created to design a new strategic plan. The strategic goals of the Institutional Strategic Plan (2022-2027) coincide with the institutional priorities of the Self-Study Committee for MSCHE accreditation. In other words, the two committees representing the stakeholders identified the same chosen mission, vision, goals, and institutional priorities.

CHAPTER ONE: STANDARD I - MISSION AND GOALS

The institution's mission defines its purpose within the context of higher education, the students it serves, and what it intends to accomplish. The institution's stated goals are clearly linked to its mission and specify how the institution fulfills its mission.

Requirement of affiliation 7: The institution has a statement of mission and related goals, approved by its governing board, that defines its purpose within the context of higher education.

Requirement of affiliation 10: Institutional planning integrates goals for academic and institutional effectiveness and improvement, student achievement of educational goals, student learning, and the results of academic and institutional assessments.

LINES OF INQUIRY

1. How were the mission and goals developed?
2. How well does the institution's mission define its purpose within the context of higher education and identify whom the institution serves and what it intends to accomplish? Is there room for improvement?
3. Does the mission address internal as well as external constituencies?
4. How do mission and goals guide the university constituency in the process of the diverse decision-making aspects such as planning, resource allocation, curricular development, and the definition of institutional and educational outcomes?
5. To what extent do the mission and goals guide the decisions and actions of faculty, administration, staff, and governing bodies related to planning, resources allocation, and program and curriculum development?
6. To what extent does the mission statement remain relevant considering the University's strategic planning activities?
7. Is the institution satisfied with its current results? If not, what are the plans for improvement?
8. How are goals used to define student learning and institutional outcomes?
9. How does the periodic assessment of mission and goals reveal their relevancy?

OVERVIEW OF THE STANDARD

Since 2002, the Polytechnic University of Puerto Rico has conducted systematic institutional strategic planning processes. (Institutional Strategic Plan 2016-2021_SI.C1.C4.R7_p.2 and Institutional Strategic Plan 2022-2027_SI.C1.C4.R7_p.17) The plan is developed by a Strategic Planning Committee led by the president of the Institution, Eng. Ernesto Vázquez Martínez, MBA. The Committee mentioned above, in turn, is supported by a Strategic Plan Team, integrating representatives of the different instances and internal university stakeholders. In addition, it is assisted by consultants and external experts when warranted. (Institutional Strategic Plan 2022-2027_SI.C1.R7_p.58) The product of the strategic planning process is an institutional plan that establishes the main goals the university will pursue in the following years, and thus, defines the institutional strategic priorities. These goals are fragmented into strategic objectives that guide the overall decision-making process throughout the institution.

ANALYTICAL REPORT

In September 2021, the Vice President for Academic Affairs, Dr. Miguel A. Riestra, started the strategic planning process for the 2022-2027 period by appointing Dr. Enrique Muñoz as the director of the strategic planning committee. It should be stated that the new MSCHE Self Study mission, vision, and goals were developed in conjunction with the UPPR Strategic Plan 2022-2027. To ensure that the Strategic Plan followed and was consistent with the institutional mission and goals, Dr. Muñoz was also designated as the chairperson of the Self-study Standard I working group.

The 2022-2027 strategic planning process was conducted based on the methodology recommended by the Society for College and University Planning (SCUP), in their manual named: *A Practical Guide to Strategic Planning in Higher Education*, Second Edition, by Karen E. Hinton, Ph.D., starting with the analysis of the external and internal environments, a review of the mission and vision, goal and strategic objectives setting. From the end of 2021 and during the first half of 2022,

a series of meetings and workshops were held for the collection and analysis of data and information that supports this plan and the preparation of its content document. The external environment was assessed following the PESTA (its acronym in Spanish) scheme that evaluates the political, economic, social, technological, and environmental environments. (Institutional Strategic Plan 2022-2027_SI.C1.R7_p.21-31) An analysis of the higher education sector was conducted to identify the trends and challenges that organizations should consider. For its part, the internal investigation was conducted to evaluate the University's resources (tangible and intangible), and organizational capabilities.

One **success story** is that as part of the strategic planning process, the institutional mission was revised. As a result, the mission statement was enhanced. Even though the essence remains the same, the mission statement was rewritten to capture in one sentence the fundamental purpose of the UPPR. The changes made are shown in **Table 1**:

Table 1: Comparison between Mission Statements

	Previous	Current
Mission	As an institution of higher education, the mission of the Polytechnic University of Puerto Rico is to provide opportunities to individuals from diverse backgrounds and in different locations using multiple methods of delivery to cultivate their potential for leadership, productivity, competitiveness, and critical thinking, through exposure to intellectual, scientific, humanistic, and technological advancement, with the purpose of contributing to regional and global sustainability.	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.

Source: Institutional Strategic Plan 2016-2021_SI.C1.R7_p.3 par.2 and Institutional Strategic Plan 2022-2027_SI.C1.R7_p.18 par.1-2

The most important features of this revision are the following:

1. The assertion *to provide opportunities for individuals from diverse backgrounds* implies that UPPR's purpose is to offer favorable junctures of circumstances for academic development, at higher education levels, to students that have diverse backgrounds. Currently, UPPR is recruiting and admitting students from public high schools, from homeschooling, from poor communities, adults who are unemployed or are planning to change their profession, and those students who take and approve the high school equivalent examinations, named General Educational Development Test (GED), clearly stating the diverse populations and our main internal constituents. At least 80% of our current student body fits one or more of these categories.
2. The declaration *to cultivate their potential for leadership, productivity, and competitiveness with the aim of contributing to society* clearly expresses its main goal, what it intends to accomplish: help students flourish to the fullest of their capabilities and skills for the betterment of humanity. The word *society* also encompasses the external constituents.
3. The expression *by applying innovative methods of delivery* specifies the intention of accomplishing its mission in an inventive fashion. At present, UPPR has technologically sophisticated distance-learning equipment and personnel, offering an ample number of

online courses using the Blackboard platform as the learning management system, and other technological advances to enhance the teaching-learning process. Approximately 2,500 students are taking some online courses. UPPR also offers online master’s degrees in engineering management, such as a Master of Business Administration with specialization in Computer Information Systems, Master of Science in Manufacturing Competitiveness, Master in Manufacturing Competitiveness, Master of Science in Manufacturing Engineering, and a Master of Engineering in Manufacturing Engineering. UPPR is also offering a Bachelor of Science in Biomedical Engineering, a Bachelor of Science in Industrial Engineering, a Bachelor of Science in Computer Science, a Bachelor of Science in Environmental Engineering, and a Bachelor of Science in Computer Engineering. Finally, our Miami branch campus is gradually becoming a virtual campus.

Another **success story** is that to implement the methodology recommended by SCUP, the strategic plan committee also reviewed the institutional vision statement, in the same manner as the mission was reviewed. The strategic plan committee wanted to capture, in the clearest way possible, the main elements that composed the institutional vision. The changes resulting from the vision statement reviewing process are shown in **Table 2**:

Table 2: Comparison between Vision Statements

	Previous	Current
Vision	To be recognized as the leading Hispanic Serving Institution in multiple fields of study, meeting societal and industrial standards in general, in association with public and private enterprise; characterized by an emphatic relationship between faculty and students, and with a culture of client-oriented quality service, empowerment and teamwork. Polytechnic University of Puerto Rico reflects the meeting of the two pervasive cultures of the Americas; thus it is well positioned to serve as a catalyzer of a symbiotic relationship between the United States and the Latin American nations.	The Polytechnic University of Puerto Rico will be recognized as a regional reference, in the formation of professionals in the areas of engineering, architecture, business administration, and related fields committed to providing tangible solutions to the social challenges of our time. The institution will strive toward becoming a key catalyzer of the symbiotic relationship between the United States and Latin America.

Source: Institutional Strategic Plan 2016-2021_SI.C1.R7_p. 3 par.3 and Institutional Strategic Plan 2022-2027_SI.C1.R7_p.18 par.3

The vision statement complements the mission statement regarding what UPPR intends to accomplish with the implementation of the strategic plans; thus, the strategic goals were developed specifying what needs to be achieved to materialize the vision. As shown in **Table 3**, the UPPR strategic plan 2022-2027 established goals that address curricular, educational, and institutional outcomes. (Institutional Strategic Plan 2022-2027_SI.C1.R7_p.46-57) In turn, each of the goals is subdivided into specific strategic objectives which are considered necessary to achieve the established goals. In this manner, the objectives defined in the strategic plan guide the different decision-making aspects taking place throughout the institution. Even though the five strategic goals of the plan are intertwined and complement each other, it can be affirmed that goals 1, 2, and 3 are oriented toward curricular and educational outcomes, while goals 3, 4, and 5 are more oriented toward institutional outcomes.

Table 3: Current Strategic Goals and Objectives

Institutional Strategic Plan 2022-2027	
Strategic Goals	Objectives
Goals	1. Develop a student-centered culture that promotes their success <ul style="list-style-type: none"> a. Formalize and promote the Polytechnic University learning model b. Develop and implement the structure for an institutional student retention and advancement program c. Establish a faculty development program d. Establish and strengthen performance management systems (faculty, administrators, and staff) e. Update our classrooms and academic facilities to support the university learning model f. Expand our academic offering with a special focus on micro-credentials g. Upgrade and expand the network of career opportunities for our students h. Encourage our students and alumni in regulated fields to obtain their professional licenses i. Establish a recruitment program to find outstanding students
	2. Foster an ecosystem of creativity, innovation, research, and entrepreneurship <ul style="list-style-type: none"> a. Build interdepartmental academic networks of faculty and students b. Promote the establishment of multidisciplinary research and development events c. Recruit/Support the development of research professors d. Build facilities that support research and innovation e. Promote, incentivize, and support the development of patents f. Establish a recognition system for peer-reviewed publications g. Create an accelerator-incubator business program h. Develop flexible curricular alternatives that will promote specializations, entrepreneurship, and research
	3. Advance a comprehensive institutional agenda for internationalization <ul style="list-style-type: none"> a. Incorporate international and intercultural aspects into our teaching, research, and service activities b. Develop fully bilingual (Spanish/English) academic offerings c. Actively participate in international higher education rankings (both general and discipline-specific, e.g., Q.S. and Financial Times) d. Accredite our academic programs e. Establish international alliances/consortia with partner universities f. Develop and promote our academic offerings internationally (Florida campuses, Caribbean, online) g. Create an international student recruitment and service program (in person/remote) h. Increase the recruitment of international professors i. Encourage faculty exchanges (incoming and outgoing) by establishing of a visiting professor program
	4. Expand our relations with the community, the industry, and the government <ul style="list-style-type: none"> a. Revitalized and strengthen the alumni association b. Build alliances/consortia with partner companies (locally and internationally) and government agencies c. Develop customized training program services for corporations and government agencies d. Stimulate an alignment between students' capstone and research projects, and the problem-solving needs of the community, the industry, and the government e. Create programs to encourage community participation in cultural, educational, and sports activities f. Establish alliances with specialized schools
	5. Strengthen our financial position, sustainability, and the responsible management of institutional resources <ul style="list-style-type: none"> a. Implement a debt burden reduction program service b. Create a commercial and campus services office c. Strengthen the fundraising office d. Formalize and develop an organizational culture of continuous improvement e. Establish a development plan for human resources (managers and staff) f. Implement a balanced scorecard management system g. Reengineer and continuously improve business processes h. Implement a sustainability program i. Improve the resources of the Sponsored Research Office to attract external funds

The mission, goals, and objectives shown in **Table 1**, **Table 2**, and **Table 3**, respectively, were approved by the Board of Trustees (Board of Trustees Certification – Approving Institutional Strategic Plan 2022-2027_SI.C1.R7), and amply discussed among the members of the university

community. To implement the strategic goals and objectives, these elements are integrated into the working plans of the academic departments which define student learning and institutional outcomes. Also, the offices that provide services that support the students considered them to accomplish the institutional mission. (Student Support Services – PSE Report 2022_SI.C3.R10)

Another **success story** is that as a start for the strategic plan implementation process, the President of the university appointed two university officials and a consultant to restructure all aspects that correspond to the new mission, its goals, and objectives:

1. Dr. María G. Véaz as Vice President for Innovation in Retention, Persistence, and Student Success. She oversees the designing, developing, and implementing of a retention model based on Dr. Vincent Tinto and Alan Seidman’s theories. (President’s Memo – New Appointment_0523_SI.C2.R10)
2. Dr. Sylvia Rivera who is a consultant in charge of planning, management, and leadership.
3. Mrs. Rosana Vázquez to coordinate the implementation of the newly approved Institutional Strategic Plan 2022-2027 among all university academic and administrative personnel.

Another **success story** is that during the institutional strategic planning process 2022-2027, the strategic plan committee decided to choose and explicitly define the institutional values, this was a first in UPPR’s history. Thus, the chosen values set the guides for the members of the UPPR academic community regarding the way they are expected to conduct their actions. The UPPR’s institutional values are shown in **Table 4**:

Table 4: Institutional Values

Institutional Values	
Values	<ol style="list-style-type: none"> 1. Excellence: We provide the university community with high-quality services, incorporating the best practices of higher education into our processes. 2. Integrity: We are guided by honesty, respect, and truthfulness in our thoughts, words, and actions within the institutional framework. 3. Social Responsibility: We assume the commitment to the development of a fairer and more equitable society and the protection of the environment. 4. Innovation: We cultivate an attitude of continuous improvement in all our constituents to offer innovative solutions to the great challenges of society. 5. Diversity: We embrace the inclusion of people of different cultures, genders, races, preferences, and opinions that add different perspectives to our community. 6. Service: We promote a permanent attitude of collaboration and support towards every one of the members of the university environment. 7. Sustainability: We adopt practices that simultaneously promote quality of life, the conservation of natural resources, and the profitability of our operations.

Source: Institutional Strategic Plan 2022-2027_SI.C1.R7_p.20

The revised mission, vision, goals, and values are displayed throughout the campuses, institutional platforms, and institutional social media accounts. To conclude, the research activities and analysis carried out by the Strategic Plan Committee to reach the mission, vision, goals, and values should be considered also as the activities of the Standard I – Mission and Goals of the Institutional Self-Study Committee.

AREAS OF STRENGTH

1. At UPPR the conceptualization of the Institutional Strategic Plan coincided with the MSCHE Self-study period.
2. The Institutional Strategic Plan is developed through an inclusive process that involves the participation of representatives of all its relevant constituents, and the current president actively participated in all the stages of the process.
3. The institutional planning function was transferred from the VP Office for Academic Affairs to the president's office.
4. The president of the university hired a professional to coordinate the implementation of the Strategic Plan.
5. Each one of the offices of the institution prepares an implementation plan including objectives, action plans, costs, and results. Thus, the degree of accomplishment of the goals and the objectives of the university are systematically evaluated each year in conjunction with the Institutional Strategic Plan.
6. The periodic assessment and revision of the mission, vision, institutional goals, and objectives ensure they are relevant to the higher education current environment.

OBSERVATIONS

1. A strategic planning and strategic plan implementation policy may be developed and formalized.
2. The institutional strategic process could include the social and economic representation of the community at large.
3. The dissemination of the institutional strategic goals to the student body could be reinforced.
4. The institution may consider evaluating the creation of an institutional intelligence unit, reporting to the president's office.

CHAPTER TWO: STANDARD II - ETHICS AND INTEGRITY

Ethics and integrity are central, indispensable, and defining hallmarks of effective higher education institutions, in all activities, whether internal or external, an institution must be faithful to its mission, honor its contracts and commitments, adhere to its policies, and represent itself truthfully.

Requirement of affiliation 5: The institution complies with all applicable government (usually Federal and state) laws and regulations.

Requirement of affiliation 6: The institution complies with applicable Commission, interregional, and inter-institutional policies. These policies can be viewed on the Commission website.

Requirement of affiliation 11: The institution has documented financial resources, funding base, and plans for financial development, including those from any related entities (including without limitation systems, religious sponsorship, and corporate ownership) adequate to support its educational purposes and programs and to ensure financial stability. The institution demonstrates

a record of responsible fiscal management, has a prepared budget for the current year, and undergoes an external financial audit on an annual basis.

Requirement of affiliation 12: The institution fully discloses its legally constituted governance structure(s) including any related entities (including without limitation systems, religious sponsorship, and corporate ownership). The institution's governing body is responsible for the quality and integrity of the institution and for ensuring that the institution's mission is being accomplished.

Requirement of affiliation 14: The institution and its governing body/bodies make freely available to the Commission accurate, fair, and complete information on all aspects of the institution and its operations. The governing body/bodies ensure that the institution describes itself in comparable and consistent terms to all of its accrediting and regulatory agencies, communicates any changes in accredited status, and agrees to disclose information (including levels of governing body compensation, if any) required by the Commission to carry out its accrediting responsibilities.

LINES OF INQUIRY

1. How can UPPR demonstrate the commitment to academic freedom, intellectual freedom, freedom of expression, and respect for intellectual property?
2. Is the administrative procedure able to protect and sustain academic and administrative freedom throughout the university community?
3. Are institutional practices promoting respect among their constituents?
4. Does the institution advocate inclusion and diversity in the community?
5. Which mechanisms are utilized by the institution to disseminate and to address complaints raised by their constituents?
6. Are those mechanisms effective?
7. Does the institution utilize the mechanisms to avoid conflict of interest effectively?
8. Which measures have HR established that guarantee fair and impartial practices for hiring, evaluation, promotion, discipline, and separation of employees?
9. Are the Admissions and Promotion Office practices demonstrating honesty and truthfulness in their advertising and recruiting materials?
10. Are the Graduate School recruiting practices demonstrating honesty and truthfulness in their advertising and engaging procedures?
11. How does UPPR promote affordability and accessibility?
12. How does UPPR enable students to understand funding sources and options, value received for cost, and methods to make informed decisions about incurring debt?
13. How does UPPR report the full disclosure of information on institution-wide assessments, graduation, retention, certification, and licensure or licensing board pass rates?
14. How does UPPR comply with the Commission's Requirements of Affiliation?
15. How does UPPR report substantive changes affecting institutional mission, goals, programs, operations, sites, and other material issues which must be disclosed in a timely and accurate fashion?
16. How does UPPR comply with the Commission's policies?
17. How does UPPR periodic assessment of ethics and integrity are evidenced in institutional policies?

18. What are the processes, practices, and manners ethics and integrity are implemented in periodic assessment?

OVERVIEW OF THE STANDARD

In its desire to train professionals of excellence in the service of society, UPPR strengthens ethics and integrity promoting actions that foster the welfare of the collective through the academy. The effort to achieve this mission is present at all levels that make up the academic community: administration, faculty and non-faculty employees, and students. This is one of the areas of Self-Study in which the university is most responsible for complying with all aspects of institutional ethics and integrity. To use diverse channels and forms to continually communicate, spread and distribute all the regulations and bylaws related to ethics and integrity. The trust of constituents in the integrity of institutional policies, procedures and practices maintains the credibility of all faculty activities, research and reports generated by the institution.

ANALYTICAL REPORT

To ensure academic freedom, intellectual freedom, freedom of expression and respect for intellectual property rights, UPPR has several policies and procedures that preserve the respect and commitment of members of the university community.

UPPR, in the Faculty Employee Handbook, recognizes and respects the academic freedom as the right of every faculty member to objectively teach the subject they profess, without other restrictions than those imposed by the intellectual and moral responsibility to cover the essential elements of the course, respect to the duty to impart their knowledge through pedagogical procedures identified with the ethics of Faculty and the search for truth. (Faculty Employee Handbook_SII.C1.R5-6_p.35 par.4) It is also the right of every member of the faculty dedicated to research work to conduct their work free of restrictions that limit objectivity, intellectual honesty, or dedication to the search for the truth in their work. (Faculty Employee Handbook_SII.C1.R5_p.35 par.5)

Intellectual freedom is granted in the Intellectual Property Policy. UPPR encourages and stimulates the development of instructional materials and research. All members of the university community should respect and have knowledge of the policy (Administrative Employee Handbook_SII.C1.R5_p.38 par.8)

“The UPPR recognizes the value of generating knowledge and the institutional need to encourage the production of creative and scholarly works and the development of new and useful materials, devices, processes, and other inventions, some of which may have potential for commercialization. Such activities contribute to the professional development of the individuals involved, enhance the reputation of the University, provide additional educational opportunities for participating students, and promote the general welfare of the public at large.” (Intellectual Property Policy_SII.C1.R5_p.1 par.2)

In the Intellectual Property Policy, administrative procedures to support compliance with the provisions of the policy include the guidance and advice of the Intellectual Property Committee. This committee evaluates, prioritizes, and assigns economic and administrative efforts for the successful implementation of the policy. The policy takes into consideration possible contractual

obligations of confidentiality and revenue sharing to protect the rights of all parties involved. (Intellectual Property Policy_SII.C1.R5-6_p.5-6 sec. C)

Freedom of expression is guaranteed in the Student Regulations. It states that any member of the academic community, especially students, has the right to meet, organize, celebrate events, and participate in student, cultural or other similar activities, to develop a holistic environment in the institution more efficient, tolerant, respectful, and orderly. (Student Rules and Regulations_SII.C1.R5-6_p.3 art. I sec. 3-4)

UPPR is devoted to encouraging the highest values in all interactions among students, faculty, staff, administration, suppliers and/or vendors. Institutional and departmental policies and practices; students, faculty and employee's handbook and catalogs, clearly address a climate that promotes respect and ethical behavior among the university community. One **success story** is that Diversity, Inclusion, Integrity, and Equity are part of the values that UPPR has fostered through its mission and through activities in promoting and disseminating them in the community. Consequently, the policies that pertain to these values are continuously being reviewed for improvement. The Diversity, Equity, and Integrity Survey, administered in the fall and winter of 2023, reflects that 96% of students feel that the university honors its institutional values. These results justify the continued refinement of policies and the creation of activities for the academic community which promote institutional values.

The Human Resources Office is the Institutional unit responsible for establishing, encouraging, and monitoring these regulations in compliance with local and federal laws. To assist the Human Resources Office in these responsibilities' other institutional units, like the Board of Trustees, Security Department, the Student Council, and the Academic Council, actively take part.

The Administrative Employee Handbook, the Faculty Employee Handbook, and the Student Rules and Regulations are the principal documents that provide the foundations and guidelines to promote respect, inclusion, and diversity among the university community. (Student Rules and Regulations_SII.C2.R5-6_p.4 art.II sec.1-3) These documents address the mechanisms to resolve differences, conflicts, and complaints. They include specific sections about equal employee opportunities, affirmative act plan, discrimination based on sexual orientation or gender identity, sexual harassment policy and management, domestic violence policy, and violence free environment, among others. UPPR "is committed to the principle of equality and opportunity in employment and education, regardless of race, color, sex, marital status, pregnancy status, sexual orientation, gender identity, religion, physical or mental handicap, age, veteran status origin, social origin or national origin, genetic information, domestic violence or any other characteristic protected by law, in the administration of its institutional, educational, admission, employment, scholarship programs, loans, as well as in all programs and activities of the university." (Administrative Employee Handbook_SII.C2.R5_p.18 par.2-5) The policy clearly establishes that "any employee who understands that this policy has been violated and that there has been discrimination in their against for any of the characteristics indicated above," can file "a complaint of according to the procedure established for these purposes." (Procedure for Filing Complaints 2019_ SII.C2.R5-6_p.1)

The Student’s Regulation plainly mentioned that “the purpose of this Regulation is to establish the rights, duties and responsibilities of the student body of UPPR and ensure that the Institution, with the student help and cooperation, can efficiently develop academic excellence in a climate of tolerance, respect and order among teachers, administrators and students as well how to foster collaboration in institutional responsibilities.” (Student Rules and Regulations_SII.C2.R5_p.12-14 art.VI sec.5-7) Within the rights and responsibilities of this document, the bases for a climate of respect and inclusion in the community of UPPR also are encouraged.

UPPR is committed to answering any grievances or complaints of all their constituents. The main objective of the Grievance Procedure is to establish a course of action to enforce the practices and reach the culmination of the procedure in a fair and impartial manner.

If a student is the complainant, the practices and procedures are managed through the Vice President of Enrollment Management and Student Services. If it is an administrative employee, the Human Resources Office oversees processing the complaint and bringing it to its conclusion. In the case of Faculty employees, the VP for Academic Affairs supervises investigating and resolving the complaint in collaboration with the Human Resources Office. (Grievance Procedure _SII.C3.R5-6_p.1 sec.II)

Any grievance or complaints given by any constituents is managed by authorized personnel and followed by the procedures described in their policies. These policies are disseminated to all the constituents by hardcopy documents and university’s web links. The policies mentioned are described in the following documents: Student Handbook, Faculty Employee Handbook, Administrative Employee Handbook, and HR Policies. More policies are mentioned in **Table 1**.

Table 1: Additional Policies

Evidence	Page, section, or paragraph
Sexual Harassment Policy	p. 6 sec. 5
Sexual Assault Policy	p. 8
Drug and Alcohol Policy	p. 1 par. 2
Student Information Handbook	p. 6
Institutional Security Policies	p. 1-9
Students Rules and Regulations Policy	p. 13-14 sec. 5-6
Procedure for Grade Review Policy	p. 2 par. 3-5
Crisis Intervention Protocol	p. 5 sec. 8
Suicide Prevention Protocol	p. 20
Procedures for Students’ Complaints	p. 1
Campus and Workplace Violence Policy	p. 2 sec. 6
Cyberbullying Policy	p. 1
Harassment Prevention on Online Communication	p. 1
Protection Policy for Students Activated to Military Service	p. 1

To avoid conflict of interest or the appearance of such conflict in all activities and among all constituents, UPPR has delegated the Human Resources Office the compliance of the actual regulations. UPPR Faculty and Administrative Employee reflects the institution's conflict of interest regulations. (Faculty Employee Handbook_SII.C4.R5-6_p.47) (Administrative Employee Handbook _SII.C4.R5-6_p.43-44) Both handbooks are in the process of being updated. Since 2016, a policy that specifically addressed conflict-of-interest issues was established. (Policy on Conflict of Interest_SII.C4.R5-6_p.1-5)

At UPPR, administrative offices are self-regulatory and audit reports are available to review compliance with federal regulations. In the institution, each office works independently following federal regulations.

In addition, management of administrative offices may not have close family ties, collections and sales are prohibited in the institution. The policy on tuition costs and payments associated with debts on academic charges is documented on the institution's website under finances. (Payment Enrollment Policy_SII.C4.R5-6_p.1)

UPPR, through the Human Resources office, ensures that all policies and procedures for recruitment, hiring, promotion, evaluation, disciplinary measures, and termination of employment are conducted in a fair and impartial manner, in accordance with state and federal laws and procedures. The Human Resources office manages the ADP system to deliver document policies to the employees with an acknowledgement, as needed. The main objective of UPPR's recruitment and selection policies and procedures is to comply with the Equal Employment Opportunity (EEO) Laws, Affirmative Action and other labor laws applicable to Puerto Rico. (Faculty Employee Handbook_SII.C5.R5-6_p.12)

In the Recruitment, Selection and Appointment Policy and Procedure, UPPR is committed to the established practices, to conduct clear and transparent procedures. The calls for applications are published inside and outside the Institution, giving priority to those internal candidates who are interested in professional growth. The selection of candidates depends on the preparation and fulfillment of the requirements for the position in question. Interviews are documented regardless of the final decision. Those who are not selected are documented as well, with the justifications for the decision. Those recruited are given a probationary period during which they can train in their area of expertise, if needed. (Administrative Employee Handbook_SII.C5.R5-6_p.10-12, 43-46) (Faculty Employee Handbook_SII.C5.R5-6_p.19-22, 48-49) (Recruitment, Selection and Appointment Policy and Procedure_SII.C5.R5-6_p.1 sec.I)

UPPR takes affirmative action to ensure that applicants are considered for employment and that employees are treated equally in their work without regard to race, color, religion, gender, gender identity, national origin, status as a Vietnam Era veteran, qualified veteran, disabled veteran, or person with a physical or mental disability, or any other protected status. Such action includes, but is not limited to employment, promotions, demotions or transfers, recruitment announcements, suspensions or layoffs, wages, as well as other forms of compensation and selection for training, including apprenticeships.

In compliance with Executive Order No. 11246, as amended, section 503 of the Rehabilitation Act of 1973, as amended, and the Vietnam Era Veterans' Readjustment Assistance Act of 1974, amended as 38 U.S.C. 4212; UPPR has developed an Affirmative Action Plan that detail all steps that are taken to ensure compliance with these laws and the institutional "Equal Employment Opportunity (EEO) Policy". The policies are available for inspection by any employee or job applicant at the Human Resources Office and are included in the Faculty Employee Handbook. (Faculty Employee Handbook_SII.C5. R5-6_p.16)

UPPR upholds its mission and goals in all communications within the internal and external community. By making this a priority, the institution prides itself on being honest and truthful in every announcement, throughout all processes and procedures.

In the recruiting and admission processes, UPPR continuously works towards providing clear, direct, and attractive communication to prospective students. This starts by advertising all the academic programs through diverse types of media: billboards, television, radio, website www.pupr.edu, and social networks. Promotional materials are available when prospective students come to visit campus and when UPPR personnel promote outside the campus (academic offerings, program descriptions, admission requirements, admission application).

Information of all programs and admission requirements are accessible at www.pupr.edu. Also, Undergraduate and Graduate catalogs can be accessed by everyone and have very detailed information (Undergraduate Catalog: Academic Years 2020-2025_rev.0922_SII.C6.R5-6_p.28 par.1) (Graduate Catalog: Academic Years 2022-2024_rev.0922_SII.C6.R5-6_p.15 par.1-13)

Prospects can take the first step and leave their information at www.pupr.edu and be able to have a conversation with the recruiting staff or academic departments. Written information can be provided via email and on Campus visits.

As part of the promoting and recruiting efforts, both undergraduate and graduate school personnel participate in key internal events: Campus Tour, Academic Department Tours, and industry conventions, as well. These are planned and coordinated by the Admissions and Promotions Office.

Once a prospective student shows interest in commencing studies, follow-up and follow-through happens as long as needed to help the student complete the admission process. Communication through email and text takes place following the guidelines stipulated by the institution's policies. Undergraduate prospects can complete the admission application through www.pupr.edu under *Undergraduate Application*. The prospective receives an email and text message with all the documentation required for the evaluation process. Once the documentation is received, the admission evaluation takes place, and the student receives the admission status via email and text message. The new students receive orientation, student email, academic counseling, and financial aid information.

Graduate students can complete their admission application through www.pupr.edu under *Graduate Admission Application*. Graduate school personnel make sure that the applicant knows which documents need to be submitted. After completing the student file, the evaluation process takes place and notice of admission is sent via email. The Graduate School conducts an online new student orientation for on-Campus programs and online programs, respectively. Important documentation is sent prior to this event and is discussed in detail at orientation. To keep new students engaged and motivated, program coordinators and Directors welcome them and conduct academic orientations via email or by phone calls. The Graduate School strives to make the students a priority by being accessible, providing excellent service and communication during their academic careers.

The students and administration are well informed of what is happening on Campus by official communications distributed via Institutional email and published on websites and social networks. Internal email is an important source of communication as it is the official channel of communication between students, faculty and administration. Announcements regarding institutional events, student achievements and workshops happen daily and follow guidelines provided by the Information Technology Office. My Poly portal is another official source of communication where active students can see important announcements, complete their trimester enrollment, request services, see all academic information, financial aid, finances, and Blackboard tutorials.

Social networks have been an important part of all communications with students and promotions. The Institutional Development and Communications Office manages these. Although there is no manual of procedures for publications, the office works hand in hand with all academic departments and administrative offices to understand their needs and communicate them to the marketing agency of Wunderman Thompson, named GREY. Announcements and marketing materials are then approved by UPPR. Alterno Agency manages www.pupr.edu website and all online live events.

UPPR follows all consumer information requirements from the different federal agencies. All the information required is detailed in different sections of UPPR website (www.pupr.edu). Some of them are: College Financing Plan, Work/Study Program, Right to Know Act, Loan information, CARES Act, COOP, Admissions, Athletics, Registrar, Costs, and Exchange. (College Financing Plan_SII.C7.R5-6, R11)

UPPR maintains a full disclosure of information on institutional wide assessment, graduation, and retention rates on the website www.pupr.edu. Compliance with the Commission's requirement of affiliation is demonstrated through this Self-Study and in the Institutional Federal Compliance Report.

At UPPR, changes to any of the policies, practices or procedures that may affect the operation of the institution are disseminated through the different offices and on the website. In the case of the institutional mission, goals, programs, operations, sites, these are published on the website but are also posted in open spaces heavily trafficked by students such as elevators, receptions, and hallways in the main buildings. In the last year, the mission, vision and goals have suffered some minor changes, these have already been disseminated throughout the campus, social media, and the website.

Compliance with the Commission's policies is evidenced in the Institutional Federal Compliance Report. This report details the information that evidences compliance with the policies. Annually external audits are also used to evidence compliance with state and federal laws. These reports are provided as part of the evidence included with this Self-Study. (Institutional Federal Compliance Report_SII.C8.R11-12, R14)

In relation to fostering a climate of respect within the institutional constituents, the university encourages open and honest communication between members of the community. Most conflict and differences of opinion among members of the university community can be resolved by the

individuals directly confronting issues and jointly exploring alternatives. In cases where conflicts cannot be mutually resolved, the university has established formal complaint procedures.

In the Administration Handbook, (Administrative Employee Handbook_SII.C9.R5-6_p.43-44 par.5) there is a section that describes expected employee conduct and the procedure to submit grievances. (Grievance Procedure_SII.C9.R5-6_p.1 sec.II) The institution assures that all grievances are addressed promptly, appropriately, and equitably based in the code of ethics of the PUPR. In the Faculty Handbook, UPPR supports the Declaration of Professional Ethics of the American Association of University Professors. (Faculty Employee Handbook_SII.C9.R5-6_p.25-26 par.6-13) Each member of the University Community must adhere to and respect the policies developed regarding copyright, protocols for Sexual Harassment and Domestic Violence.

The Student Rules and Regulation Handbook is the institutional document where the rights, duties, and responsibilities of the students from UPPR are set. (Student Rules and Regulation_SII.C9.R5-6_p.3 art.I) This includes the procedure to be followed by the Disciplinary Committee in cases of violations of the institutional rules and the disciplinary sanctions to be applied. The Vice President of Enrollment Management and Student Services is responsible for ensuring the student orientation and disseminating all important and relevant information to the university community to foster a climate of tolerance, respect and order among faculty, administrators, and students. Within the student community the University has developed its academic integrity policy which is circulated to the University Community regularly. This Academic Integrity Policy is applied by faculty members in cases where it is evident that students have failed the policy. (Academic Integrity Policy_SII.C9.R12_p.3 par.1)

During the period from 2016 to 2023, 27 grievances were filed in the Human Resources Office. To more effectively and quickly resolve possible grievances that may arise in the academic community, the Human Resources Office undertook the task of reviewing the policies and procedures regarding the filing of grievances by faculty and non-faculty employees. For its part, the Vice Presidency for Student Affairs did the same to address any complaints that might arise from students. Another **success story** is that the revision of existing policies and their updating allowed 85% of the cases to be resolved through arbitration, 11% were resolved following the processes established in the Grievance Policies, and 3.7% of them were dismissed by one of the parties. All the grievance cases regarding students were successfully resolved.

UPPR keeps revising the Administrative Employee Handbook updating it according to the situations that are currently lived in daily life. UPPR has created its Privacy Policy by which employees must be guided by policies related to ethics. In addition, these employees must abide by the codes of ethics of the professions they currently exercise. The University has its procedures to channel complaints, unauthorized conduct, and disciplinary sanctions that entail not following the different guidelines and policies for these purposes. UPPR Security Office is one of the units responsible for promoting and enforcing an environment free of violent acts, including sexual assault.

In the case of the academic integrity, to address cases in which a student commits a violation in the academic integrity, there is a disciplinary committee composed of faculty and administration members that studies the cases that arise during the academic year to take the corresponding

actions that lead students to move on the path of ethics and integrity. Also, the faculty have discretion in imposing sanctions for violations of the policy, which may include failing grade for the assessment and in some cases, a failing grade for the course. (Student Rules and Regulations_SII.C9.R5_p.11 sec.1-8)

To conclude, since ethics and integrity are the sum of dozens of institutional principles, practices, rules, and regulations covering UPPR's administration, faculty, students and other members of the institutional constituency, there is no specific period or date in which ethic and integrity are assessed. Instead, ethics and integrity are continuously assessed depending on the issue under concern. What is perfectly clear is that ethics and integrity are the most important principles underlying all practices.

AREAS OF STRENGTH

1. Policies and practices regarding students, faculty and administration are updated and widely disseminated among offices, students and on the website www.pupr.edu.
2. Faculty can rely on technologies and practices to enforce academic integrity. The technology provided by the virtual platform and VEIL allows the faculty to have confidence in the academic integrity of the virtual assessments.
3. Students are informed of the procedures used to verify their identity during virtual assessments.
4. Students, faculty and administration grievance policies and procedures are clearly outlined and implemented. Records are well kept.
5. There are clearly updated policies and procedures for hiring, evaluation, and promotion. All interviews are documented regardless of the decision.
6. The calls for applications are published inside and outside the Institution, giving priority to those internal candidates who are interested in professional growth.
7. Policies and procedures for recruitment, hiring, promotion, evaluation, disciplinary measures, and termination of employment are conducted in a fair and impartial manner, in accordance with state and federal laws and procedures.
8. Institutional and departmental policies and practices clearly address a climate that promotes respect and ethical behavior among the university community.
9. Every announcement clearly reflects the institution prides itself on being honest and truthful throughout all processes and procedures.
10. Promotional materials are available on campus when UPPR personnel promote outside the campus, social media, and the website www.pupr.edu.
11. The institution complies with all state and federal regulations related to its constituency's rights.
12. Student and faculty surveys were conducted regarding their opinions about the university as a whole and specifically about each head office on campus.
13. Since 2016, a conflict-of-interest policy was established in the institution.

OBSERVATIONS

1. All policies related to ethics and integrity may be continuously disseminated and revised.
2. The Human Resources Office and VP of Enrollment Management and Student Services could include in the Administrative and Faculty Handbook and Student Rules and

Regulations a broad statement of ethics, with procedure and policy. This may be continuously updated and disseminated among the constituents, offices, and website.

3. All faculty and student regulations may be continuously updated and disseminated among the constituents.
4. The institution may consider developing additional innovative approaches to promote student participation in the revision of institutional policies.
5. The conflict-of-interest policy may be continuously disseminated among the constituents to ensure that all institutional policies and procedures meet current best practices.

CHAPTER THREE: STANDARD III - DESIGN AND DELIVERY OF THE STUDENT LEARNING EXPERIENCE

An institution provides students with learning experiences characterized by rigor and coherence at all programs, certificate, and degree levels, regardless of instructional modality. All learning experiences, regardless of modality, program pace/schedule, level, and setting are consistent with higher education expectations.

Requirement of affiliation 8: The institution systematically evaluates its educational and other programs and makes public how well and in what ways it is accomplishing its purposes.

Requirement of affiliation 9: The institution's student learning programs and opportunities are characterized by rigor, coherence, and appropriate assessment of student achievement throughout the educational offerings, regardless of certificate or degree level or delivery and instructional modality.

Requirement of affiliation 10: Institutional planning integrates goals for academic and institutional effectiveness and improvement, student achievement of educational goals, student learning, and the results of academic and institutional assessments.

Requirement of affiliation 15: The institution has a core of faculty (full-time or part-time) and/or other appropriate professionals with sufficient responsibility to the institution to assure the continuity and coherence of the institution's educational programs.

LINES OF INQUIRY

1. How does UPPR ensure that the programs' academic curricula are coherent, appropriate in length for the objectives of the degree, and designed so that the learning experiences are of the appropriate rigor, and promote the synthesis of learning?
2. How does the UPPR ensure that the student learning experiences are rigorous and effective in teaching, assessment of student learning, scholarly inquiry, and service, as appropriate to the institution's mission, goals, and policies?
3. How does UPPR determine that the faculty is sufficient in number and qualified for the positions they hold and the work they do?
4. How does UPPR provide faculty with sufficient opportunities, resources, and support for professional growth and innovation?
5. How is UPPR faculty evaluated? Are the policies and procedures clearly established?

6. How are the academic programs clearly and accurately described in official institution publications so that students can understand and follow program and degree requirements and expected time for completion?
7. How does the Institution provide sufficient learning opportunities and resources to support the programs of study and the students' academic progress?
8. How does the Institution offer opportunities to attract students into new areas of intellectual experience, expand their cultural and global awareness and cultural sensitivity, and prepare them to make well-reasoned judgments outside as well as within their academic field?
9. What are the objectives of the General Education Program at UPPR?
10. How does the General Education program support the UPPR mission statement, enrich the students' intellectual and cultural experience and prepare them to make well-reasoned judgments beyond their academic field?
11. How does the General Education program support the development of essential skills (such as oral and written communication, scientific and quantitative reasoning, critical analysis, and reasoning, technological competency, and information literacy), and the study of values, ethics, and diverse perspectives?
12. How does UPPR Graduate School offer opportunities for the development of research, scholarship, and independent thinking? How does UPPR make sure that the Graduate School faculty has the appropriate credentials to comply with the requirements of graduate-level curricula?
13. How does the institution monitor periodic assessment of the effectiveness of programs providing student learning opportunities?

OVERVIEW OF THE STANDARD

UPPR is committed to providing consistent, rigorously designed curricula aligned with the institution's mission, values, and job market demands. UPPR offers certificate, associate, bachelor, and graduate degree programs, which include diverse backgrounds and emphasize the development of intellectual, scientific, humanistic, and technological experiences. The diverse student population is present on three campuses: San Juan, Orlando, and Miami, the international academic alliance with the INTEC campus, Santo Domingo, Dominican Republic, and the local academic alliance with Boston Scientific, Dorado, PR. The institution has developed academic outlines for each program that feature trimester-by-trimester degree requirements.

ANALYTICAL REPORT

Academic Programs

The academic offering of UPPR includes programs in the major areas of Business, Architecture, Engineering, and Education. Specifically, the institution offers associate degrees and bachelor's degrees at the undergraduate level. At the graduate level, there are graduate certificates, master's degrees, and a PhD degree. Finally, UPPR has an academic alliance in INTEC, Dominican Republic, to offer a master's degree and a similar local alliance at Boston Scientific, Dorado, PR, to offer several graduate programs. The university's total number of degrees per discipline and academic level is presented in **Table 1**.

Table 1: Academic Degrees* per Discipline and Level

Undergraduate			Graduate			
Degree	Discipline	Quantity	Degree	Discipline	Quantity	
Associate Degrees	Engineering	4	Graduate Certificates		3	
	Architecture	1			3	
Bachelor Degrees	Business	2		Masters	Engineering	14
	Engineering	10			Architecture	2
	Architecture	2			Education	1
			PhD		Engineering	1

* Refer to the Main Programs of Study on page 17 for a specific list of UPPR offerings.

Outcome assessment of student learning is continuously executed in all disciplines. The assessment process shows the effectiveness of achieving the institutional learning goals (Figure 1) and the specific academic program goals. The assessment of an academic program is based on the accreditation criteria issued by the corresponding agencies and the institutional mission and academic objectives.

Figure 1: Institutional Learning Goals

- By the time of graduation, UPPR graduates are expected to attain the following eight competencies:
1. **Effective Communication:** Express ideas in oral, written, and graphic modes.
 2. **Scientific and Quantitative Reasoning:** Apply scientific and mathematical reasoning to the solution of problems.
 3. **Critical Thinking:** Interpret and question evidence, statements, and graphics to draw justified, educated, reasonable, and truthful conclusions.
 4. **Technological Competence:** Use technology and tools to gather, process and analyze the information required to solve problems in the field of study.
 5. **Information Literacy:** Acknowledge, locate, and evaluate the information needed to accomplish a specific purpose.
 6. **Lifelong Learning:** Recognize the need to engage in lifelong learning.
 7. **Ethical and Social Responsibility:** Be aware of ethical, professional, and social responsibilities.
 8. **Teamwork.** Contribute to achieve team goals.

The San Juan campus has been licensed to operate in Puerto Rico under the JIPs. The Florida campuses are licensed by the Florida Commission for Independent Education. Moreover, numerous academic programs also have professional accreditation. All programs at the College of Engineering are accredited by the corresponding commission of the Accreditation Board for Engineering and Technology (ABET). Also, UPPR has a National Security Agency’s National Center of Academic Excellence in Cybersecurity (NCAE-C) designation. Finally, the School of Architecture has the National Architectural Accrediting Board (NAAB) and Landscape Architectural Accreditation Board (LAAB) accreditation for the Bachelor’s degree in Architecture and the Master’s degree in Landscape Architecture, respectively. All these specialized accreditations exemplified UPPR goal of offering high-quality, rigorous, and effective education.

At UPPR, the student learning experiences at the undergraduate level include real scenario examples, laboratory experiences, course projects executed in industry scenarios, and capstone projects. In addition to these curriculum requirements, the students can perform internships and participate in extracurricular competitions at local, national, and international levels in their specific discipline. UPPR programs are designed to provide a coherent learning experience and prepare students for advanced degree programs and immediate career opportunities upon

graduation. Some of the latest examples are associate degrees in surveying, mechanical engineering, computer application development engineering, supply chain and logistics engineering, and product design. (Undergraduate Catalog: Academic Years 2020-2025_rev.0922_SIII.C1.R9_p. 288-317) One related **success story** is that students participate in national extracurricular competitions, achieving top recognition in their fields. All academic departments and student organizations are encouraged to be involved in extracurricular activities, including local, national, and international competitions. For example, eight mechanical engineering students won First Place Overall and First Place Regular Class Mission Performance in the Aero Design West competition organized by the Society of Automotive Engineers.

UPPR has three teaching modalities: on-campus, hybrid, and online. As part of the academic offering, UPPR has five (5) fully online bachelor's degrees and three (3) master's degrees. UPPR's faculty knows the latest teaching methodologies and technological tools trends. Additionally, they were certified in online teaching due to the COVID-19 pandemic, and now they excel in using the mentioned methodologies and technological tools. One related **success story** is that all faculty members (PT and FT) were certified in online teaching due to the COVID-19 pandemic. An Institutional Certification Program was established to address online teaching during the COVID-19 pandemic. The Institutional Certification Program offered by the Virtual Education and Innovative Learning Center permitted all faculty members (PT and FT) to use virtual methodologies and technological tools.

UPPR promotes research activities at both the undergraduate and graduate levels. At the undergraduate level, the Undergraduate Research Program for Honor and Outstanding Students (URP-HOS), sponsored by the Hispanic-Serving Institutions - Science, Technology, Engineering, or Mathematics (HSI STEM) grant, prepares students with the fundamental tools for pursuing research and encourages them to continue to graduate studies in their disciplines of interest. Other regular research modalities embedded in the curriculum include capstone experiences and course projects. At the graduate level, research is part of the curriculum in thesis activities and, definitely, in the doctoral dissertation endeavors.

Graduate Education Towards Independent Thinking

UPPR Graduate School offers opportunities for research and independent thinking. The graduate students are required to design a final project to solve or propose solutions to a real-life problem. In the proposed solutions, the students must apply concepts learned in their area of study and do research, for example, through a review of the literature and develop knowledge through surveying the workplace area (for example, interviewing managers and employees) to create a new solution to the problem being solved.

Evidence of the completed master's degree projects worked is in the Puerto Rico Cloud Repository (PRCR), where they are saved and updated by year and month. The thesis are in PROQUEST – Dissertation and Thesis@Universidad Politecnica de Puerto Rico.

The students present their final project at the Graduate School Expo. In the Expo, the projects are evaluated by a judge in terms of creativity or innovation, contribution to solving a problem, and applying concepts of areas of study. The Graduate School Expo is held at the end of each trimester. The judge evaluation form constitutes evidence of the occurrence of the event (Graduate Project

Expo Rubric_SIII.C6.R9_p.1).

UPPR Graduate School offers opportunities for career and assistantship for students in their third, fourth, and fifth year of study and at the graduate level. Professors offering courses at the Graduate School have academic preparation at the doctorate level. Evidence of the professor’s credentials by area of study is included in the graduate UPPR catalog. (Graduate Catalog: Academic Years 2022-2024_rev.0922_SIII.C6.R15_p.31-109)

Course and Academic Renewal

As stated in ‘Goal 3: Foster institutional alignment with educational trends’ of UPPR’s Strategic Plan, the institution successfully has identified and developed programs and added program offering formats (e.g., online and on-campus) based on new market needs at the undergraduate and graduate level. (Institutional Strategic Plan 2016-2021_SIII.C1.R8_ p. 8) In fact, the evaluation of most academic programs is based on the accreditation criteria issued by the relevant agencies, as well as the mission and educational goals of the institution. The Institutional Student Learning Assessment Committee recognizes that assessing to enhance and adjust and assessing to demonstrate are fundamental stages in developing an effective outcomes assessment program. (Academic Program Review Policy_SIII.C1.R8_p.1 and Undergraduate Catalog: Academic Years 2020-2025_rev.0922_SIII.C1.R10_p.17)

All new program proposals must follow the steps outlined in **Table 2** to ensure that all degree and certificate programs provide students with a coherent learning experience that fosters them to reach the synthesis level.

Table 2: New and Renewal of Academic Programs Process

Steps	Responsibility	Actions
1	Academic Department	Proposes new ideas or revisions of academic curriculum to the Dean.
2	Department Curriculum Committee	Reviews and approves the proposal.
3	VP for Academic Affairs	Reviews; makes recommendations as deemed necessary; endorses for submission to the Academic Council.
4	UPPR Academic Affairs Committee of the Academic Council	Reviews; makes recommendations as deemed necessary; endorses for submission to the Academic Council.
5	Academic Council	Reviews and approves the proposal.
6	Board of Post-Secondary Institutions	Reviews; makes recommendations as deemed necessary; approves.

Source: (1) Academic Affairs Committee Operational Procedure rev. 10-30-2015, (2) Academic Affairs Committee Procedural Memo, and (3) Academic Policy Memo August 3, 2016.

The academic programs are fully explained and described in the university undergraduate and graduate catalogs (Undergraduate Catalog: Academic Years 2020-2025_rev.0922_SIII.C1.R8_p.52-317 and Graduate Catalog: Academic Years 2022-2024_rev.0922_SIII.C1.R8_p.31-109), the university website www.pupr.edu, and the academic department bulletin boards. Incoming students visit the Office of Undergraduate Recruitment, where they can have an initial orientation that covers an overview of the programs offered at the institution. Candidates for a master’s or PhD program can visit the Graduate School for a similar initial orientation and overview of the academic offerings.

Active students are continually encouraged to visit their academic departments, where educational materials like curriculum sequence and annual offerings, among others, are always available. In addition, in the academic departments, students can interact with faculty members and academic advisors regarding specific information about their academic curriculum.

Student Learning Assessment Process

Some aspects of the student learning assessment process at UPPR are decentralized due to the unique characteristics of the programs and the requirements of academic program-specific accreditation agencies. Nevertheless, each academic program has a set of learning outcomes aligned with the institution's learning goals and mission. In addition, each institution's course syllabus includes a section outlining the course objectives. Most programs have also adopted a section of the course syllabus that outlines the program-level learning outcomes strongly supported by the course.

The school deans are responsible for planning and managing related actions to ensure proper implementation. Professors are tasked with designing courses to ensure the assessment strategies align with the course's objectives and learning outcomes. This alignment ensures that the assessments measure what they are intended to measure and that the knowledge and skills being assessed are valid and reliable. To facilitate the synthesis of learning, the program provides students with opportunities to integrate and apply what they have learned throughout the program. To ensure validity and reliability, professors consider the following when creating assessments:

1. Use various assessment methods such as quizzes, exams, essays, and projects to evaluate students' knowledge and skills comprehensively.
2. Use clear, concise, and unambiguous assessment instructions so students understand what is expected of them.
3. Establish explicitly stated and easily understood grading criteria so students know what they are evaluated on and can tailor their work accordingly.
4. Use formative and summative assessments that allow students to receive feedback on their progress and make improvements before the final summative assessment.

These actions are supported by providing general information to the students on key academic and administrative issues, summarized in the undergraduate and graduate catalogs. (Undergraduate Catalog: Academic Years 2020-2025_rev.0922_SIII.C1.R9_p.21-51) (Graduate Catalog: Academic Years 2022-2024_rev.0922_SIII.C1.R9_p.10-28) (Undergraduate and Graduate Catalog Miami Campus: Academic Years 2022-2023_rev.1122_SIII.C1.R9_p.24-45) (Undergraduate and Graduate Catalog Orlando Campus: Academic Years 2022-2023_rev.1122_SIII.C1.R9_p.24-45)

Periodic Assessment of the Effectiveness of Academic Program

All the programs offer rich learning opportunities for the students through their curriculums. The program curriculums were meticulously designed by professors with advanced degrees and extensive curricular and professional practice experience, so they meet the expectations of higher education and industry demands and are aligned with the institutional mission. These curriculums have been designed considering constituencies' input. UPPR continuously communicates with potential employers in Industry and Government through the Office of Career and Internship Services and through departments or dean-specific efforts such as Industry Advisory Board meetings coordinated by the engineering departments. Information from Constituencies

(employers, alumni, industry representatives, students) is gathered through meetings, job-fair interactions, employer surveys, alumni surveys, exit surveys, exit interviews surveys, and performance evaluations of student supervisors in internships and COOP programs, among others. These are means to receive information that helps keep curriculums up to date. (Longitudinal Analysis of the 2013 to 2022 Institutional Exit Interview Survey Results_SIII.C5.R8)

All academic programs at UPPR San Juan Campus have been licensed to operate under the Puerto Rico Board of Post-Secondary Institutions; for the Orlando and Miami Campuses, programs are licensed by the Florida Commission for Independent Education. Most academic degrees at UPPR have program-specific accreditations that imply curriculums that meet such accreditations' breadth and depth requirements.

In the academic departments, an assessment and continuous improvement process structure is in place to evaluate the program's effectiveness and the level of attainment of the student outcomes. This process is more structured in some areas than in others. Still, all areas have faculty involvement in the continuous evaluation of the curriculums and courses and in the implementation of continuous improvement measures at the course level, area of specialty level, or program level. Most programs have curriculum maps identifying strategic courses supporting the program's learning outcomes. The academic departments have a curriculum committee or equivalent formed by faculty members in charge of reviewing course syllabi and proposed curricular changes.

UPPR provides students with a program curriculum sequence aligned with the academic time length and course prerequisites. All curriculums have been designed with a pre-requisite and co-requisite structure that guarantees gradual growth in the skills that the student must develop and a culminating experience that prepares them for professional practice based on previously acquired knowledge and skills. This culminating experience integrates technical and non-technical competencies gained through the curriculum. It allows the evaluation of the level of attainment of the student outcomes at the time of graduation. (Undergraduate Catalog: Academic Years 2020-2025_rev.0922_SIII.C8.R8_p.43-51) (Undergraduate and Graduate Catalog Miami Campus: Academic Years 2022-2023_rev.1122_SIII.C8.R8_p.46-54, 113-120) (Undergraduate and Graduate Catalog Orlando Campus: Academic Years 2022-2023_rev.1122_SIII.C8.R8_p.45-52,192-199)

Significant changes in the curriculum, such as creating or eliminating courses or creating new specializations or areas of interest (tracks) within an academic program, require the approval of the Academic Council. The process starts at the academic department level with the active participation of relevant standing committees. The department directors and the corresponding academic deans submit these revisions to the Academic Council, along with the associated documentation justifying these changes. (Academic Program Review Policy_SIII.C8.R8_p.1)

The Academic Council is the body in charge of advising the President on projects related to changes in curricular programs, suppression, or creation of courses. (Academic Council Regulations 2016_SIII.C8.R8_p.2-3). The Academic Affairs Committee (Academic Council Regulations 2016_SIII.C8.R8_p.11-12) of the Academic Council has as a primary purpose to make recommendations to the Academic Council on new subjects or programs and curricular changes at the University. This Body comprises nine (9) new counselors, of which seven or more are

professors, and one is a student. The final recommendations of the Academic Affairs Committee are evaluated in a plenary session, and if approved, an official certification is created by the Academic Council, a copy is sent to the Registrar’s Office for inserting modifications in the Master Catalog of Courses, and the dissemination and implementation of changes processes are initiated.

Faculty

Although concise data about the faculty population was presented at the beginning of the document, this part of Standard III represents a more extensive report on faculty. UPPR faculty members serve full-time or part-time, depending on the institution’s academic needs. Once hired, these faculty members can also be assigned other tasks, such as administrative assignments. The Institution's academic ranks for full-time faculty members are Instructor, Assistant Professor, Associate Professor, and Professor. For the part-time faculty members, academic ranks range from Lecturer I to Lecturer IV. In the last Self-Study document, it was stated that UPPR faculty serves in a multi-year contract policy. However, since 2015 the multi-year contract policy has been substituted by annual contracts. (Policies on Loads, Academic Discharges and Faculty Employees Compensation_rev.0615_SIII.C2.R15_p.1-3)

The Human Resources department provided the annual faculty profile. **Figure 2, Figure 3,** and **Figure 4** summarize the data, including the total number of faculty members and the division between full-time and part-time members. The total number of faculty members has maintained a steady trend over the years. The slight decrease in the last three years has not affected the academic offering of the Institution since it has been due to a reduction in the part-time faculty members. One related **success story** is that the number of faculty members having a doctorate has increased over the last seven years. Also, the institution has a strong group of faculty members with master’s degrees (115 as FA22). The academic departments established an objective to seek and recruit doctoral-level candidates and encourage faculty to complete their graduate studies. Over the last seven years, the number of the faculty members with a doctorate has increased from 65 to 82.

Figure 2: Total Faculty (Full-Time and Part-Time)

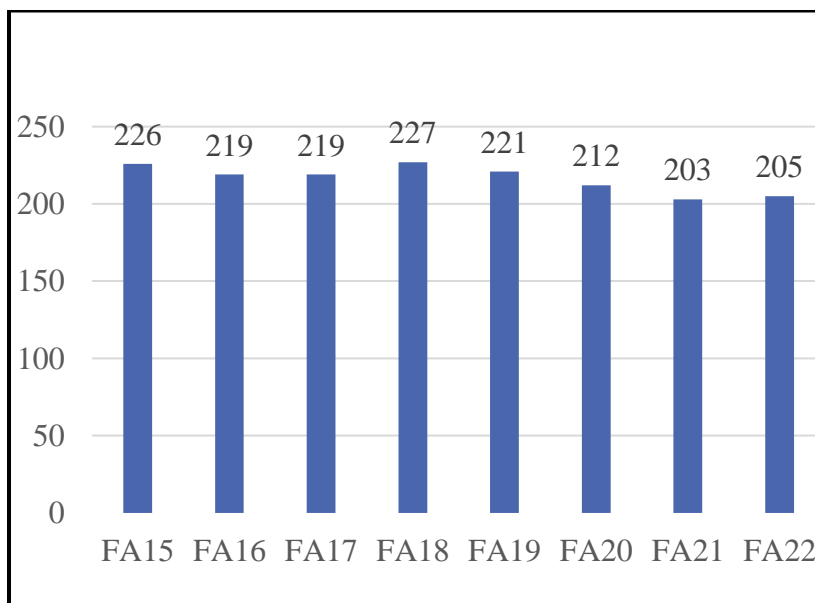
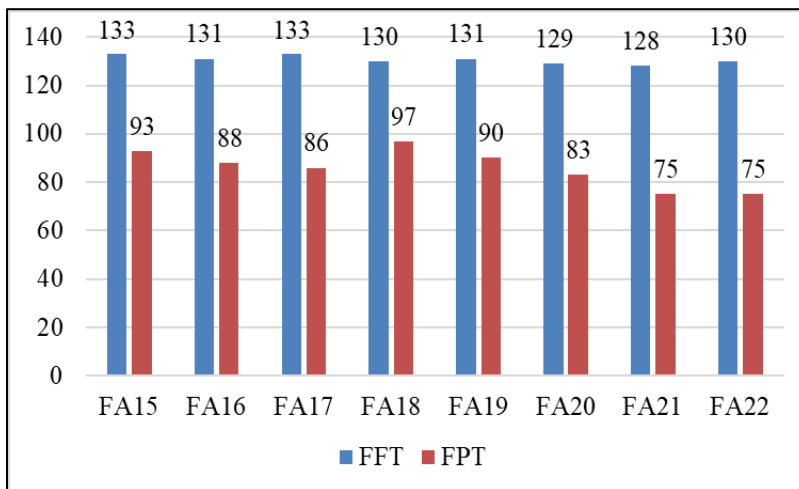


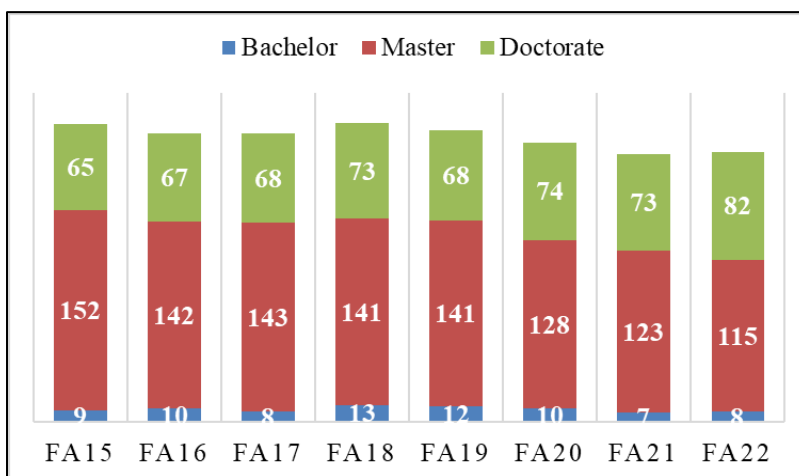
Figure 3: Full-Time (FFT) and Part-Time (FPT) Faculty



In terms of faculty academic preparation, the number of faculty members having a doctorate has increased over the years. Also, the institution has a strong group of faculty members with master’s degrees. Thus, the institution has benefited from a qualified academic body that offers a rigorous curriculum and maintains the professional accreditation status across the disciplines offered.

Every term, the institution’s educational offering is assured as planned. Canceling courses due to a lack of faculty members who could teach them is not a practice. Instead, the institution guarantees the educational offering using a prorated compensation policy. Faculty assigned to course sections with fewer than eight students received prorated compensation. (Faculty Compensation Policies_rev.0615_SIII.C2.R15_p.1)

Figure 4: Faculty Academic Preparation



Advancement and development of faculty members are accomplished through activities related to research, academics, and cultural or well-being topics. The Institution authorizes departments to develop professional growth and innovation activities and include them in their specific budget. The Institution promotes seminars to develop faculty members' knowledge in these areas. The academic and administrative areas mainly organize seminars and workshops, while the different Schools provide target group discussions related to educational topics. Particularly, the Human

Resources Office sponsors well-being seminars or activities provided by outsourced personnel. The School of Arts, Science, and Education coordinates cultural activities for faculty members, administration personnel, and students. Due to the increment in online education, the Virtual Education and Innovative Learning (VEIL) Center has offered considerable training opportunities in this teaching methodology (VEIL Faculty Certifications and TEC de Monterrey Certification). Finally, faculty could pursue professional education through the Center for Professional Education and Training (CEPA) department while receiving significant discounts. (Center for Professional Education and Training_CEPA enrollment_SIII.C2.R15_p.3)

The faculty evaluation process starts at the departmental level. The department head is responsible for coordinating the evaluation process. Each academic department director is responsible for evaluating the faculty members. Faculty evaluation should be performed at least once a year. The academic directors determine the trimesters of assessments. The instruments that form part of the assessment are (1) students' faculty evaluation, (2) responsibilities inherent to the academic role, (3) faculty evaluation during a regular class teaching (classroom visit), and (4) peer evaluation. The results of these evaluations are used, among other purposes, for retention and promotion. Also, the students evaluate part-time, adjunct, and other faculty members employing the same instrument used for full-time faculty members (i.e., students' faculty evaluation). In 2019, due to the increase in online courses, an adequate form for the students' faculty evaluation was established for this teaching methodology. The faculty employee handbook includes information regarding faculty evaluation and promotion. (Faculty Employee Handbook_rev.0910_SIII.C2.R15_p.21-22) In addition, the specific forms for the faculty evaluation procedure are available on UPPR website, under Office of Institutional Research and Assessment. (Institutional Research and Assessment page_SIII.C2.R15)

Academic Support Services

UPPR offers students a variety of learning opportunities and resources beyond their regular classes. The University provides support in academic and personal areas so students can access experiences and support for their best academic achievement. The services offer supplemental instruction, professional and research experiences, career orientation, information literacy, and access to learning and information resources.

Center for University Progress

Tutoring is available through various programs. The Center for University Progress (CPU) works in coordination with the academic departments and the Dean of Arts, Sciences, and Education, as well as with counselors and subject coordinators, who serve as links between tutors and professors. Students who attend regularly are evaluated based on modern educational methods and are granted honor points that are added to their grades in the course, according to each professor's standards. The Student Support Services Program (as its acronym in Spanish PSE) is financed with federal funds from the US Department of Education. It provides tutorial services, counseling, and cultural activities to disadvantaged, low-income, first-generation with university-level studies and physically disabled students. Its goal is to retain and graduate eligible project participants. It comprises three primary components: tutorial, counseling, and cultural activities. Both Programs use different methods to provide tutoring. Students receive the service in small groups where, in addition to getting their questions answered, they learn to develop and strengthen their teamwork skills, among other benefits. Tutoring services are offered in mathematics, Spanish, English,

physics, and engineering.

Career and Internships Service Program

The Employment and Internships Program performs activities and identifies cooperative education or co-op opportunities, internships, and jobs for students and graduates within private industry and government agencies. These actions and strategies allow recipients to contribute most effectively and competitively to society. In addition, this office plans and coordinates events aimed at the professional development of current students and alumni. Current students participating in Co-Op Programs and internships find they can validate these experiences for academic credits through the Professional Practice course. (ADDENDUM – Undergraduate Catalog: Academic Years 2020-2025_rev.0922_SIII.C3.C4.R9_p.4 and Graduate Catalog: Academic Years 2020-2024_rev.0922_SIII.C4.R9_p.41)

Honor Program

The Honor Program's mission is to provide a dynamic environment for all participating students to improve their personal growth and academic performance with the help of counseling and various activities. The program is a member of two important organizations dedicated to developing events for honor program students in Puerto Rico and the US and to providing learning tools for faculty members: the Puerto Rico Honor Program University Association (as its acronym in Spanish AUPH) and the National Collegiate Honors Council (NCHC).

Undergraduate Research Programs and Opportunities for Students

Since 2016, the Undergraduate Research Program for Honor and Outstanding Students (URP-HOS) aims to provide an enriched undergraduate academic experience to high-achieving students, preparing them as career leaders in their areas of expertise. Students participating receive a series of compulsory research methodology and related workshops, are assigned a mentor, and work on a research project. They make progress presentations during the year. At the end of the year, there is an exhibition of research posters and a final presentation, in addition to delivering the final research report.

Since 2006, the Professional Development Programs in Transportation Infrastructure Inspection (TIRC PDPTII UPPR/ACI-Herzog Honors Program) is a cooperative agreement between Alternate Concepts, Inc. (ACI) and UPPR. The Program's principal objectives are to stimulate the development of engineering students in Transportation Infrastructure Inspection and Maintenance, to perform an inspection and maintenance assessment program of the San Juan Railway System (as its acronym in Spanish TU) structures and drainage infrastructure, and to propose possible improvements to the inspection, condition evaluation, and maintenance assessment processes of transportation facilities.

The Center of Information Assurance for Research and Education in Puerto Rico (CIARE) research center provides a forum that can be used by faculty, students, and cybersecurity professionals from the public and private sectors. This collaboration helps to identify the issues on AI and cybersecurity that need to be solved. The Center is a vehicle for training, research, invention, innovation, education, public awareness, entrepreneurship, economic development, and dissemination of best practices.

International Affairs and Student Exchange

International Affairs are the responsibility of the Office of the Registrar. They coordinate the necessary support services for the international students' adjustment to the new environment and academic success. To promote multicultural diversity and expand its services, UPPR established a student exchange program in 2006. This program allows students and faculty academic mobility outside the island of Puerto Rico through agreements and partnerships in which the university participates. It also collaborates with the recruitment of international students. The Student Exchange Program gives participants access to a global society and an understanding of other cultures. Students who participate in the program become ambassadors of the University. These experiences positively impact their academic lives, help them establish international networks, and encourage them to become successful graduates. The Institution is part of the National Student Exchange consortium. It has other agreements with major institutions in America, Asia, and Europe that offer diverse academic programs with credit hours outside Puerto Rico.

Counseling Office

The Counseling Office is committed to the mission and objectives of the institution, providing students with the necessary tools to maximize their academic, social, personal, and professional potential. This office's purpose is to assist students in the transition from high school to university and help them through personal and academic issues, decision-making skills, and other situations that interfere with realizing their academic and professional goals. Counseling is an educational service that allows individual and collective follow-up in the formative process of students at all levels. Some services include people with disabilities and reasonable accommodation, Wellness & Prevention Program, psychological services, and academic planning. The counseling team coordinates with faculty and other institutional services to develop procedures to help students succeed academically.

Student Chapters of Professional Organizations

Another opportunity for students offered at UPPR is joining student chapters of professional organizations. This gives them a taste of the profession they are pursuing. There are more than 20 organizations like the American Society of Mechanical Engineers (ASME), American Society of Civil Engineers (ASCE), American Institute of Architecture Students (AIAS), Society of Automotive Engineers (SAE), Society of Hispanic Professional Engineers (SHPE), Society of Women Engineers (SWE), Association of Business Administration Students, and the American Institute of Chemical Engineers, among others.

Library

The library collections include physical and online resources specializing in engineering, surveying, architecture, business, education, and computer science. Students can access physical and online resources, including books, periodicals, and academic journals, videos, maps, interactive tools, images, infographics, and more. The Online Catalog describes the information resources and includes links to digital content. The Library Databases page describes each database's (more than 20) content and resources. The Library Webpage has a discovery service (EDS) for students to search seamlessly from all collections and databases. UPPR Library keeps a historical archive and a Repository for Institutional content like publications, theses, and other student and faculty work. Students and faculty can also obtain resources from other libraries via the OCLC WorldShare Interlibrary Loan service. The Information Literacy Program offers

workshops to develop information competencies. Students can also have one-on-one references and research assistance from the librarians. The library has six professional librarians with master's degrees in Library and Information Science and nine Auxiliary Librarians. Librarians continuously receive professional development workshops and courses to keep updated on available resources, technology, and library trends. Another service they offer is the creation of Library Guides and tutorials, including how to use the library services, resources for specific courses, and other specialized topics like citations, plagiarism, style manuals, research skills, and geographic information. The library has a web page and a blog where students can access information, contact librarians, and find services to develop the necessary research and information literacy skills for academic success.

Educational Technology Center

UPPR facilities, laboratories, and classrooms are prepared with up-to-date equipment and resources so students can access modern technology for the best learning and hands-on experiences. The Educational Technology Center (as its acronym in Spanish CTE) constitutes the academic computing center. It provides computer services to the student body and faculty and assists them in the performance of their academic endeavors and projects. However, computer terminals are available for use in various computer centers and laboratories on campus. Specialized and updated software like AutoCAD, MATLAB, PSpice, Visio, SOLIDWORKS, SketchUp Pro, Adobe Photoshop, and Archicad, among others, are provided for all terminals and are licensed so students can also access them online from their own computers anywhere outside the campus. Students also have a Microsoft Office 365 account for their use. Specialized laboratories with state-of-the-art resources and technological facilities include the Plasma Laboratory, Aerospace Simulator, Materials Laboratory, Rehabilitation Engineering and Industrial Automation Laboratory, Architectural Conservation Laboratory, and Ceramics Laboratory, to name a few. Institutional Web pages describe all services and make them available for students.

General Education and Institutional Requirements

The General Education Program is assigned to the School of Arts, Sciences, and Education. The school consists of the following units:

1. Academic Departments
 - Mathematics and Sciences
 - Socio-Humanistic Studies
 - Education
2. And the following services:
 - Tutoring Services
 - Student Support Services – PSE
 - Student Support Services – STEM
 - Student Support Services – ESL

The faculty of the School of Arts, Sciences, and Education develops in the student body social awareness, sensitivity to existing societal differences, tolerance, and acceptance through guided exposure to the collective, historical, cultural, and artistic realities of the world. The academic support personnel and faculty members facilitate acquiring and enhancing learning experiences and student retention. The school offers courses specifically designed to foster cultural awareness and diversity, with some even making them mandatory to attain undergraduate degrees.

Mathematics and Sciences

The General Education Program is committed to providing knowledge, skills, and abilities (KSA) for the student to be able to accomplish the following program educational objectives:

1. Apply the fundamental principles and concepts of mathematics and science required by the program chosen.
2. Identify, formulate, and solve problems using mathematical methods, technological tools, and fundamental principles of science required by the program chosen.
3. Communicate effectively with others orally and in writing, specifically in scientific and mathematical terms.
4. Engage appropriately in a teamwork environment using a cooperative and collaborative approach toward solving a problem.
5. Understand and be aware of the importance of mathematics and science in a global, economic, environmental, and societal context.
6. Recognize the elements of the Scientific methods necessary to develop scientific research

Socio-Humanistic Studies

The General Education Program is committed to providing knowledge, skills, and abilities (KSA) for the student to be able to accomplish the following program educational objectives:

1. Develop significant learning of general culture.
2. Develop reflective and critical thinking.
3. Develop basic language skills in both Spanish and English.
4. Recognize the importance of world literature.
5. Practice a foreign language.
6. Recognize the usefulness of literacy information.
7. Evaluate the importance of social, legal, and ethics of contemporary issues

UPPR undergraduate programs include a solid general education component with clearly defined expected learning outcomes aligned with the institutional mission and goals. The general education requirements for each academic program are clearly stated in the institution's undergraduate catalog, academic program descriptions, and program curricular sequence.

The program provides all UPPR's students with the undergraduate academic background and knowledge of the general culture, mathematics, science, education, the humanities, the social sciences, and languages, as well as the required knowledge of physics, chemistry, and biology, to help them meet the challenges presented by the degree-granting units of engineering, architecture, surveying and geospatial science, business administration, and computer science.

The General Education program provides learning experiences for the development of knowledge, skills, and abilities (KSA) about global culture, social and ethical responsibility, critical thinking skills, oral and written competencies, foreign languages communication skills, lifelong learning abilities, recognition, analysis, and judgment of contemporary ethical issues.

Mathematics courses provide students with the language to express themselves adequately based on logical reasoning and reflective thought and promote the use of tools and techniques to solve problems. Science courses, through the promotion of scientific-based knowledge, allow the employment of fundamental principles and the use of elements of the scientific method to explain

physical or natural phenomena or behavior.

The General Education program offers a course on Adjustment to University Life. (Undergraduate Catalog: Academic Years 2020-2025_rev.0922_SIII.C4.R9_p.76) This course integrates the use of the library's technological resources to develop information literacy skills.

AREAS OF STRENGTH

1. The university provides quality undergraduate and graduate education at multiple academic levels (i.e., from an associate degree to a PhD).
2. The institution engages in expanding the Hispanic professionals in the United States with robust academic preparation in the areas of Engineering, Architecture, Business, and Education.
3. The general education program is a strong foundation for all academic disciplines.
4. UPPR has three teaching modalities, on-campus, hybrid, and online, equally robust in the student learning experience.
5. UPPR has a solid academic support services, including counseling, undergraduate and graduate research programs, an honor program, and career and internship programs.
6. UPPR expanded the academic offering through online undergraduate and graduate programs.
7. The number of faculty members with a doctorate has increased.
8. Full-time and part-time faculty are trained in using the Learning Management System for online education.

OBSERVATIONS

1. UPPR may consider promoting the faculty benefits portfolio to support the well-being of the student learning experience in a matter that prevents academic inbreeding.
2. The instruments that form part of the faculty evaluation process may be updated to consider elements such as research, publications, and other special endeavors accomplished by the professors that are valuable to the design of the student learning experience.
3. The university could support research activities at both undergraduate and graduate levels to enhance the academic learning experience.
4. UPPR may develop and implement a process to permit part-time faculty to have the opportunity to escalate in the academic ranks ranging from Lecturer I to Lecturer IV.
5. The institution may examine the re-establishment of the program that supports professors to pursue and complete their PhD degrees in educational areas that enrich the student learning experience.

CHAPTER FOUR: STANDARD IV - SUPPORT OF THE STUDENT EXPERIENCE

Across all educational experiences, settings, levels, and instructional modalities, the institution recruits and admits students whose interests, abilities, experiences, and goals are congruent with its mission and educational offerings. The institution commits to student retention, persistence, completion, and success through a coherent and effective support system sustained by qualified professionals, which enhances the quality of the learning environment, contributes to the educational experience, and fosters student success.

Requirement of affiliation 8: The institution systematically evaluates its educational and other programs and makes public how well and in what ways it is accomplishing its purposes.

Requirement of affiliation 10: Institutional planning integrates goals for academic and institutional effectiveness and improvement, student achievement of educational goals, student learning, and the results of academic and institutional assessments.

LINES OF INQUIRY

1. How do the policies, the processes, and the information system regarding recruiting, admission, retention, and graduation foster student success?
2. How do the institutional policies and procedures of transfer credits, and credits are awarded through experiential learning, prior non-academic learning, competency-based assessment, and other alternative learning approaches facilitate the students' recruitment and retention?
3. How do the policy and procedure in the information security management system provide safe and secure maintenance and appropriate release of student's information and record?
4. How does the institution plan and promote athletics, student life, and other extracurricular activities to enhance the educational experience?
5. How are the effectiveness of the student support, academic and professional counselling services measured and assessed?

OVERVIEW OF THE STANDARD

This working group evaluates the effectiveness and coherence of the student support system considering the student retention, persistence, and completion sustained by qualified professionals, which enhances the quality of the learning environment, contributes to the educational experience, and fosters student success. The working group also examined the policies, procedures, and practices on recruitment and admission of students whose interests, abilities, experiences, and goals are aligned with the institutional mission and educational priorities.

ANALYTICAL REPORT

During Spring 2021, five Interdisciplinary Committees composed of faculty and administrators from all over the university's deanship and departments were appointed to assess the institution's student achievement performance. A fact of one **success story** is that the graduation rate has fluctuated between 10-25% over the last four years due to students' academic performance. Additionally, considering factors such as the pandemic, demographics, and economic conditions, enrollment has remained unchanged over the past eight years. (Graduation Rates Over Time - San Juan Campus @ 2021 IPEDS Report_SIV.C6.R10) Under the guidance of the Vice President for Academic Affairs, the presidents of these committees form the Coordinating Committee to follow up on the activities and gather all five committee's reports. The findings and recommendations collected were analyzed, and an action plan has been established. Some of the actions recommended were: (1) Expand the Summer Bridge Camp, revise the tutoring, counseling, mentoring, and academic advising, (2) Revise admission policy to attract more talented students, (3) Raise funds for Honor Program, and (4) Revise the syllabus of the Adjustment to University Life course.

As an outcome of the assessment of institution's student achievement performance, a new Vice Presidency for Innovation in Retention, Persistence, and Student Success was established on May

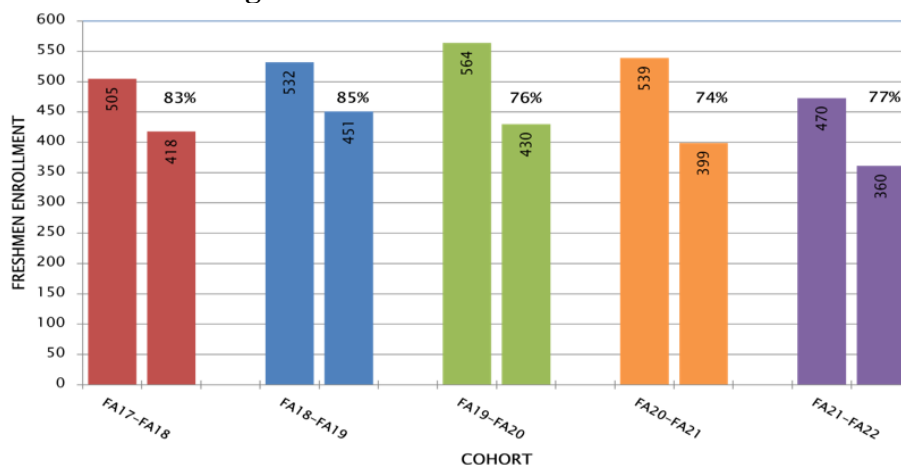
2, 2023. After careful consideration and a thorough review, the Vice President for Academic Affairs dissolved the five committees. The Vice Presidency for Innovation in Retention, Persistence, and Student Success will continue the efforts to improve student achievement performance. This strategic decision aims to streamline the organizational structure and enhance efficiency by consolidating related functions using a new institutional retention model and the Committees' recommendations. (New Retention Model – PowerPoint Presentation June 2023_SIV.C1.R8) (President’s Memo – New Appointment_0523_SIV.C1.R8)

That Vice Presidency aims to evaluate, conceptualize, design, and implement a new institutional retention model integrating the core processes of the academic, administrative, and technological systems. The fundamental objective is to identify the factors that contribute to student retention, persistence, and student success considering the graduation rate during the last four years.

With consistent enrollment for the past eight years, averaging 4,286 students, UPPR aims to explore innovative approaches to enhance student retention and graduation rates while minimizing the time required to complete their degrees. (Historic Enrollment 2015-2023_SIV.C6.R10) The strategic goal is to develop a student-centered culture that promotes student success, establishing the following strategic objectives: (1) Formalize and disseminate the teaching model, (2) Develop and implement the structure for an institutional student retention and progress program, (3) Establish a faculty development program, (4) Establish and strengthen performance management systems (faculty, administrators, and staff), (5) Adapt classrooms and academic facilities to support the university teaching model, (6) Expand our academic offerings with a special focus on micro-credentials, (7) Improve and broaden the network for our students' career opportunities, (8) Encourage our students/graduates of regulated professions to obtain professional licensing, and (9) Establish a talented student recruitment program. (Institutional Strategic Plan 2022-2027_SIV.C1b.C1d.R8_p.46)

The institutional retention rate for the 2017-2021 period is shown in **Figure 1**.

Figure 1: Institutional Retention Rate



Source: Freshmen-Undergraduate Students, Retention 1st to 2nd Year Cohort, and 2017-2021 Year Cohort provided by the Institutional Research Office

(First-year students – Undergraduate Students Retention 2017 – 2021 Cohorts_SIV.C6.R8.R10)

The assessment of the institution’s student achievement performance results in a significant evolution in its admission policies, resulting in a comprehensive and revised framework. The university has a revised admission policy applicable to the San Juan, Orlando, and Miami campuses. It is clearly stated, provides reasonable expectations for students' success, and is compatible with its institutional mission. It allows all interested and eligible people the opportunity to enter and complete a university study program. It also promotes a flexible admission policy, assuring access to higher education for students applying for admission. UPPR also promotes a new holistic admission policy to assure access and equal educational opportunities to higher education to students from diverse social, cultural, geographic, and economic backgrounds. Aadvocates for the absence of discrimination based on race, sex, religion, ethnic origin, age, political ideas, or handicap in the consideration of diversity, equity, and inclusion, as mandated by federal laws. (Undergraduate Catalog: Academic Years 2020-2025_rev.0922_SIV.C1a.R8_p.3, 28-33) (Graduate Catalog: Academic Years 2022-2024_rev.0922_SIV.C1a.R8_p.3, 15-17) (Undergraduate and Graduate Catalog Miami Campus: Academic Years 2022-2023_rev.1122_SIV.C1a.R8_p.4, 24-28) (Undergraduate and Graduate Catalog Orlando Campus: Academic Years 2022-2023_rev.1122_SIV.C1a.R8_p.3-4, 26-32)

Considering UPPR transformation in admission policies, the updated framework, which is implemented across diverse campuses, involves a holistic evaluation of students' admission files. Holistic evaluation is part of the admission process and placement in the academic programs, and it is aligned with the institutional mission. The previous academic experiences, attributes, and academic metrics of the applicants, as well as the value that an applicant would contribute to the university community and to the learning, practice and teaching processes are considered during the process.

Students can be exempted from taking developmental courses by demonstrating their level of skills in the subjects through a holistic evaluation of their admission file, considering the factors presented in **Table 1**:

Table 1: Holistic Evaluation

Holistic Evaluation Considerations		
Rigor of the program of study from the high school or Homeschooling, especially in the courses that are related to the program the student applies to	Transcript of High School Credit , in such a way that it demonstrates having taken advanced level courses, honors courses, or university level (dual enrollment courses)	Interview during the admission process with the Academic Director
UPPR placement tests	Standardized tests results*	Grade Point Average (GPA)

* College Board PNA Advanced Placement Program, College Board SAT, CLEP tests – College Level Examination Program Credits Earned, PAA University Admission Test of the College Board, International Baccalaureate Program or Any other test validated by a national agency duly authorized by the Federal Department of Education

The Mathematics and Science Department and the Socio-Humanistic Studies Department administrate the placement tests in the subjects of Spanish, English, Science, and Mathematics to assess the students’ academic skills. Their scores are used to determine whether to exempt students from developmental courses and place them in the appropriate first-year courses in Spanish,

English, Science, and Mathematics. (Institutional Credit Validation and Exemption Policy_rev.0223_SIV.C1b.R8)

Students who are not adequately prepared and cannot demonstrate basic skills in the subjects of Spanish, English, Math, and Science must take developmental courses and are referred to the Center for University Progress (CPU) to receive tutoring services. (CPU (Student Served) @ 2016-2021_SIV.C1b.C6.R10) The center aims to reinforce the students' academic skills to help them reach their careers and professional goals. Tutoring is offered in Mathematics, English, Spanish, Chemistry, Physics, and some engineering courses such as statics, computer programming, probability, and statistics, among others. About ninety per cent (90%) of the students receiving online tutoring service obtained a passing grade (A, B or C) in their tutoring supported courses during the pandemic period (2020). (Report CPU FA20 Tutoring Service_SIV.C1b.R10)

In an effort to improve student achievement performance, a Summer Bridge Camp is offered each year for new admission students to improve basic math skills. A summary is shown in **Table 2**, including placement, graduation, and retention percents.

Table 2: Math - Summer Bridge Camp Summary

Summer Camp / Years	2017	2018	2019	2021	2022
Participant	32	30	25	24	35
High School Students	0	0	0	5	11
Math 1350 Placement	13	28	9	2	0
Preparatory Courses Placement	19	2	16	17	24
Success Math 1350 Placement	100%	100	88%	50%	0%
Success Math Placement All	97%	100	96%	95%	92%
Graduation (4th - 6th year)	41%	30%	-	-	-
Retention Up to date (August 2023)	59%	70%	62%	94%	92%

The Admissions and Promotions Office at UPPR serves as the initial point of contact for prospective students, marking the beginning of their journey with the university. After the student's admission, the Enrollment Coordinator provides an initial orientation. During this orientation, the student is guided in the process of getting acquainted with UPPR rules and regulations and is given a package with the Student Guide, Description of Placement Tests, Informative Bulletin, information regarding tuition, fees and costs per credit-hour, and Online Manuals Sheet which includes links to access the following: Student Handbook, Students Rules and Regulations, Security Policy, Qualification Review Procedures, Credit Transfer Validation Policy, Policy on the Use and Abuse of Controlled Substances, Sexual Assault Policy and Agreements between UPPR and other Institutions. Upon completing all admission requirements, the applicant is admitted and enrolled.

Following the pivotal role played by the Admissions and Promotions Office, the Vice Presidency of Enrollment Management and Student Services maintains robust communication with academic stakeholders (deans, academic director, and faculty members) and oversees various aspects of student admission, enrollment, and services. This includes managing complaints, grievances, disciplinary cases, and coordinating inter-office processes. Also, coordinates the inter-office

processes and schedules activities during the enrollment process. Moreover, to support online service during the COVID-19 pandemic and enhance communication with students, the Virtual Ticket Service System was implemented to support enrollment.

The Counseling and Psychological Services office plays a crucial role in addressing the diverse needs of students, working collaboratively with the Vice Presidency of Enrollment Management and Student Services. This office offers personal, occupational, and academic counseling services aimed at helping students achieve their goals, especially as student mental health needs have increased. In addition, the office works on cases of reasonable modification for students with functional diversity. The counseling services include academic, personal, occupational, and career counseling, follow up on students on academic probation, psychological services, and reasonable modification coordination for students with functional diversity, among other student support services. Moreover, to foster positive life attitudes, discourage the use and abuse of alcohol or drugs, and prevent violence, the office oversees the Alcohol, Drugs, and Violence Prevention Program, known in Spanish as the *Programa de Calidad de Vida*.

Complementing the services mentioned, UPPR provides a range of supplementary programs and services to improve retention and persistence. Notably, the federally funded TRIO programs, including Student Support Services (SSS), Student Support Services-ESL, and Student Support Services-STEM, play a crucial role. These programs boast an impressive 86% persistence rate and an 84% rate of good academic standing. The Student Support Services programs have a persistence rate of 86%, and good academic standing of 84%. They aim to increase the number of low-income, first-generation college students and college students with disabilities to complete a program of study at the postsecondary level.

Those programs provide guidance and assistance in course selection, financial aid programs, benefits, and resources for locating public and private scholarships, and assistance in completing financial aid applications. The programs also provide education and counseling services designed to improve financial and economic literacy and assist students in applying for admission to graduate and professional programs. The Student Support Services programs provide individualized counseling for personal, career, and academic information, activities, and instruction designed to acquaint students with career options. Those programs also offer exposure to cultural events and academic mentoring programs. Tutoring, counseling, and psychological services are also provided to students who require them or those referred by faculty or counselors. The commitment to helping students succeed is evident. Therefore, the Financial Aid office conducts student advising on financial aid through the activities (1) First-year students' orientation - new students receive information about financial aid programs, aids available, and academic progress requirements, (2) Workshops about educational costs and the FAFSA application process, (3) Advising of the due dates and how the institution determines financial need, and (4) Orientation for the Work-Study Program and Student Loans to the first-year and regular students.

In order to maintain the university community well informed, UPPR's admission policy, transfer of credit policy, and procedures are well-articulated and accessible to the public. As part of this commitment and to improve student achievement performance a reviewed policy about course work validation, exemption, and placement through a holistic evaluation of the entire student academic experience has been established. The admissions policy provides an opportunity for: (a)

high school graduates; (b) individuals who have passed a state high school equivalency examination, (c) transfer students, (d) USA veterans and beneficiaries, and (e) international students, to enroll in UPPR credit courses and programs. An Admission policy with requirements for students from the home education method (Homeschooling) applicable to San Juan, Puerto Rico and Miami/Orlando, Florida campuses is available. (Institutional Credit Validation and Exemption Policy_rev.0223_SIV.C2.R8)

The policy is established to validate and exempt course works through a holistic evaluation of the entire academic experience of the student during their high school, home schooling, or university of origin duly authorized and accredited by the post-secondary education regulatory agencies in the jurisdiction of origin. The policy includes transfer applicants, course placement and exemptions, international students, special students, special program for high school students, College Board advanced placement exams, and institutional placement tests.

In conjunction with the comprehensive admissions policies outlined above, the institution has established an admissions appeals committee to address cases where students may not initially qualify for admission. The committee comprises the Vice Presidency of Enrollment Management and Student Services, academic directors, and the Counseling and Psychological Office director. Another important population served is the transfer-in students. The university enrolled more than 1,100 transfer-in students in the last five years. The transfer-in enrollment is around 28% of the new, degree-seeking students for the fall term. The institution's student learning outcomes, academic goals, and strategic priorities guide the formulation of policies and procedures for transferring credits. It evaluates courses, programs, and other learning experiences on their learning outcomes and the existence of valid evaluation measures. Also, provides students with a reasonable explanation about how the work for which students seek credit is or is not comparable with curricula and standards to meet degree requirements. The institution is clear about what degree requirements may or may not be met by prior or experiential learning, including major requirements, general education, core course requirements, and electives. UPPR is committed to consistently transferring credit decisions directly so it benefits students and helps reduce systemic inequities.

In alignment with student success, the Institution requires every student to demonstrate academic progress in the number of academic credit hours completed and the grade point average the student maintains. The policy and procedures for student retention, probationary status, suspension, and permanent dismissal, and appeals are established. The student's satisfactory academic progress is evaluated yearly, at the end of the academic year (June).

Fostering inclusivity, elevating academic standards, and equipping students and faculty for the demands and opportunities of an interconnected global society, internationalization is a goal for UPPR. The three campuses are authorized by the Immigration and Naturalization Services (INS) to issue a Certificate of Eligibility for Nonimmigrant Student Status (Form I-20) for qualified international students who are not citizens of the United States of America or permanent residents.

To comply with the university's mission that "provides opportunities to individuals from diverse backgrounds," the dual enrollment program offers a valuable opportunity for high school students to prepare for the challenges of higher education academically and personally. The Special

Program for High School Students (SPHS) allows high-achieving students to take college-level courses while pursuing their 10th, 11th, and 12th grade. Credit hours completed through SPHS can be validated after successful completion of course requirements. Financial aid is available for those who qualify.

Furthermore, UPPR acknowledges the importance of documented military training, allowing students to request credit awards. The Academic Director is responsible for working with the student to evaluate the request and to determine if the credit option is appropriate. UPPR accepts elective credit-hours with grades for undergraduate degrees a maximum of twelve credit-hours in ROTC courses from the University of Puerto Rico (UPR).

In conjunction with its commitment to transparent communication, the website serves as a dynamic and continuously updated platform for students. Student activities and achievements are highlighted on social media (Instagram, Facebook, and other social platforms). On the website, the students can find the undergraduate and graduate academic programs, calendars, all information about university life, and news about social and academic activities within the university community. Students can find the admissions requirements, policies, fees, available financial aid, and placement tests in the institutional catalogs. The following information can be retrieved from the webpage, online catalog: Admission Policy, Student Information, Financial Aid, and other important policies.

Moreover, UPPR provides a schedule of accurate, comprehensive, and accessible information regarding expenses, financial aid, scholarships, grants, loans, repayment, and refunds. The Financial Aid Office of UPPR provides information to students and their families regarding the available financial aid programs, the application process, and eligibility requirements. The Office is responsible for assuring institutional compliance with applicable instructions under the Higher Education Opportunity Act. Its mission is to provide accurate and clear consumer information to help students explore the different financial aid resources that can help them obtain the necessary funding to reach their academic goals. (Undergraduate Catalog: Academic Years 2020-2025_rev.0922_SIV.C1a.R8_p.3, 34-42) (Graduate Catalog: Academic Years 2022-2024_rev.0922_SIV.C1a.R8_p.3, 18-23) (Undergraduate and Graduate Catalog Miami Campus: Academic Years 2022-2023_rev.1122_SIV.C1a.R8_p.4, 30-38) (Undergraduate and Graduate Catalog Orlando Campus: Academic Years 2022-2023_rev.1122_SIV.C1a.R8_p.4, 33-41). Also, the University conforms to the Student Consumer Information Requirements established by the United States Department of Education, and hereby notify that the director of Student Financial Aid and office staff are the people designated under those requirements to assist the student or prospective student in obtaining information regarding student financial assistance.

The policies and procedures for the management and release of students' information and records are essential to protect students' rights and privacy and contribute to the educational institution's overall integrity and reputation. UPPR has policies and procedures for the safe and secure maintenance and appropriate release of students' information and records. (Registry and Veterans Policies_rev.0820_SIV.C3.R8_p.1-4) Registrar's Office has as a main responsibility to ensure compliance with the following processes and services: generate transcripts, generate enrollment and degree conferred certificates, evaluation of Standard Academic Progress, readmissions, changes of address, department changes, classroom allocation, academic assessment, lists of

graduates, exchange program coordination, withdrawals, and academic calendar. Also, the Office is the custodian of student electronic records and ensures confidentiality. These are in accordance with the standards established by FERPA (Family Educational Rights & Privacy Act). For this reason, confidential information is not released by e-mail or phone to students. No transcript or other documents are processed to third parties without the student's written consent, unless legally required to do so, including parents, spouses, siblings, or friends. Each year, UPPR informs students about FERPA and explains the procedure to comply with the provisions of the law. Students also have the right to file complaints concerning alleged failure by the University. Related questions are referred to the Vice Presidency for Enrollment Management and Student Services to provide more information and advice.

The institution designates the following categories of information about students as public information or Directory Information: Category I (name, address, telephone number, attendance date, courses), Category II (Institutions previously attended, specialized fields, awards, honors (including Dean's List,) and degrees obtained, including dates), and Category III (Present and past participation in sports and officially recognized activities, physical appearance (height, weight) of athletes, place, and date of birth).

In parallel with the Registrar's Office, the Information Technology (IT) office is committed to protecting UPPR's Institutional members and the Institution from illegal or damaging actions by individuals, knowingly or unknowingly. Internet/Intranet/Extranet-related systems, including but not limited to computer equipment, software, operating systems, storage media, network accounts providing electronic mail, WWW browsing, and FTP, are the property of UPPR. These systems are to be used for business or educational purposes in serving the interests of the University during normal operations. Effective security is a team effort involving the participation and support of every UPPR Institutional member and affiliate who deals with information and/or information systems. It is the responsibility of every computer user to know these guidelines and to conduct their activities accordingly. (See policy and procedure regarding the acceptable use of computer and telecommunication equipment). (Information Technology Acceptable Use Policy_SIV.C3.R8) Another responsibility of the IT office overseas is managing the institutional technological platform (Jenzabar). The IT office is handing the transition to a new institutional system known as Banner. This new system will maintain student, faculty, course, alumni, finance, financial aid, and personnel data and will it support advising, course scheduling, registration, grading, and other academic processes at the university.

Integrating academic and professional development with social and wellness initiatives creates a synergistic approach to student development, fostering a well-balanced and supportive university environment. UPPR is committed to its students' comprehensive development, creating a university atmosphere adapted to their interests and improving their quality of life. For this purpose, the Vice presidency of Enrollment Management and Students Service coordinates different activities with the Academic Departments and support offices to enhance and promote retention efforts.

The activities range from academic and professional development to social and wellness initiatives, among others, are as follows:

1. First-year and transfer students participate in intensive academic advising activities. The primary goal is to support students in developing study strategies and self-confidence to succeed in university life.
2. During the summer, first-year students may enroll in the course Adjustment to University Life (ATUL 0100). This course offers an advantage to first-year students since they are introduced to the campus, receive information about institutional policies and procedures, and begin networking with their peers before starting the Fall term.
3. Offer training to students and faculty members in the recognition, prevention, and intervention of issues related to drug and alcohol use, violence, harassment, and other topics that strengthen student wellness.
4. Summer activities and workshops in areas related to Engineering, Architecture, Business Administration, and Mathematics. The Summer Bridge Camp's goal is to improve basic skills among first-year students and academically disadvantaged students in Mathematics.

Furthermore, the VP Office of Enrollment Management and Student Services is the administrative unit in charge of the development of student life. This office serves as a link between support offices and academic programs. It includes the office of Admissions and Promotions, Financial Aid Office, Counseling and Psychological Service, Athletic Activities, Idea Center Program (Institutional Development, Employment & Alumni), Student Council, Student Organizations and Chapters, and Cultural and Social Activities. (Undergraduate Catalog: Academic Years 2020-2025_rev.0922_SIV.C1a.R8_p.3, 21-27) (Graduate Catalog: Academic Years 2022-2024_rev.0922_SIV.C1a.R8_p.3, 13-14) (Undergraduate and Graduate Catalog Miami Campus: Academic Years 2022- 2023_rev.1122_SIV.C1a.R8_p.3, 20-23) (Undergraduate and Graduate Catalog Orlando Campus: Academic Years 2022-2023_rev.1122_SIV.C1a.R8_p.3, 23-25)

Complementing the wellness initiatives, the institution has a Student Health Services. This service, sponsored by the institution, is an individually contracted plan. The service is not health insurance and, as such, does not include radiology, laboratory services, or medicines. It is offered by a physician in his private office located on José Martí Street adjacent to the University campus.

The diverse activities enrich the student experience and foster holistic development. From athletic competitions, cultural tours, student clubs, volunteer initiatives, and leadership programs, the university provides a platform for various activities. As follows a brief description of some of these activities:

1. The athletic activities play a crucial role in enhancing the student experience, fostering community, and contributing to the overall success and reputation of the university. The Department of Athletic Activities is responsible for planning and coordinating sports events besides offering recreational activities to the student body. The institution participates in the Inter-University Athletic League (LAI, by its Spanish acronym). This organization has among its members the largest campuses of the different public and private universities in Puerto Rico and the Virgin Islands. The Department provides support services such as scholarships, tutoring classes, counseling, lunches, uniforms, and transportation to student athletes.

2. The Honor Program coordinates the following student activities: technical and cultural tours, lectures, workshops, counseling, enrollment in honor courses, visits to museums and industries, scholarships, and newsletter distribution.
3. The Cultural Activities Office of the Socio-Humanistic Studies Department was created in 2006 and has been entrusted to provide students, in close collaboration with faculty, the opportunity of getting acquainted with experiences that provide cultural and intellectual enrichment and strengthen their commitment towards their education.
4. The University Choir is a vocal ensemble in which a student or employee can participate after being qualified by an audition. Throughout the entire year, the Choir participates in cultural activities inside and outside the Institution, providing services to the community, local public schools, and non-profit organizations.

The Security Office is an integral component of the university's infrastructure, playing a crucial role in maintaining a secure and conducive environment for the entire campus community. This Office is responsible for promoting an environment free of violence where peaceful coexistence can be created between the campus community. Pursuant to Public Law 101 – 542 Student Right to Know and Campus Security Act of 1990, UPPR created the Security Office. Also, it is responsible for creating, promoting, and maintaining academic and working conditions on campus, free of criminal acts. UPPR has a policy to protect all individuals' rights and ensure a safe environment for all students, prospective students, employees, and visitors to the university. The policy meets the "Code of Federal Regulations" specifications, 34 CFR 668.46 (Institutional Security Policies and Crime Statistics) Department of Education of the United States. A crime statistics disclosure of incidents occurring within the university campus and adjacent areas, such as streets or avenues close to the institution is published.

UPPR main campus residence halls are new and are designed to meet the students' needs. They are located off campus but at walking distance from the main campus. The amenities and services include:

1. Each floor has communal areas and a shared kitchen and laundry.
2. All apartments included all the basic services and main appliances.
3. Study rooms with Wi-Fi access.
4. Security service 24/7 hours.

Higher education aims to create a transformative educational experience that goes beyond the acquisition of academic knowledge, aiming to shape well-rounded individuals capable of contributing meaningfully to society. Based on this principle, the IDEA Center office builds liaison collaboration in three primary areas: Institutional Development, Employment, and Alumni. It works to connect industry, university, students, and alumni with resources and support to empower them. It supports the industry's recruitment processes, coordinating professional development workshops, and information sessions, among other activities. It provides a recruitment platform, where students and alumni apply and sign up for interviews or resume referrals and allows employers to post job or internship positions. It performs activities and finds cooperative education or co-op opportunities, internships, and jobs for students and graduates within private industry and government agencies. Current students participate in COOP Programs and internships can validate these experiences for academic credits through the Professional Practice course (COOP 3010).

Engaging in personal and professional development within a global framework prepares individuals to succeed in a connected and ever-changing world. It is where the Registrar's office takes on the essential role of coordinating programs for the Department of Veterans and the International Student Exchange Program. The office is responsible for certifying international students. The goal of the program is to promote and increase student exchange through the United States, Canada, and Spain. Students have the opportunity to join the program and expand their personal and educational horizons.

Regarding the Veteran Program, since 1985, UPPR has had formal arrangements with the University of Puerto Rico, Río Piedras campus, whereby students may register in the University of Puerto Rico's Reserve Officers Training Corps (ROTC) program. Arrangements for participation in this program should be made with the Department of Military Science or Department of Aerospace Studies at the University of Puerto Rico in Río Piedras or Mayagüez. UPPR accepts as elective credits with grades for undergraduate degrees a maximum of twelve credits in ROTC courses from the University of Puerto Rico under the agreement. (Registrar's Office – Student Handbook_SIV.C4.R8_p.1-2). The register administrates the policy on protective measures applied to students activated for military service. (Registry and Veterans Policies_rev.0820_SIV.C3.R8_p.4)

The Library of UPPR provides physical and virtual space where the academic community can interact, develop skills, exchange ideas, discover new sources, and create new knowledge, resulting in an empowering lifelong learning experience. This statement is consonant with the university's mission, and all library services are directed towards achieving it. The library collection is specialized to support the university's academic programs in Engineering, Land Surveying, Architecture, Landscape Architecture, Education, Management, and Entrepreneurship. The library offers services and resources on-site as well as online. The collection includes over 200,000 resources, including books, media, and serial volumes, which are cataloged and searchable through the online catalog.

Closing the loop in the university processes is not just a practice but a commitment to fostering an environment where every voice is heard, concerns are addressed, and feedback contributes to meaningful changes. The Vice presidency of Enrollment Management and Students Service and IDEA Center office in collaboration with the Institutional Research Office, administered an Exit Interview Satisfaction Survey to graduating students during the 2013 to 2022 period as part of a continuous improvement process. The survey considered aspects of the support service: Advising & Counseling, Career Services, Financial Aids, Library Resources, and Safety Campus.

The Student Satisfaction Survey has been implemented as an assessment tool to improve and continue the effectiveness of student support services. This survey includes demographic information and receives feedback from students regarding the services offered during their university career, especially those services regarding student life. The results of this survey and other surveys developed are shared with the University community and can be found on the webpage www.pupr.edu . A summary of the student services satisfaction assessment is shown in **Table 3**.

Table 3: Student Services Satisfaction Assessment

Service	Requirement	Criteria	Overall Satisfaction SP-21	Overall Satisfaction SP-22
Counseling	8	6	80%	85%
Vice-Presidency of Student Services	8	6	81%	84.6%
Registrar	8	6	86%	89.6%
Admissions	8	6	90%	91.2%
Bursar	8	6	80%	89.6%
Financial Aid	8	6	81%	88.1%
Student Support Services Programs	8	6	91%	89.2%
Employment and Internship Program	8	6	79%	87.6%
Honor Program	8	6	81%	83.3%
Health Services	8	6	86%	84.7%
Library	8	6	89%	93.8%
CPU (tutoring)	8	6	83%	84.9%
Security	8	6	83%	88.5%
Student activities (extracurricular)*	8	6	---	68.4%
Athletics*	8	6	---	72.7%
Knowledge of institutional policies* and academic information	8	6	---	81.6%

Source: Student Satisfaction Survey SPRING 2021, Student Satisfaction Survey SPRING 2022, Student Exit Interview 2021. *These questions were added to the Student Satisfaction Survey in 2022.

(Longitudinal Analysis of the 2013 to 2022 Institutional Exit Interview Survey Results_SIV.C6.R8.R10)

Another **success story** is that UPPR’s institutional values embrace the inclusion of people of diverse cultures, genders, races, preferences, and opinions that add different perspectives to our community. Therefore, the Vice Presidency of Enrollment Management of Student Services administered the Diversity, Equity, and Inclusion Survey with a sample of undergraduate students. This survey was developed as an exercise to understand the experiences and perspectives of the student body regarding diversity. The information received recognizes the institutional strengths related to diversity on our campus, and the necessary steps to take initiatives that improve the environment of diversity and inclusion. Alongside the efforts that the results of this survey will support, strategies will also be outlined to strengthen activities and processes related to the Title IX policy. UPPR reviewed said policy in 2023 and is organizing workshops for the university community (students, faculty, and staff) to inform them about Title IX updates and related aspects. Below are highlighted survey results: A summary of the student survey is shown in **Table 4**.

Table 4: Diversity, Equity, and Inclusion Survey

Age	73% of students are between 18 to 22 years old		
Sex	Feminine 29%	Masculine 70%	Other 1%
Gender Identity	Feminine 28%	Masculine 67%	Non-Binary 2%
	Transgender 0.4%	Prefer not to answer 1.1%	Other 1.5%
	Heterosexual 83%	Lesbian 1.5%	Gay 1.1%
Sexual Orientation	Bisexual person 12%	Asexual 0.4%	Other 3%
	Diversity 92%	Equity 87%	Inclusion 87%
	Knowledge of terms		
General Satisfaction			
At Polytechnic University of Puerto Rico, I feel valued and appreciated.			89%
My courses and academic materials are inclusive and represent diverse perspectives.			88%
The faculty (professors) at Polytechnic University of Puerto Rico offer their courses with respect and recognizing diversity.			89%
The treatment and services I have received at Polytechnic University of Puerto Rico have been fair and equitable.			96%
I feel that the environment at Polytechnic University of Puerto Rico is a safe one.			92%
It is important to address diversity, equity, and inclusion issues in university life.			91%
The overall environment I have experienced on campus has been positive and to my liking.			92%

(Diversity, Equity, and Inclusion Student Survey Results - FA 2023 and WI 2023_SIV.C1c.C3.C6.R8.R10) (Gender Discrimination Policy and Procedure Federal Department of Education - Title IX_SIV.C1c.R8.R10)

Miami and Orlando Campus consider the same policies, diversity, equity, and inclusion practices of the main-San Juan campus.

AREAS OF STRENGTH

1. Admissions policies and procedures are aligned with the institution's mission by providing special services to underrepresented students.
2. There are open and wide institutional publications that correctly disseminate admission policies, legislation, and financial aid programs.
3. UPPR conducts appropriate institutional research studies on applicants and graduates.
4. There are excellent academic programs, enrollment management plan and student services for students that include developmental courses, tutoring, academic advising, counseling services and mentoring.
5. The Admissions Office has adequate human, technological, and financial resources to fulfill its responsibilities.
6. UPPR has demonstrated institutional integrity in its admissions policies and their coherence with the institution's mission.
7. There is a clear-cut policy on transfer credit-hours from other accredited universities and colleges.

OBSERVATIONS

1. The University may consider continuing with the process of evaluation, conceptualization, design, and implementation of a new institutional retention model.
2. The Support Service units could integrate the core processes of the academic, administrative, and technological systems to enhance the support of the students' experience.
3. The new VP Office for Innovation in Retention, Persistence and Student Success may continue expanding its students' outcomes assessment strategies with the use of the Banner Platform and the professional development of the student support service personnel.

CHAPTER FIVE: STANDARD V - EDUCATIONAL EFFECTIVENESS ASSESSMENT

Assessment of student learning and achievement demonstrates that the institution's students have accomplished educational goals consistent with their program of study, degree level, the institution's mission, and appropriate expectations for institutions of higher education.

Requirement of affiliation 8: The institution systematically evaluates its educational and other programs and makes public how well and in what ways it is accomplishing its purposes.

Requirement of affiliation 9: The institution's student learning programs and opportunities are characterized by rigor, coherence, and appropriate assessment of student achievement throughout the educational offerings, regardless of certificate or degree level or delivery and instruction modality.

Requirement of affiliation 10: Institutional planning integrates goals for academic and institutional effectiveness and improvement, student achievement of educational goals, student learning, and the results of academic and institutional assessments.

LINES OF INQUIRY

1. Are UPPR educational goals clearly stated at degree/program and institutional levels? Are these goals interrelated with one another, with relevant educational experiences, and aligned with the UPPR mission?
2. What is the UPPR structure that supports the assessment process?
3. How are the assessment processes conducted at UPPR? Are these processes organized and systematic? How is the faculty involved? How do these processes demonstrate the extent of student achievement of degree/program goals and institutional mission?
4. How are the results of the assessment process communicated to stakeholders?
5. How are the assessment results used to improve teaching and learning and overall educational effectiveness (pedagogy and curriculum, review programs and support services, assist students in improving learning, improve key indicators, among others)?
6. How is the effectiveness of the assessment processes periodically evaluated?

OVERVIEW OF THE STANDARD

The purpose of Standard V – Educational Effectiveness Assessment is to demonstrate that, at graduation, the institution’s students have knowledge, skills, and competencies consistent with the degree level, mission, and appropriate higher education goals.

Assessment culture has been established at Universidad Politécnica de Puerto Rico (UPPR) for more than 25 years. In 2000, UPPR started focusing assessment efforts on student learning, aligned with the requirements of accreditation agencies.

The University has made continuous efforts to improve student learning and academic and administrative services. The students and graduates have been exposed to scenarios where they have achieved recognition and have shared the knowledge acquired in their respective academic programs. The graduates are testimony to the transformational process experienced by the students at UPPR. This is despite the social and economic challenges facing Puerto Rico.

With a decentralized student learning assessment process, UPPR institutional efforts are channeled through the *Institutional Student Learning Assessment Committee*. Since 2013, this committee has been composed of representatives from each academic area including general education (Math and Sciences and Socio-humanistic Studies), who are also the assessment coordinators in their respective areas. Its main role is to ensure that the learning assessment processes in each deanship/school are systematic and that continuous improvement efforts are carried out for the institutional learning goals (ILOs) and the program/area learning outcomes (SOs). This Committee meets monthly to advance the institutional learning assessment agenda.

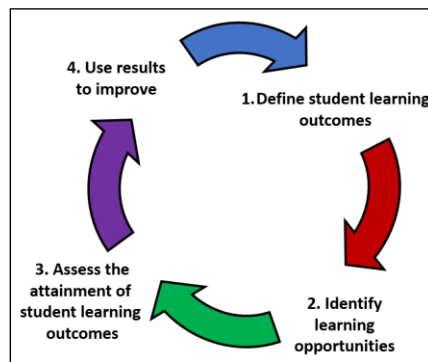
The representatives of the academic areas on the Committee work collaboratively to continuously improve the attainment of the student learning goals. These improvements can be seen in each deanship in the form of updating the curriculum, training faculty, and improving student support services, among other improvements in student services. The learning assessment model used by UPPR consists of four stages explained in the next section.

ANALYTICAL REPORT

The analysis of this standard is performed based on the four steps of the teaching-learning-assessment cycle followed by the University and described in **Figure 1**:

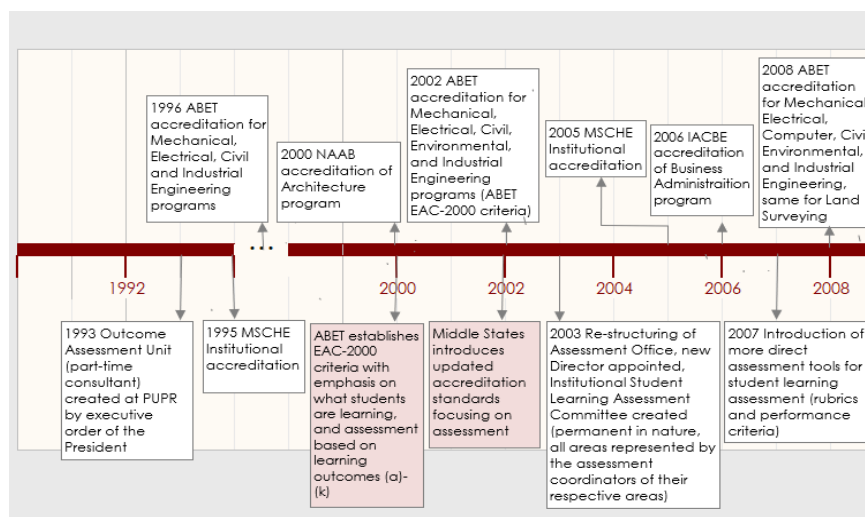
1. Develop clearly articulated key learning outcomes.
2. Design courses, programs, and experiences that provide learning opportunities to attain learning outcomes.
3. Assess student attainment of those learning outcomes.
4. Use the results of the assessment to improve teaching and learning.

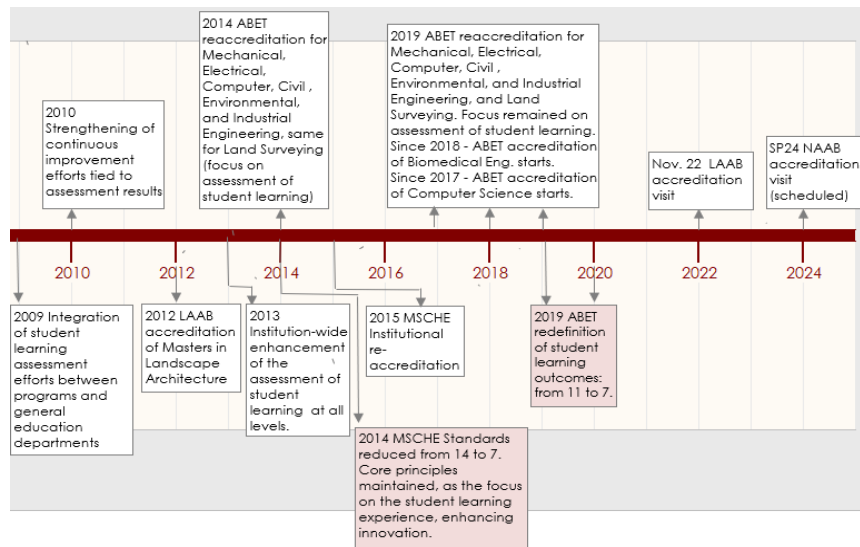
Figure 1: Assessment Cycle Stages



All academic programs at Universidad Politécnica de Puerto Rico (UPPR) have been licensed to operate under the Board of Post-Secondary Institutions of Puerto Rico and those in Florida by the State Commission for Independent Education. The Institution has been accredited by the MSCHE since 1985. All bachelor programs at the School of Engineering, Surveying, and Geospatial Science are accredited by the Accreditation Board of Engineering and Technology (ABET), the architecture program is accredited by the National Architectural Accrediting Board (NAAB), and the Master of Landscape Architecture is accredited by the Landscape Architectural Accreditation Board (LAAB). The timeline in **Figure 2** (split into two parts) shows major milestones in this regard.

Figure 2: Timeline - Background of Student Learning Assessment at UPPR





UPPR has a decentralized student learning assessment structure. Each school and academic department/area has clearly defined learning outcomes and a student learning assessment process that responds to each program’s characteristics and idiosyncrasy, and rigorous program-specific accreditation agency requirements. (e.g., ABET, NAAB, LAAB) (UPPR webpage Licenses & Accreditations_SV.C1-2.R9-10) (Undergraduate Catalog: Academic Years 2020-2025_rev.0922_SV.C1-2.R9-10_p.15-16) These processes are aligned and comply with institutional assessment guidelines. The School of Arts, Sciences, and Education represents the general education component and includes two departments: Math and Sciences and Socio-humanistic Studies. Both academic areas also have clearly defined learning outcomes and an assessment plan and process in place. At the program/area level, the Dean of the School is responsible for this process. At the department level, the head of the department appoints an assessment team or coordinator to administer the process.

At the institutional level, the Vice President for Academic Affairs (provost) heads the Planning and Development Office and the Institutional Research Office. These Offices compile IPEDS data and other statistics on institutional key performance indicators used for decision-making (e.g, retention rate, graduation rate, enrollment) and reporting to federal agencies. It also assists in developing, administering, and processing various assessment instruments (e.g., exit interview survey, satisfaction survey) that are annually distributed to the academic and administrative areas and available in an institutional repository.

The provost created the *Institutional Student Learning Assessment Committee* (Regulations of the Institutional Student Learning Assessment Committee_rev.0823_SV.C2.R10) and, in 2013, restructured this Committee and delegated its guidance to three co-chairs who are also faculty members in charge of their respective program assessment plans. This Committee brings together the assessment coordinators of all programs/academic areas of the Institution, including Florida campuses. This is an effective way to integrate institution-wide efforts, provide general guidelines and minimum student learning assessment requirements, define institutional learning goals aligned with program/area learning outcomes, align assessment processes, share assessment findings, and disseminate assessment results.

In general, the Institution and the academic areas follow the four-stage assessment cycle depicted in **Figure 1**. The following is a summary that describes the efforts of UPPR in each of the four stages of the assessment cycle:

I. Stage 1 – Developing Clearly Articulated Key Learning Outcomes

UPPR currently has clearly articulated student learning outcomes at the institutional, program (including the general education areas: Mathematics and Sciences and Socio-Humanistic Studies), and course levels.

A. Institutional Level

There is a set of eight approved and adopted institutional learning goals/outcomes (ILOs), developed in alignment with UPPR’s mission, higher education standards, and MSCHE general education requirements that, since established in 2014, represent the focus of the work of the *Institutional Student Learning Assessment Committee*. By the time of graduation, UPPR graduates are expected to attain the following eight competencies:

1. **Effective Communication.** Express ideas in oral, written, and graphic modes.
2. **Scientific and Quantitative Reasoning.** Apply scientific and mathematical reasoning to the solution of problems.
3. **Critical Thinking.** Interpret and question evidence, statements, and graphics to draw justified, educated, reasonable, and truthful conclusions.
4. **Technological Competence.** Use technology and tools to gather, process and analyze the information required to solve problems in the field of study.
5. **Information Literacy.** Acknowledge, locate, and evaluate the information needed to accomplish a specific purpose.
6. **Lifelong Learning.** Recognize the need to engage in lifelong learning.
7. **Ethical and Social Responsibility.** Be aware of ethical, professional, and social responsibilities.
8. **Teamwork.** Contribute to achieving team goals.

The 2014 learning goals (ILOs) were ratified on January 20, 2023, by the *Institutional Student Learning Assessment Committee*, after a thoughtful and deep analysis, and elevated to UPPR President by the Vice President for Academic Affairs for final approval. A survey was distributed among the committee members as part of this process (Memo Request Recertification of Institutional Learning Goals_SV.C1.R10). This ratification considered the last review of UPPR mission statement, the last definition of the MSCHE standards and requirements of affiliation, the last review of the ABET criterion related to student outcomes, and the last version of the programs/areas’ learning outcomes.

The ratified institutional learning goals have been endorsed and disseminated through a President’s letter to the academic community distributed by electronic message on March 31, 2023. (President Memo Ratifying Institutional Learning Goals_rev.0323_SV.C1.R10) The institutional learning goals are disseminated through UPPR catalogs, the web page, and the programs/areas assessment plans, and are documented in the *Institutional Student Learning Assessment Plan*. (Institutional Student Learning Assessment Plan_ rev.2023_SV.C1-3. R8-10)

B. Program Level

Each academic program has a set of program goals defined and stated in terms of student learning outcomes (SOs), consistent with the program of study and degree level, clearly aligned with the institutional learning goals (ILOs), and with UPPR’s mission. (UPPR webpage Mission, Vision & Goals_SV.C1.R10) (UPPR webpage Academic Offerings Undergraduate Programs_SV.C1.R10) (Undergraduate Catalog: Academic Years 2020-2025_rev.0922_SV.C1.R10) For graduate programs, a set of general learning goals appropriate for the graduate level has been defined and included in the *Graduate School Assessment Plan*. (Graduate School Assessment Plan 2022 Template _rev.2023_SV_C1.R10)

Table 1 summarizes the relationship (alignment) between the institutional learning goals (ILOs) and the schools’ program/areas learning outcomes (SOs). Program learning outcomes (SOs) are available to current and prospective students through institutional catalogs (undergraduate, graduate) (Undergraduate Catalog: Academic Years 2020-2025_rev.0922_SV.C1.R9) and web pages (UPPR webpage Academic Offerings Undergraduate Programs_SV.C1.R9), bulletin boards, and syllabi.

Table 1: Mapping of Institutional Learning Goals (ILOs) and School/Area Learning Outcomes (SOs)

INSTITUTIONAL LEARNING GOALS (ILOs)	School of Eng. and Geospatial Sciences	School of Architecture	School of Management and Entrep.	School of Arts and Sciences and Education		Graduate School	Library
				Socio-Humanistic Studies	Mathematics and Sciences		
1. Effective Communication. <i>Express ideas in oral, written, and graphic modes.</i>	X	X	X	X	X	X	X
2. Scientific and Quantitative Reasoning. <i>Apply scientific and mathematical reasoning to the solution of problems.</i>	X	X	X		X	X	
3. Critical Thinking. <i>Interpret and question evidence, statements, and graphics, to draw justified, educated, reasonable, and truthful conclusions.</i>	X	X	X	X	X	X	X
4. Technological Competence. <i>Use technology and tools to gather, process and analyze the information required to solve problems in the field of study.</i>	X	X	X		X	X	X
5. Information Literacy. <i>Acknowledge, locate, and evaluate the information needed to accomplish a specific purpose.</i>	X	X	X	X		X	X
6. Lifelong Learning. <i>Recognize the need to engage in lifelong learning.</i>	X	X	X	X	X	X	X
7. Ethical and Social Responsibility. <i>Be aware of ethical, professional, and social responsibilities.</i>	X	X	X	X		X	X
8. Teamwork. <i>Contribute to achieve team goals.</i>	X	X	X	X	X	X	X

C. Course Level

Each syllabus at the Institution has a section that clearly states course objectives. Most programs also include a syllabus section that indicates the program-level learning outcomes (SOs) the course strongly supports. Faculty uses the syllabus as a guide to design the student's learning experience in the course. The course objectives and the course contribution to the program learning outcomes have been defined by qualified faculty members.

II. Stage 2 – Design Courses, Programs, and Experiences that Provide Learning Opportunities to Achieve Learning Outcomes

UPPR courses, programs, and experiences have been designed by qualified faculty members

and experienced professionals, following a rigorous process initiated at the academic department level with the active participation of relevant standing committees. (Academic Program Review Policy_SV.C2.R9-10). For new subjects or programs and other relevant curricular changes, the Academic Council is involved in evaluating and approving these. (Academic Council Regulations 2016_SV.C2-3.R9-10)

At UPPR, the design of courses, programs, and experiences are centered on the student and seeks to reach their full potential, supporting UPPR's mission and strategic goal I of the 2022-2027 strategic plan: "Develop a student-centered culture that promotes their success," and the strategic goal 3 of the 2016-2021 strategic plan: "Foster institutional alignment with educational trends". (Institutional Strategic Plan 2022-2027_SV.C1-2.R9-10_p.46) (Institutional Strategic Plan 2016-2021_C1-2.R9-10_p.8) This process also considers the program objectives, constituencies' needs, and compliance with high standards to meet society, licensing, and accreditation requirements.

Learning opportunities at the undergraduate level include real-life problem-solving through projects, laboratory experiences, and capstone/design projects. In addition, students are encouraged to participate in internships, COOP, undergraduate research (e.g., seven-year Undergraduate Research Program for Honor and Outstanding Students, URP-HOS), competitions, and other enriching extra-curricular and professional development activities (e.g., sixteen-year Professional Development Program in Transportation Infrastructure Inspection - PDPTII PUPR/ACI-Herzog, 2023 algae prize, ASCE concrete canoe, robotics competitions, and participation in the IE annual convention, among others). Curricula have been designed with a pre-requisite and co-requisite structure that guarantees gradual growth in the student's skills and a culminating experience that prepares students for professional practice. This culminating experience is based upon previously acquired knowledge and skills and integrates technical and non-technical competencies gained through the program of study. It allows the evaluation of the level of attainment of the student outcomes at the time of graduation. (2019 ABET Self-Studies_SV.C1-3.R9-10)

The academic areas have a documented assessment plan and process in place, consistent with the general guidelines provided in the *Institutional Student Learning Assessment Plan* (Institutional Student Learning Assessment Plan_rev.2023_SV.C1-3.R8-10) and considering program-specific accreditation requirements. (e.g., ABET) (2019 ABET Self-Studies_SV.C1-3.R8-10) It includes the assessment opportunities for the learning outcomes and a mapping between the courses (based on the course learning objectives) and learning outcomes (SOs), and between the program outcomes (SOs) and the institutional learning goals (ILOs). It also incorporates the assessment tools/instruments and the performance threshold (target or goal) used to demonstrate the attainment of the student outcomes.

Since the last MSCHE visit, the *Institutional Student Learning Assessment Committee* has focused efforts on refining and standardizing the process to evaluate the attainment of the institutional learning goals (ILOs) at strategic/key courses. The template to document the program/area assessment plan was revised in 2022 as part of the continuous improvement process. Standardized rubrics and associated performance indicators were created to assess the institutional learning goals (ILOs). The update of the academic areas assessment plans with

this template, and the newly implemented rubrics and performance indicators, implied a thorough review and analysis of how the programs/areas support the attainment of institutional learning goals (ILOs). The current alignment of this process at all levels (course → program outcomes (SOs) → institutional learning goals (ILOs)) identifies the appropriate data points in the curriculums, facilitates the data collection, and the analysis and use of results for continuous improvement. This exercise resulted in enhanced assessment practices. It is considered an improvement of the assessment process itself. The program/area assessment plans are an addendum to the institutional student learning assessment plan. (Program SLA Plan Template 2022_rev.0823_SV.C1-3.R8-10)

Examples of improvements in the assessment processes that resulted from the 2022 review are:

- **Mathematics and Science Department:** Evolved from an assessment process based on a holistic set of rubrics to an assessment process based on an analytic set of rubrics. As a result, the data collection plan for the student outcomes (SOs) and the institutional learning goals (ILOs) are better aligned and allow the identification of strengths and weaknesses based on a standard set of performance indicators.
- **Graduate School:** The Design Project Expo, a culminating experience, has been redesigned to make it more inclusive. Online students from the management graduate programs now present their research at the same event as the on-campus community. The event's name changed to Graduate Project Expo. Also, the traditional Graduate Project Expo evaluation process is now performed on the Blackboard platform, using a reviewed virtual version of the rubric that facilitates the event's judges' assessment. The Expo results are gathered and analyzed using an Excel instrument that was also refined to facilitate the Graduate School Assessment Coordinator's analysis and interpretation of results. (Graduate Project Expo Rubric_SV.C3.R10)
- **Socio-humanistic Studies (SOHU) Department:** As part of the definition and evaluation of the institutional rubric for ethics and social responsibility, the SOHU faculty teaching the associated courses met with the assessment coordinator and the department head of the area. They discussed the rubric and evaluated the general education component strategic courses, experiences, and learning opportunities related to these competencies.

III. Stage 3 – Assessing Student Achievement of Learning Outcomes

For the academic programs, the assessment is performed at the course and program levels. The School of Arts, Sciences, and Education performs assessments for the general education component of the undergraduate curricula and focuses on developing essential skills, including oral and written communication, scientific and quantitative reasoning, critical thinking, and technological competence. The Library Information Literacy program contributes to developing information literacy skills for all institutional academic programs. (UPPR webpage Library Services Information Literacy_SV.C1.R9) The various course and program assessment tools and instruments are documented on each area's student learning assessment plan. (Program SLA Plan Template 2022_rev.0823_SV.C1-3.R8-10)

The assessment of student learning is mainly based on direct assessment measures. According to a plan prepared by the assessment coordinator of the area/program, the faculty collects assessment data in strategic courses using various means (e.g., exams, lab reports, assignments, oral presentations, and projects). Then, the faculty prepares course summative reports based on a rubric and an associated set of performance indicators to evaluate the level of attainment of the program/area learning outcomes (SOs). This information is scaled to evaluate the attainment of the institutional learning goals (ILOs).

At the course level, the most common assessment instruments reported by the academic areas are exams, projects, laboratory reports, special assignments, oral presentations, capstone project evaluations, technical paper reviews, poster presentations, case studies, and written essays. Capstone project courses, the Graduate Project EXPO poster session, and the architectural design jury evaluations, as culminating experiences, play an important role in assessing the level of attainment of the program outcomes (SOs).

Other direct and indirect sources of assessment data utilized by specific academic programs in their assessment plans include the Fundamental of Engineering (FE) exam results, the COOP Supervisor Performance Evaluation, the senior exit survey, and the employer feedback survey, among others. The assessment results are integrated and processed in meaningful ways by the assessment coordinator of the area/program. Then, these are presented to the faculty members to inform departmental decisions and provide insight for continuous improvement efforts.

Each program/area delivers an assessment report to the co-chairs of the *Institutional Student Learning Assessment Committee*, using information collected in strategic courses identified in the assessment plan as key for assessing the institutional learning goals (ILOs). (Institutional Student Learning Assessment Plan_rev2023_SV.C1-3.R8-10) (Program SLA Plan Template 2022_rev.2022_SV.C1-3.R8-10) Then the co-chairs integrate and analyze the results and disseminate these to the Institution. To facilitate the process of evaluating the attainment of the institutional learning goals (ILOs), during 2022, automatic and homogenous data collection forms were created to help integrate the assessment results from different academic areas. This facilitates the documentation of summarized results of the analysis and continuous improvement efforts of the areas, supports the preparation of institutional reports and the identification of actions that must be carried out at the institutional level. (ILO Results Excel Form Template_SV.C2-3.R8-9)

Leveraging the annual reports prepared by the Office of Planning and Development, and the Institutional Research Office, the *Institutional Student Learning Assessment Committee* has performed a 2013 to 2022 longitudinal analysis of the annual results of the Exit Interview Survey and Satisfaction Survey. (Longitudinal Analysis of the 2013 to 2022 Institutional Exit Interview Survey Results_SV.C3.R10) This analysis evaluates trends in different institutional aspects that impact educational effectiveness, especially during these particularly challenging times due to several events that have hit the island of Puerto Rico in recent years. (Refer to the Introduction Section of this document on page 8) (Institutional Strategic Plan 2022-2027_SV.C3.R8.R10_p.25) The results of these longitudinal analysis have been discussed in the *Committee* meetings. At the Planning and Development Office and the Institutional Research Office, other reports are generated and published for the use of the academic and

service areas of the Institution to continue improving services, including the analysis of enrollment, retention, and persistence data. (UPPR webpage Office of Institutional Research and Assessment_SV.C3.R8.R10)

IV. Stage 4 – Use Results of Assessment to Improve Teaching and Learning

The results of the assessment of student learning have been used in the continuous improvement of academic areas/programs (for “closing the loop”). This is a continuous cycle. Each department head and corresponding assessment coordinator/team are responsible for documenting the actions implemented for the enhancement of the program/component teaching and learning activities, as well as the results of these actions, whether successful or not. Deans celebrate regular meetings with the department heads and related personnel to address and define strategies for all matters concerning the school’s academic programs.

At the institutional level, the area/program coordinators share the assessment results and associated improvement actions in the *Institutional Student Learning Assessment Committee*. These reports and presentations are communicated to the deans and the Vice President for Academic Affairs. Specific concerns are elevated by the co-chairs of the *Institutional Student Learning Assessment Committee* directly to the Vice President for Academic Affairs or by the assessment coordinators to their corresponding Department Head and Dean. The committee meeting records are kept in the meeting minutes.

Based on the assessment results multiple actions have been implemented, including training and development of the faculty. (e.g. workshops, conferences, and certifications in educational innovation, technological tools, and assessment of student learning coordinated or offered by the Virtual and Innovation Center-VEIL) (VEIL Distance Education Evolution at PUPR Draft_rev.0622_SV.C3.R10) (VEIL Timeline Online Academic Offerings Draft_rev.0622_SV.C3.R10) An example of a **success story** is that UPPR's objective of training and reinforcing the use of the Blackboard platform was accelerated in COVID-19 Pandemic as a means to support the teaching-learning process and innovation in the classroom. 100% of the faculty have been certified in using the platform and more than 80% use it as a learning assessment tool. In addition, UPPR has offered several workshops aimed at improving the teaching-learning process.

Examples of continuous improvement actions to increase educational effectiveness include:

- **Mathematics and Sciences Department**

1. The Summer Bridge Camp is a summer workshop offered to new students to strengthen weaknesses and skills in the fundamental concepts of preparatory mathematics courses. That camp allows placing students who demonstrate academic achievement in more advanced mathematics courses in the first quarter of study. According to **Table 2**, by 2022 the success rate was 100% compared to 96% and 95% in previous years.

Table 2: Summer Bridge Camp % Success in the Placement Course

Summer of year	# of participating students	Math 0102	Math 0106	Math 0110	Math 1330	Math 1340	Math 1350	Success in the placement course	No success	% success
2019	25	2	4	8	5	0	6	24	1	96
2021	21	5	3	3	7	1	2	20	1	95
2022	23	7	8	3	4	1	0	23	0	100

In addition to preparatory courses and institutional tutoring services (CPU, PSE, ESL), the Summer Bridge Camp is an example of a great initiative to help respond to the challenge the island of Puerto Rico’s higher education institutions are facing. **Figure 3** is a graph published by a local newspaper in April 2023 that represents the College Board exam results for PR high school seniors. It shows a small (less than 5%) yet steady decrease between 2018 and 2022 in essential skills (math and reading/writing)

Figure 3: 2018-2022 College Board Results. Decrease in Learning Levels in PR



English Translation of the text of Figure 3:

Decrease in learning levels in the island
 Scores of high school graduation candidates on the College Board aptitude test have decreased in all subjects in the last five years (2018-2022).

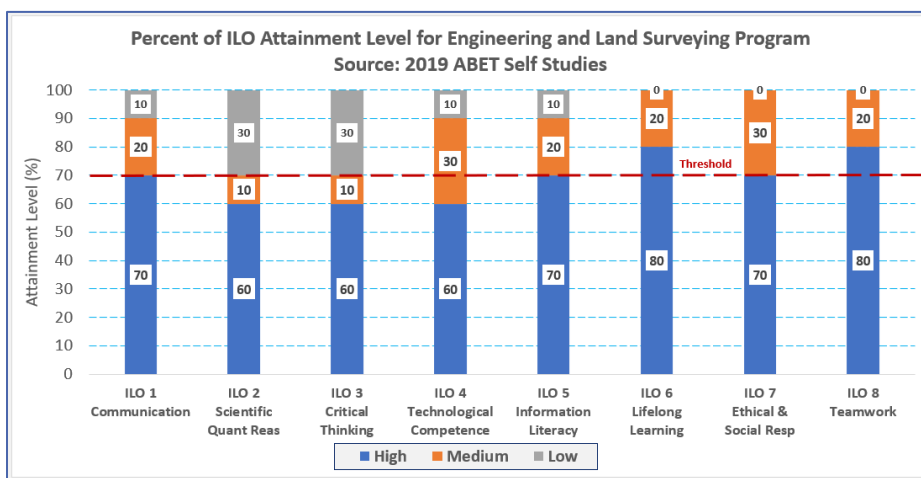
- Reading and Composition (purple line)
- Mathematics (yellow mustard line)
- English (green line)

Source: Puerto Rico and Latin America College Board
 Chart by: "El Nuevo Día", a local newspaper.

2. Faculty training and development activities, leading to innovation in the classroom, improvement in teaching methodologies, support to online courses, enrichment of face-to-face courses, and strategies to deal with the pandemic challenges. (Math & Sciences Historic Summary Per Year from 2019-2020 to 2022-2023 _SV.C3.R8.R10) This includes training in laboratory interface equipment, Cengage eBooks and WebAssign, WebWork, virtual education, Quality Matters workshops, faculty participation in the 2022 University of Wisconsin-Madison Distance Teaching & Learning Conference about educational innovation, and the basic, intermediate, and advanced certifications coordinated or offered by the Virtual and Innovation Center (VEIL), including a certification from the Tecnológico de Monterrey, Mexico. These certifications and associated preparation were an institutional effort to develop the faculty in all academic areas.
3. Agreements were reached between 2019 and 2020 with eScience Labs and Science Interactive to improve the online instruction of Biology and Chemistry.
4. Support the admission office mentoring and interviewing PES and PESA program students whose purpose is to attract gifted high school students.
5. Review of validation of transfer credit evaluation and student placement process (2020).

6. Review and redesign the placement test in the Blackboard platform (2019-2021).
 7. A faculty member engaged in educational research by participating as a mentor of 10 students in the Undergraduate Research Program for Honor and Outstanding Students (URP-HOS), in collaboration with the Chemistry and Biomedical Engineering departments (since 2020).
 8. Created analytical rubrics (2021) to replace the holistic rubrics used to assess the department student outcomes (SOs) and the institutional learning goals (ILOs).
 9. Departmental review sessions were implemented in Fall 2022 term, as a rapid response to a drop in the first departmental test mean grade (59% failure). These sessions were implemented for the complete term for the following courses: Math 0102, Math 0106, Math 0110, Math 1330, and Math 1340. As a result of this strategy, the mean performance of the students improved in subsequent tests.
- **School of Engineering**
 Considering the results reported in criterion 4 (continuous improvement) of the 2019 ABET self-study reports, there was an 80% attainment of the institutional learning goals (ILOs), as shown in **Figure 4**. The critical thinking and quantitative reasoning goals should continue to be reinforced. (2019 ABET Self-Studies_SV.C1-3.R9-10) (PUPR Engineering ILOs Attainment Analysis based on ABET 2019 Self Study Reports_rev.0423_SV.C1-3.R8-10)

Figure 4: Analysis of the Level of Attainment of the Institutional Learning Goals (ILOs) as per the 2019 ABET Self-Study Reports



After 2019, an example of impactful changes in terms of continuous improvement at the School of Engineering include:

1. All academic programs thoroughly evaluated their assessment processes in response to the ABET review of the student outcomes criterion (e.g., the student outcomes for engineering changed from a to k to 1 to 7). The revised assessment process is being implemented by the academic programs.
2. The development of fully online programs to offer an alternative delivery mode to on-campus. This includes the following academic programs: Industrial and Systems Engineering, Biomedical Engineering, Computer Science, and Computer Engineering. Other programs are in progress, such as Electrical Engineering.

3. A broad development of online courses as an alternative to face-to-face courses. This is an institutional strategy to increase enrollment by providing alternative delivery modes to students.
4. Developed strategies for a rapid response to the COVID-19 pandemic. The faculty had an agile response to the sudden transition to online synchronous offerings for face-to-face courses. In the beginning, using the Collaborate Ultra platform or Teams. In 2021, 65 classrooms were converted to smart rooms, enabling faculty to teach both on-site and remote students through synchronic sessions while returning to normal campus activities from the pandemic and for the students' benefit.
5. According to Dr. Godoy and the Virtual Education and Innovation Center (VEIL) Team Members' draft report of June 2022 titled "Evolution, expansion, and internationalization of online academic offerings at UPPR" (VEIL Distance Education Evolution at UPPR Draft_rev.0622_SV.C3.R10), in 2015 UPPR explored the adoption of a Learner-Centered Education and offered a 120-hours contact certificate program on innovative learning environments enriched with technologies to 72 faculty members (from 2017 to 2020). Over 60 classrooms were equipped with desks or podiums to facilitate on-campus instruction supported with technology. (VEIL Timeline Online Academic Offerings Draft_rev.0622_SV.C3.R10)
6. UPPR faculty completed three stages of certification requirements for online teaching since 2020. Stage 1 (2020): "Skills for virtual teaching" basic level certification, including the use of Collaborate Ultra for synchronous instruction; stage 2 (2021) "Skills for virtual teaching"; and stage 3 (2022) "Advanced Certification".
7. A Blackboard update to improve the faculty and student experience as well as the acquisition of a data visualization module for a better dissemination of the assessment results at all levels.
8. Increase the number of undergraduate research opportunities for the students, and student participation in these experiences, through initiatives such as the Undergraduate Research Program for Honor and Outstanding Students (URP-HOS).
9. A thorough review of the BSEE Program launched in 2020 with an innovative curriculum mainly impacting energy systems as a response to industry and constituencies' needs (survey with consultation performed in Dec. 2018). (EE Advisory Board Survey on Changes to Power Track_SV.C3.R10) This implied a review of the body of knowledge in the curriculum and a reinforcement of the field of Automation, Software Processes, and Database Management. The Power Systems area of interest changed its name to Smart Grid Power Systems. An Aerospace multidisciplinary option was added as part of the Communications, Signals, and Controls Track.
10. At the ECECS Department, an ambitious laboratory development plan and equipment started in the Fall 2020 term, including the Embedded Control & Cyber-Physical Systems Laboratory, Automation and Industrial Controls Laboratory, Robotics Laboratory, and the relocation and expansion of the Computer Laboratory. Acquisition of new equipment and instrumentation to

support new Data Science and Embedded Control & Cyber-Physical Systems courses (still ongoing).

11. An increase in the Computer Engineering and Computer Science academic offerings to incorporate technical electives in Data Science (4 courses) to the ones already implemented in Cybersecurity (4 courses), as a first step to provide micro-credentials in these areas, supporting the Institutional priorities. (Institutional Strategic Plan 2022-2027_SV.C3.R8.R10_p.46, 49)
12. The Center for University Progress (CPU), which offers tutoring services to students, has digitized all its enrollment and evaluation processes to respond to the pandemic and has kept it up to date, combining face-to-face and remote offerings depending on the availability of tutors. All support services areas of the Institution (enrollment process, mentoring, etc.) were reinvented to respond to pandemic demands and now have more means to serve the student population.
13. The Graduate School signed agreements (2018) with Technological Institute of Santo Domingo (INTEC) to offer a master's in Manufacturing Competitiveness program in the Dominican Republic.

- **Institutional Learning Goals/Outcomes (ILOs)**

- ***Effective Communication (ILO 1)***. In the Socio-humanistic courses, faculty reports that students arrive with deficiencies in writing and reading skills. This is consistent with the 2018-2022 College Board results in Reading and Composition presented previously in **Figure 3**. To respond, courses and teaching approaches are reviewed periodically. Among the implemented strategies, the faculty is more aggressively monitoring assignments, requesting students to rewrite exercises, and discussing common mistakes in the classroom. At the Capstone level, written communication skills (grammar, expression) are still a challenge. Faculty provide feedback to improve technical writing. In terms of oral communication in the technical field, increasing the opportunities for oral presentations of projects across the curriculum has been encouraged. The computer engineering program, for example, has had improvement in oral communication skills after requiring oral presentations in an increased number of laboratory courses.

- ***Scientific and Quantitative Reasoning (ILO 2)***. Freshmen students show math deficiencies. These difficulties also impact concentration courses. The Summer Bridge Camp was implemented to refresh and reaffirm the knowledge of the students in topics ranging from Algebra to Precalculus. **Table 2** presented earlier shows the % of success of this strategy from 2019 to 2022. The Center for University Progress (CPU), the PSE (Educational Services Program), and the STEM Proposal provide tutoring for mathematics courses throughout the academic year. Other strategies include diagnostic tests for new students to place them in mathematics courses based on their results and the use of digital textbooks and online practice resources at no cost to the student. The WeBWorK platform of the American Mathematical Association was installed and its compendium of exercises for STEM courses is used to complement the course material with practice exercises in preparatory math courses. Reviews are offered in preparatory and concentration courses, and/or the faculty provides appropriate references (e.g. handouts or videos) on background knowledge in which students seem to have

difficulties. An example of a **success story** is that UPPR's open admission policy allows every student to have the opportunity to study engineering or other careers offered by the institution. High school students have the lowest scores in mathematics with scores between 445 and 457 between 2018 and 2022, on the College Board test. The Summer Bridge Mathematics program, offered by UPPR in the summer, allows placing students who demonstrate academic achievement in more advanced mathematics courses in the first quarter of study. Between 2019 and 2022, the success rate of students in the course they were placed has been, on average, 97%.

-Critical Thinking (ILO 5). In Socio-Humanistic courses, students show poor reading and writing skills, and this impacts critical thinking. They show difficulty in the comprehension of texts or articles. They also exhibit a lack of interest in socio-humanistic topics in contrast with a marked interest in engineering subjects. In engineering, some areas report that expressing analysis and conclusions from experiments in writing is a skill that needs reinforcement. Faculty have implemented different strategies, such as discussing the content of laboratory reports, providing feedback on students' work, showing examples, emphasizing the importance of performing educated conclusions, and developing sample reports for reference purposes.

-Information Literacy (ILO 5). The results of the 2020 and 2021 exit interview surveys show a decrease in the perception of students on how well UPPR prepared them for Information Literacy. (Longitudinal Analysis of the 2013 to 2022 Institutional Exit Interview Survey Results_SV.C3.R10). Students are introduced to this skill in the introductory course (ATUL) through the Library Information Literacy Program workshops. Subsequently, these skills are developed through learning opportunities embedded in the curriculums with or without the involvement of the Library personnel. Students don't seem to associate the ATUL workshops or other course-related activities with the survey question. Since the Winter 2022 term, the ATUL Library workshops include an orientation session explaining the meaning and scope of information literacy, as well as the courses and activities where this skill is developed.

The Library Information Literacy Program has maintained contact with the academic departments and faculty members to continuously inform and promote library resources and services, including workshops in style manuals, plagiarism, use of search engines, trusted sources, and databases, among others. The Library personnel has an interest in supporting the academic departments in evaluating the information literacy content in the curricula and the development and implementation of a joint information literacy program embedded in the curriculums. As a first step, a preliminary curricular map was developed identifying key strategic courses. The next step is to work with department heads and deans to promote and formalize this initiative.

-An example of a success story is that even though students admitted to UPPR present lags in critical thinking, teamwork, problem-solving, and oral and written communication skills, 72% of Institutional Learning Outcomes (ILOs) exceeded the 70% goal. To continue improving by exceeding the goal, strategies have been

implemented at the level of courses and programs to improve scientific reasoning skills, critical thinking, and technological competencies from the first year of studies.

- **Assessment of the Effectiveness of the Student Learning Assessment Processes at UPPR**

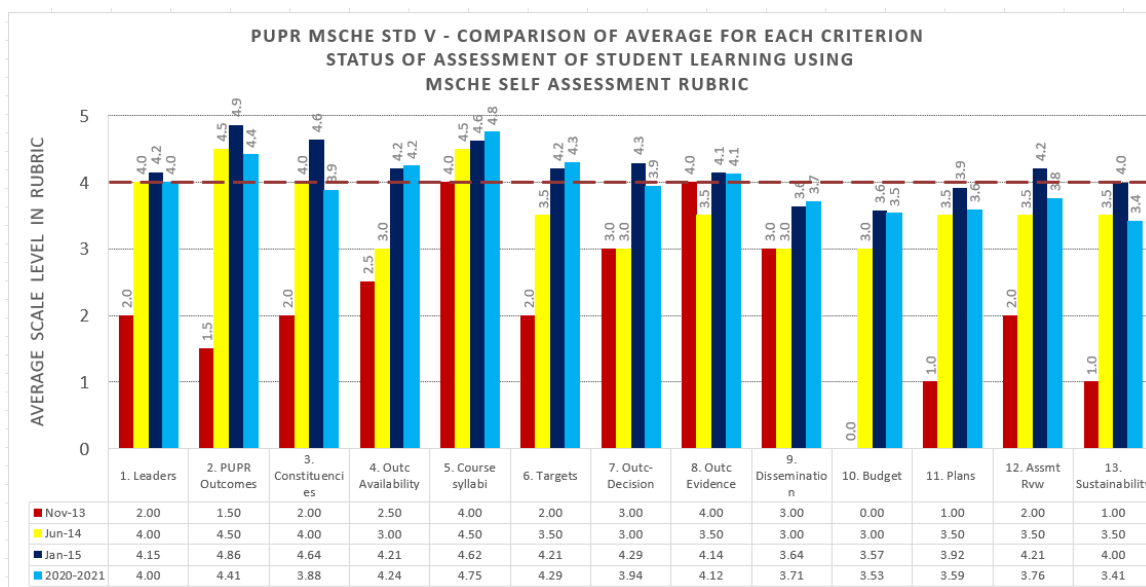
Great challenges have hit Puerto Rico in the last few years (since 2017) with natural disasters (hurricanes, earthquakes), and the worldwide irruption of the COVID pandemic, impacting all levels of education (primary, secondary, high school, higher education). Despite this, creativity, innovation, hard work, and commitment of both, the academic and administrative personnel, have allowed UPPR to maintain the quality of education and services and the definition of a rapid path to overcome these challenges.

Regarding the *Institutional Student Learning Assessment Committee*, the work was only briefly interrupted. While stabilizing, the line of work switched priorities temporarily to respond to emergencies and support each other in the process but the *Committee* could resume with agility the focus of its work.

Figure 5 shows the results of a self-evaluation survey based on an adapted version of the MSCHE 2008 “rubric for evaluating the institutional student learning assessment processes”. (MSCHE Self-Evaluation SLA Processes Adapted PUPR 2020_SV.C5.R8.R10) This survey is based on 13 items. It has been performed by the *Institutional Student Learning Assessment Committee* co-chairs at key times (2013, 2014, 2015, and 2020-2021 academic years) to evaluate the state of the assessment processes institution-wide. Comparing the last two evaluation points (2015 and 2020-2021) it can be appreciated that the assessment processes were not drastically affected during these challenging times. Some indexes show a slight reversal in trend in the last two data points (which is expected given the last years’ challenges), but these are expected to recover by the time of the next evaluation (scheduled for the 2024-2025 academic year). Of the 13 items in the rubric, the areas showing greatest opportunity for improvement are:

1. **Item 10 - *Student learning assessment results have been used by institutional leaders to inform planning and budgeting decisions.*** It is expected that the implementation of the new strategic plan (2022-2027) will provide support to this indicator.
2. **Item 13 - *There is sufficient engagement, momentum, and simplicity in current assessment practices to ensure that assessment processes will be sustained indefinitely.*** The assessment processes and practices have been maintained (with the corresponding updates) since established in 2000. There are academic programs with more mature and sustained processes than others. Through the *Institutional Student Learning Assessment Committee*, support is given to the academic areas to continue improving their processes and growing in student learning assessment efforts. For the next evaluation, this item is expected to improve.

Figure 5: Comparative Analysis of the Student Learning Assessment Processes at UPPR (2013, 2014, 2015, 2020-2021)



AREAS OF STRENGTH

1. Commitment of the academic areas and their leaders with the assessment of student learning.
2. The permanent *Institutional Student Learning Assessment Committee* with its current composition: a representative from each academic area and campus who, in turn, is the assessment coordinator for the area/program.
3. Commitment of the faculty and service areas personnel. UPPR responded quickly to the COVID-19 pandemic and other natural disaster challenges.
4. Enhanced processes to assess the institutional learning goals (ILOs).
5. Institutional focus on continuously improving academic and administrative services for a better student experience.

OBSERVATIONS

1. The Universidad Politécnica de Puerto Rico (UPPR) may consider enhancing assessment result dissemination institution-wide and its alignment with budget and planning.
2. UPPR could consider identifying strategies to minimize the turnover of assessment coordinators to maintain the Institutional Student Learning Assessment Committee's timeline. Restore the publication in the academic calendar of the date for the faculty to submit the assessment reports to the program coordinators.
3. UPPR may enhance promoting a stronger assessment culture by engaging all faculty in assessment best practices implementation and dissemination, establishing a peer program, reinforcing faculty assessment training, and promoting and recognizing continued innovation in the classroom.
4. UPPR could consider exploring strategies to provide additional support in developing language skills (e.g., an institutional writing center) and an information literacy program embedded in the academic curricula. Expand tutoring offerings with innovative and

creative methods, based on identified academic challenges and expressed students' needs. Strengthen student engagement through a student mentor program headed by senior students.

5. UPPR may contemplate reviewing the institutional structure and procedures to ensure that all student support services follow a systematic continuous improvement process based on assessment information.

CHAPTER SIX: STANDARD VI - PLANNING, RESOURCES, AND INSTITUTIONAL IMPROVEMENT

The institution's planning processes, resources, and structures are aligned with each other and are sufficient to fulfill its mission and goals, to continuously assess and improve its programs and services, and to respond effectively to opportunities and challenges.

Requirement of affiliation 8: The institution systematically evaluates its educational and other programs and makes public how well and in what ways it is accomplishing its purposes.

Requirement of affiliation 10: Institutional planning integrates goals for academic and institutional effectiveness and improvement, student achievement of educational goals, student learning, and the results of academic and institutional assessments.

Requirement of affiliation 11: The institution has documented financial resources, funding base, and plans for financial development adequate to support its educational purposes and programs and to ensure financial stability. The institution demonstrates a record of responsible fiscal management, has a prepared budget for the current year, and undergoes an external financial audit on an annual basis.

LINES OF INQUIRY

1. How is the alignment process conducted between the mission/goals of the institution and the different units and constituents versus the processes of planning and assigning institutional resources?
2. How does UPPR make sure that institution-wide and individual units' objectives are aligned with institutional mission and goals?
3. How does UPPR make sure that conclusions drawn from mission and goals achievement assessment results are used for planning and resource allocation?
4. What are the objectives of the institution?
5. How are budget units allocated?
6. What documents show that the assessment results align with the institutional objectives and the different units?
7. How are the results used for making decisions during the processes of planning and allocation of institutional resources?
8. How are the assessment results of institution-wide and individual units' objectives achievement used during the processes of planning and allocation of institutional resources?
9. Which evidence demonstrates that constituents participate in the institutional planning and improvement procedure?

10. How does the institution ensure that the budgeting process and financial planning are linked to the strategic plan and the institution's objectives and departmental units?
11. How are the results of the assessments used in the planning and budgeting process?
12. How does the institution ensure budget allocation alignment with priorities that focus on the needs of all the constituents?
13. What is the order of priorities established in the budgeting process and the allocation of funds, for example, students, faculty, management, community, etc.?
14. How does UPPR determine that human resources are sufficient to carry out institutional operations (academic, financial, administrative, maintenance, security, etc.)?
15. How does UPPR determine that fiscal resources are sufficient to carry out institutional operations (academic, financial, administrative, maintenance, security, etc.)?
16. How does the institution determine that the physical and technical infrastructure resources are sufficient to carry out institutional operations (academic, financial, administrative, maintenance, security, etc.)?
17. How are changes in the organizational structure communicated to the UPPR community?
18. How well defined are the decision-making processes and assignment of responsibilities/accountability documented?
19. Which are these documents, and where are they located?
20. How well is the comprehensive planning for facilities, infrastructure, and technology linked to the institution's strategic and financial planning processes?
21. How frequently are these processes revised to include deferred maintenance and sustainability issues?
22. Where is the documentation of the independent audits and the evidence of attention to the findings' audits?
23. What is the institutional policy to disclose to constituents the results of the annual independent annual audit report?
24. How are the audit findings (concerns) of independent auditors considered in the decision-making process of upper management?
25. Which strategies are used to measure and assess the adequacy and efficient utilization of institutional resources required to support the institution's mission and goals?
26. How often does the institution measure the effectiveness of planning, resource allocation, institutional renewal processes, and availability of resources?

OVERVIEW OF THE STANDARD

UPPR's strategic plan provides the primary framework for decision making at the university and advancing the university's mission. (Institutional Strategic Plan 2022-2027_SVI.C1.R10_p.18 par.1-2) That is a fact of a **success story**.

Since 2002, UPPR has been conducting systematic institutional strategic planning processes. From these past efforts, key initiatives have fostered an environment where government, policies, processes, and metrics have been identified, analyzed, improved, and assessed. There are four clear identifiable cycles within the strategic planning endeavors at UPPR: 2002-2007, 2004-2009, 2010-2015 and 2016-2022. The first two cycles overlapped as part of the strategic planning renewal process to adapt to internal and external changes that allow UPPR to maintain excellence as a top higher education institution.

As part of the 2016-2022 Institutional Strategic Planning Committee, a set of strategic questions were acknowledged, and the following four subcommittees composed from selected members of the faculty and the Strategic Planning Committee were appointed to comprehensively study and answer the design questions:

- Aspirations Subcommittee
- Higher Education Trends Subcommittee
- PR and USA Landscape Subcommittee
- Strengths and Weaknesses Subcommittee

ANALYTICAL REPORT

Upon comprehensive analysis and discussion of the findings the following strategic goals were articulated:

1. Diversify institutional sources of income.
2. Evolve from a purely teaching institution to a teaching/research/consulting institution.
3. Foster institutional alignment with educational trends.
4. Increase student recruitment.
5. Increase retention and graduation rates.

Based on the SMART approach, goal activities were defined for each strategic goal. The proposed 2016-2021 Institutional Strategic Plan was submitted and approved by UPPR's Board of Trustees in February of 2016.

Although there is always room for improvement, the institution has historically been **successful** in managing and aligning its planning, resource allocation and assessment processes to ensure alignment of resources with UPPR strategic plan, goals, and priorities. This process allows for both long- and short-range planning, assessment, and development of objectives with measurable outcomes.

Current Planning Process

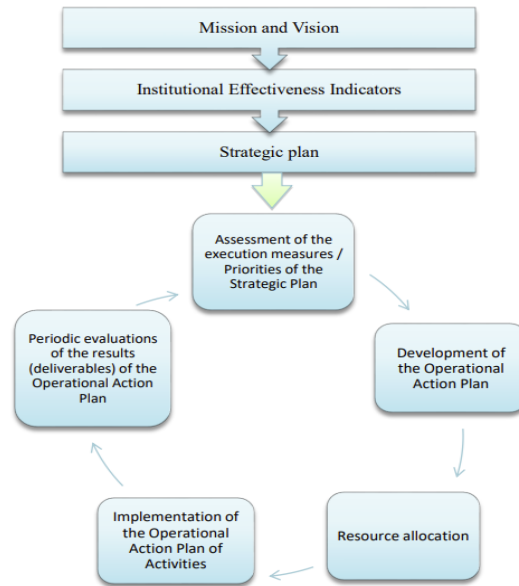
As indicated in Chapter I, the 2022-2027 Institutional Strategic Plan (ISP) was developed by a Strategic Planning Committee, which in turn is supported by a Strategic Planning Team made up of representatives of the different instances and internal stakeholders of the University. (Institutional Strategic Plan 2022-2027_SVI.C1.R10_p.58-59)

As part of the execution process of the ISP (2022-2027), a procedure has been established to ensure that the resource allocation associated with the activities conducted by the institutional academic departments and administrative offices address Institutional Mission and Institutional Planning Goals. The execution process is coordinated and overseen by the Implementation Coordinator of the ISP who reports to the President, since the position was created in 2023.

The planning process at UPPR is a combination of annual and long-range planning at both the institutional and unit levels. With the completion of the university's 2022-2027 Strategic Plan, academic departments and administrative office heads engage in multi-year divisional planning to support the achievement of the objectives of the strategic plan. All units have in place multi-year strategies that guide divisional and institutional improvement over time. The conceptual

methodological scheme to calibrate the achievement of the goals and objectives of the ISP is depicted in **Figure 1**.

Figure 1: Model for the Assessment of the ISP and the Matrix for the Elaboration of Academic and Administrative units Annual Work Plans



As depicted in **Figure 1**, once the priorities of the ISP have been set, the academic and administrative units prepare goals and objectives-based annual work plans. The annual work plan standard form requires that academic and administrative units define specific unit activities which should contribute to achieve one or more Institutional Planning Goals and Objectives. The activities identified may extend beyond the annual cycle being reported. During February, the operational units define and submit to the ISP Implementation Coordinator the following information for each unit activity identified in their Annual Work Plan table via a Microsoft Shared file:

1. Strategic institutional objectives which are impacted
2. Activities/actions required to reach each institutional strategic objective
3. Relevance which describes how the activity contributes to achieving the associated objective
4. Budget required to complete the planned activity
5. Persons responsible for completing the activity
6. Due date or itinerary
7. Expected results which define success

The ISP Implementation Coordinator then proceeds to analyze the aggregated activities and data submitted through the Microsoft Shared file by all institutional units to define the Institutional Annual Work Plan for the next fiscal year. Actions which are a direct result of such analysis may include one or more of the following changes to the unit Annual Work Plan activities:

1. Deleting duplicated unit actions/activities
2. Revising budget allocated to activities

3. Revising persons responsible to complete activity
4. Revising itineraries

The following institutional areas collaborate with the dissemination of the ISP by cascading the information to their personnel and appointing the responsibility of the completion of the necessary tasks and projects required to complete the plan. Different technologies are used by these areas to disseminate information to each one.

- Institutional Strategic Plan Implementation Coordinator
- Director of Human Resources
- Director of Communications
- VP for Academic Affairs
- VP of Enrollment Management and Student Services

The Implementation Coordinator of the ISP is responsible for collecting data and information to align it with the various projects presented in the plan. This information is aligned with the goals and objectives of the institution. The coordinator is also responsible for monitoring the calendarization as well as completion of the projects presented in the ISP. The Director of Human Resources shares the responsibility of disseminating the information regarding the goals and objectives stated in the ISP to the institution's personnel. The Director of Communications is responsible for the implementation of various technologies and resources to disseminate the ISP information as well as publishing it. This is done in different formats, so the achievements of the Institutional Goals presented in the ISP are well circulated through the entire academic population. The VP for Academic Affairs is responsible for disseminating the ISP information to all the departments as well as indicating how the objectives of the projects established in the ISP are going to be completed. The VP of Enrollment Management and Student Services works towards disseminating the information for the student population and shares the responsibility of overlooking the completion of the established projects in the ISP regarding this population.

Financial Planning and Budgeting Process

The unit annual work plan is the basis for the annual budget proposal that is submitted by each institutional unit to the Budget and Finances Coordinator. As part of the standard budget proposal form, each item requested requires a justification describing how it aligns with the following:

1. Unit operational needs
2. Specific unit objectives
3. Institutional planning goals

The budget proposal procedure starts at the Office of the Budget and Finances Coordinator. During February, this office sends a memorandum to the institutional units with the instructions, time schedule and forms needed to submit a budget request for the next fiscal year that runs from August 1 of the current year to July 31 of the following year.

Each operational unit prepares its budget request for the next fiscal year and submits it to the Office of the Budget and Finances Coordinator. (Budget FY-2024 Approved Distance Learning VEIL_SVI.C3.R11) This office consolidates all the requests made and compares the total expenses with the projected income that the university has forecasted for the same period.

Based on the projected income, a budget revision may be requested by the Office of the Budget and Finances Coordinator to the operational unit Directors. The revisions are analyzed and discussed with the unit Director until a final agreement is reached. The Budget and Finances Coordinator prepares the institutional budget final version and submits it to the Vice President for Administration and Finance. Once the VP of Administration and Finance revises the proposed institutional budget, he submits it for approval to the President and the Board of Trustees for final approval. Once the Board of Trustees authorizes the budget, the Budget and Finances Coordinator sends the authorized version to each operational unit. The Office of the Budget and Finances Coordinator maintains control of the budget and it is the institutional unit responsible of assessing this process.

After the budget is approved by UPPR Board of Trustees, the budget office inputs the approved budget into the Enterprise Resource Program (ERP). Throughout the year, all purchases are then electronically performed and approved using the ERP system to automatically monitor each of the department's available budget against its allocated budget. Any deviations from the input budget are analyzed and approved by the budget office and accounted as an over-budget expense at the end of the year.

At the end of each academic year a final assessment report of accomplishments associated with the annual work plan is submitted by each operational unit through the Microsoft Shared file. The final assessment report is used by the operational units to determine the level of accomplishment for each unit objective, and the reasons for below targeted unit objective accomplishments. It also helps to determine what corrective actions may be necessary, as well as the human, fiscal, physical, and/or technical infrastructure resources that need to be allocated during the next budget cycle.

The Institutional Strategic Plan (ISP) Implementation Coordinator uses the aggregated data collected through the Microsoft Shared file to prepare an institutional final assessment report of accomplishments. The president, vice presidents and the ISP Implementation Coordinator analyze the end of year assessment report to determine any corrective actions that may be necessary, as well as resources that may be needed to be allocated during the next budget cycle.

Internal and External Funds

A fact of another **success story** is that UPPR is a highly tuition-dependent university with over 81% of its income coming from tuition and fees (as of July 2022). The university enrollment was 4,528 students for the Fall 2021 term. This enrollment represents a reduction of 1,413 students (26% decrease) when compared against the historic highest enrollment of 5,491 students in Fall 2007 term. (Historic Enrollment 2015-2023_SVI.C3.R11_p.1-2)

Due to this enrollment decline, the university continued with the implemented human resource restructuring plan in the administrative offices and academic departments. The plan was able to reduce the university administrative staff from 231 in 2013-2014 to 217 in 2021-2022. Moreover, the plan was able to reduce the university faculty staff from 252 professors in 2013-2014 to 194 in 2021-2022. That constitutes a reduction of 14 administrative staff employees (6% reduction) and of 58 faculty staff employees (23% reduction). The human resources restructuring plan has effectively downsized the university to match its current student enrollment. The next steps are some additional expenses reduction measures adopted by the

institution: energy conservation projects, strict purchasing procedures and vendor agreements. (Human Resources Cognos Census 2015 to 2022_SVI.C4.R11)

To increase the pool of prospective students, the 2016-2021 Strategic Goal 3 activities contemplated development of new degrees aligned with national priorities and industry needs. **Successfully**, during said period a total of 10 academic programs were developed to enhance the institutional academic offering including: one (1) associate's degrees, five (5) bachelor's degrees, and three (3) master's degrees level programs, as well as a graduate certificate program. (Refer to the Main Programs of Study on page 17 for a specific list of UPPR offerings.)

One of these newly developed programs was the bachelor's program in Biomedical Engineering, which started in Fall 2016 term with an enrollment of 35 students. By Fall 2021 term its enrollment had steadily increased to 429 students. (Certification Number 2021-095_SVI.C1.R8_p.2)

A fact of another **success story** was the strategic activity called for the development of online programs. During this period, the online modality of all general studies courses for all undergraduate programs and the online modality of general engineering courses for all undergraduate engineering programs were developed. As a result of these developments the number of institutional online courses offered grew from 186 courses in Fall 2016 term to 387 courses in Fall 2021 term, that is an increase of 201 courses (108% increase). Similarly, the institutional duplicated online enrollment grew from 1,768 students in Fall 2016 term to 4,198 students in Fall 2021 term, that is an increase of 2,430 duplicated students (137%).

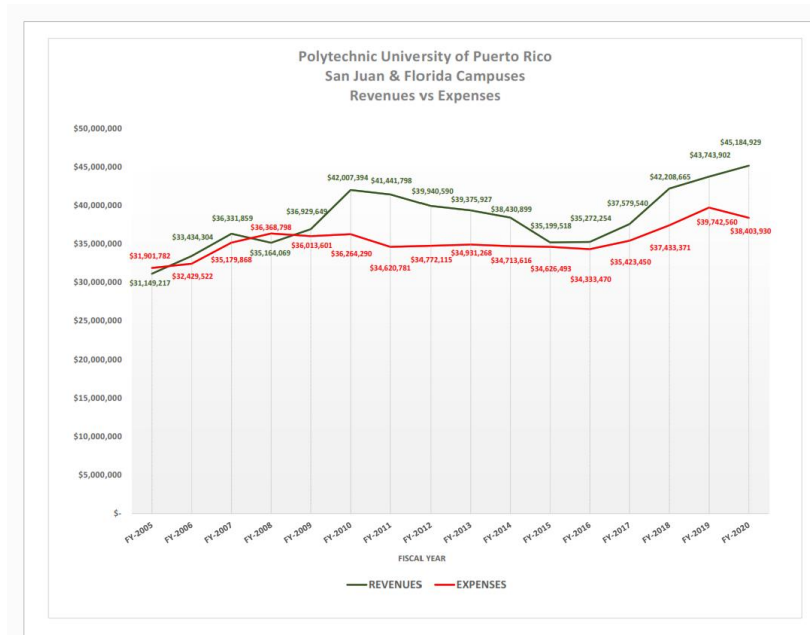
In June 2021, the online modality of bachelor's programs in industrial and in biomedical engineering were submitted to and approved by the Board of Postsecondary Institutions (JIPs). (Certification Number 2021-096_SVI.C1.R8_p.2) During the Fall 2021 term the combined enrollment in these two programs was five students. A year later, the Fall 2022 term combined enrollment was 123 students.

In addition, the BS in Computer Science and BS in Environmental Engineering online programs were approved by the JIPs in August and December of 2022. (Certification Number 2022-317_SVI.C1.R8_p.2) The fully online program of BS in Computer Engineering was also recently approved by the PR government agency JIPs (May 2023). (Certification Number 2021-086_SVI.C1.R8_p.2) All these academic program modalities are now available to interested students.

During the Spring 2023 term the BSBME, BSIE and the BS in Computer Science online programs enrollments were 49, 90 and 9 students respectively for a total enrollment of 148 students. (Certification Number 2021-239_SVI.C1.R8_p.2) Most of the online students live outside the San Juan Metropolitan area and are unable to attend on-campus classes. Further, some of the students enrolled in the online program reside in California and Texas.

UPPR total revenue was \$31.1M for fiscal year (FY) 2005, \$35.2M for FY 2008, \$35.2M for FY 2015, and \$45.2M for FY 2020. UPPR's Total Revenues vs Total Expenses for FY 2005 through 2020 is shown in **Figure 2**.

Figure 2: Total Revenues vs Total Expenses (2005-2020)



It is worth mentioning, as another **success story**, is that even though total UPPR student enrollment has remained relatively stable over the past eight years (a net increase of 45 students when Fall 2016 term enrollment is compared to Fall 2021 term enrollment), the university revenues have increased during the same period. This is the result of the following two major actions:

1. The university ability to request and receive federal and local external funds that added over \$50M in the past eight years
2. The gradual increase in fees and tuition

As a result, during the same period the university dependency on tuition and enrollment fees was reduced from 87.5% in 2012-2013 to 81% in 2019-2020. This is a significant reduction from a 96.4% in FY 2005, a trend which should continue in the next cycle as outlined in the Strategic Goal V which seeks to strengthen the institution’s financial position, its sustainability, and an effort to responsibly manage the institutional resources as outlined in the 2022-2027 ISP.

In a non-profit higher education institution like UPPR, surplus funds were used to reduce long term debt, develop capital projects and reserve fund investments. They were also used to expand facilities for the operational purposes of the institution. The surplus funds were a means to produce property income, such as interest for the institution.

Internal Control Measures and External Audits

Several quantitative and qualitative measures are used by the office of Vice President of Administration and Finance to evaluate the efficiency and effectiveness of the resource allocation process. (Financial Statements PUPR FY-2022_SVI.C7.R11) Among them are Budget vs Actual Expenses Report, Indirect vs Direct Cost Ratios, Number of Faculty vs Number of Students Ratios for all academic departments, Department Enrollment Trends vs. Budget Allocation, Infrastructure Expenditures vs. Campus Development Plan, and Departmental Equipment Expenditures vs. Departmental Equipment Maintenance Plan.

At the end of every fiscal year, an external auditing agency conducts an independent audit of the university financial records to verify compliance with all local and federal regulations. The results of the audit are summarized in a management letter presented to the university.

Facilities and Equipment

Among the major facilities currently under development, a Makerspace Lab for immersive, hands-on, active learning with 20,000 square feet is currently under construction. This space is mainly used by students to build prototypes of robots, solar cars, bridges, airplanes, cement canoes, cement bowling balls, etc., which are entered in national and international engineering students design competitions. The facility is accessible to students 24 hours, 7 days a week. The projected investment is around \$1.3M.

Another campus development is the acquisition of the world's leading higher education enterprise resource planning (ERP) system: Banner. Banner maintains student, faculty, course, alumni, financial aid, and personnel data. It includes self-service options that let users access the features they need at any time, from any device. The investment in Banner is over \$6M.

In addition, 125 traditional classrooms have been converted into smart-classrooms to support the active learning educational model being adopted by the institution. The smart-classrooms have been equipped and set-up with audio visual, presentation, and communication technologies for use with laptops, smartphones, and tablets. Through these facilities faculty members can implement different educational strategies that support student active learning. Further, students may participate in class activities while they are present in the classroom attending classes on campus or attending classes via an internet connection. The total investment in this project is estimated at \$2M. (Campus Development Plan 2020-2030_SVI.C6.R11)

Student Learning and Outcomes Assessment

Student learning resources are an important part of every academic department budget allocation. Among the budget requested by each department for this purpose are: faculty professional development, laboratory equipment, engineering, architecture, and general use software application packages.

Moreover, the university supports an Outcomes Assessment Office that standardizes and institutionalizes student-learning best practices among all academic departments. (VP for Academic Affairs' Memo - Institutional Student Learning Assessment Committee_SVI.C5.R10) The office is currently composed of three faculty members who act as Co-Chairs of Institutional Outcomes Assessment. At the academic department level there is an Outcomes Assessment Coordinator who oversees collection, analysis, documentation, and continuous improvement processes conducted by faculty at the academic program or departmental level. The Institutional Outcomes Assessment Chairs oversee dissemination of academic department's outcomes assessment data for university wide self-improvement and accreditation purposes.

UPPR has recently purchased Blackboard's EAC Assessment Reporting Software. This software can be utilized to automate data collection, analysis, and documentation processes when students' evaluations and assessment are conducted through virtual exams. In this way, faculty are able to focus their attention on designing and deploying alternatives to improve student academic

performance. It is expected that software deployment and debugging, and faculty training are completed by 2025. Investment in software and consulting services during this period 2023-2024 and 2024-2025 is around \$76,800.00. (Budget FY-2024 Approved Distance Learning VEIL_SVI.C3.R11)

AREAS OF STRENGTH

1. Despite a rather grim economic outlook affecting Puerto Rico for the past 20 years, UPPR has managed to remain financially stable and has financial resources adequate to support its operations, educational purpose, and programs.
2. UPPR provides strong support for evidence-based practice with readily available information and analysis, as well as analytical support provided by the Office of Institutional Research, Planning and Assessment.
3. While other Puerto Rican universities have experimented a dramatic student population decline, UPPR has managed to retain a stable enrollment in San Juan Campus with a steady average student population around 4,250 for the past 8 years. This is the result of effective combined strategies including the addition of new and attractive academic programs, as well as an increased significant number of online courses available to students.
4. UPPR has implemented a well-structured Institutional Strategic Plan (ISP). UPPR has also designated an ISP Implementation Coordinator which reports to the President. The ISP Implementation Coordinator has as a primary function to ensure that the ISP is functional, well implemented and that all academic and administrative units are aligned with the ISP implementation.

OBSERVATIONS

1. UPPR could continue efforts to diversify sources of income in the short to medium term.
2. UPPR may develop an Institutional Plan to improve in the short to medium term retention and persistence rates.
3. UPPR could make sure that budget information is distributed before the beginning of each academic year.
4. UPPR may consider implementing effective strategies to communicate with university constituents.
5. UPPR could make sure that an evaluation of annual reports of institutional units' objective accomplishments is implemented at the end of the ISP annual cycle.

CHAPTER SEVEN: STANDARD VII - GOVERNANCE, LEADERSHIP, AND ADMINISTRATION

The institution is governed and administered in a manner that allows it to realize its stated mission and goals in a way that effectively benefits the institution, its students, and the other constituencies it serves. Even when supported by or affiliated with governmental, corporate, religious, educational system, or other unaccredited organizations, the institution has education as its primary purpose, and it operates as an academic institution with appropriate autonomy.

Requirement of affiliation 12: The institution fully discloses its legally constituted governance structure(s) including any related entities (including without limitation systems, religious sponsorship, and corporate ownership). The institution's governing body is responsible for the

quality and integrity of the institution and for ensuring that the institution's mission is being accomplished.

Requirement of affiliation 13: Most of the institution's governing body's members have no employment, family, ownership, or other personal financial interest in the institution. The governing body adheres to a conflict-of-interest policy that assures that those interests are disclosed and that they do not interfere with the impartiality of governing body members or outweigh the greater duty to secure and ensure the academic and fiscal integrity of the institution. The institution's district/system or other chief executive officer shall not serve as the chair of the governing body.

LINES OF INQUIRY

1. Is there a clear leadership, governance, and decision-making structure that supports institutional mission, goals, objectives, and policies?
2. How efficient and effective is this structure?
3. When was the last evaluation carried out? What are these documents, and where are they available?
4. Does the Board of Trustees have sufficient independence and expertise to assure academic integrity and autonomy of the institution?
5. Does the Board of Trustees participate in planning and maintaining the institution's financial health while avoiding micromanagement?
6. To what extent is the Board of Trustees involved in generating resources needed to sustain and improve the institution?
7. Does the Board of Trustees appoint the president, the academic and administrative officers?
8. Is there a conflict-of-interest policy for the Board of Trustees?
9. Is there a process for orienting new members and providing continuous updates for current members of the Board of Trustees on the institution's mission, organization, and academic programs and objectives?
10. Does the president report and maintain the Governing Board informed? Which Governing Board documents do you use to support your statement?
11. How would you define the president's role? Is the role considered to be similar to other university presidents?
12. Does the executive branch possess the academic background, training, leadership skills, and experience necessary to carry out its functions effectively and efficiently?
13. Does the president know the strategic plan and implement it accordingly?
14. Are the lines of authority within the administrative structure well defined? Did UPPR compare it with similar universities?
15. Is there effective communication between members of the administration at all levels, upper and mid-level management? What research was carried out to support your statement?
16. Are there mechanisms provided by the governing structure to allow for the input of students and faculty? How readily available are they? Are they formally established and in writing?
17. Are there written policies outlining administration and faculty governance responsibilities and readily available to the campus community?

18. Do the administrative leaders (vice presidents) possess the academic background, training, and experience necessary to carry out their functions effectively and efficiently? How do they compare to similar universities?
19. Does the administration have enough understanding of the institutional mission, goals, and objectives?
20. Are there institutional forums or committees designed to guide and assist the development of institutional policies? How effective and efficient are they? Which are these forums?
21. Is the management information system adequate to provide accurate information for the institutional decision-making processes?
22. How is the administration evaluated? How often? How is the information obtained through the assessment of the administrators used? For what purposes?
23. Does the Board of Trustees assess its effectiveness?
24. How is the administration evaluated?
25. Has the organizational chart been revised? When? By whom? Does it reflect the desired administrative structure?

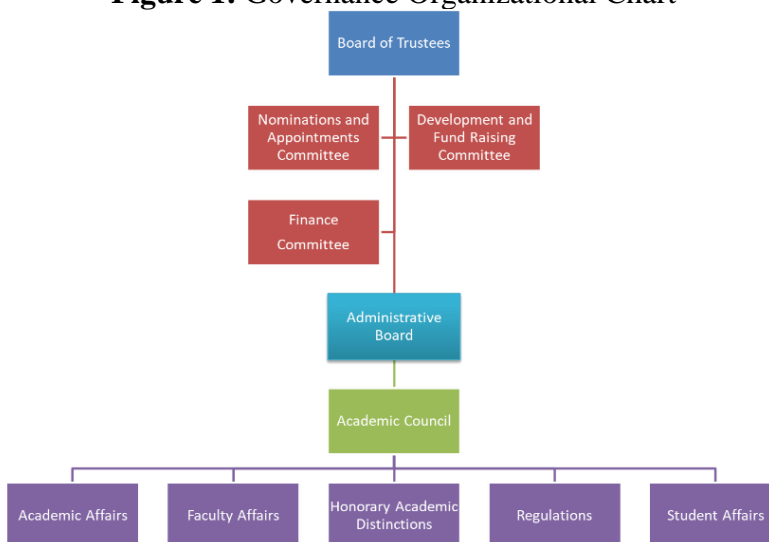
OVERVIEW OF THE STANDARD

Standard VII committee studied the governance, leadership, and administration areas of the university. To do so the committee analyzed bylaws, procedures and plans, administered and analyzed surveys, and performed interviews to the members of these university areas. In the following section, a summary of these studies is presented.

ANALYTICAL REPORT

UPPR clearly differentiates its governance and administration bodies. UPPR Board of Trustees (governance body) shown in **Figure 1** establishes policies and the president (leadership) with his administrative staff implement these policies.

Figure 1: Governance Organizational Chart



In the first level of **Figure 1** is the Board of Trustees, in the second level is the Administrative Board that the President leads, and in the third level is the Academic Council. Each one of these bodies is explained further.

The Board of Trustees is constituted of nine members and the President of the university, who acts as an ex-officio member. It is the governing body that establishes the academic and administrative policy of the institution. As established by the corporate Bylaws of the University, the Board of Trustees has sufficient independence to assure the academic integrity and autonomy of the institution. They have the authority of designating and dismissing the president of the university and establishing his/her compensation. According to the Bylaws, once a president of the university has been designated by the Board of Trustees, his or her term has duration of five years. At the end of the term, the Board has the power to renew the designation for another five years. There is no limit to the number of renewals. The Board of Trustees also has the authority of designating and dismissing vice presidents and deans. They have the final word on the creation of new academic programs and the mission and vision of the institution, and they approve the budget and use of financial resources of the university. They have the responsibility of maintaining the financial health of the institution. Finally, the Board is subdivided into three committees: Nominations & Appointments, Development & Fund Raising, and Finance. (Bylaws Universidad Politécnica de Puerto Rico_SVII.C2.R13)

The Administrative Board consists of eleven members representing administration and faculty. The Board constitutes the university community forum through which the administrative policy of the institution is recommended to the Board of Trustees. It is also an advising body to the president of the University, as stated on the regulations of the Administrative Board. If the decisions of the Academic Council or the Administrative Board convey university-wide implications, then these are raised to the Board of Trustees. (Administrative Board Regulations_SVII.C4.R12)

The Academic Council is constituted of 30 members who represent faculty, students, and administration. The Council is responsible for the recommendation of the academic policy of the institution. It is the advising body to the president of the Institution in academic affairs, as stated on the regulation of the Academic Council. The Council has five standing committees (Academic Affairs, Faculty Affairs, Student Affairs, Regulations, and Honorary Academic Distinctions). Recommendations from these committees are presented to the Council as a whole. If the recommendations approved by the Academic Council have economic or financial implications to the institution, they are raised to the Administrative Board. (Academic Council Regulations 2016_SVII.C4.R12)

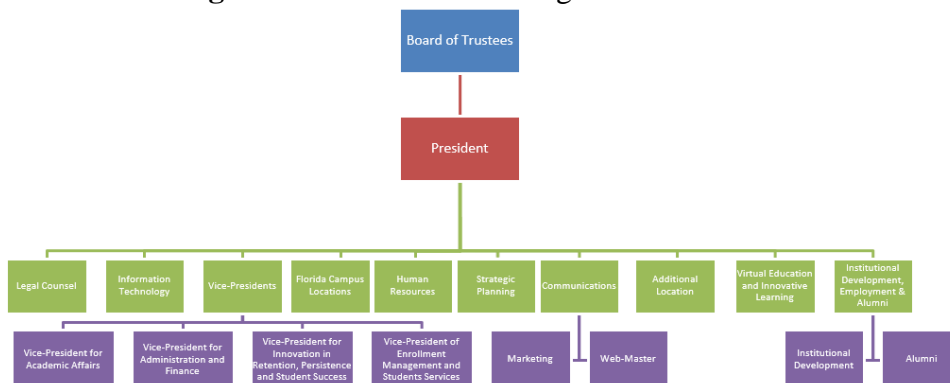
UPPR provides mechanisms that allow the input of students and faculty throughout all the governing structure. The Students Regulations establish a policy for the organization of the Student Council. The undergraduate and graduate students' representation assures the presence of that part of UPPR's constituents.

The regulations of the Academic Council establish, as part of its composition, the attendance of the following students: two undergraduates from the School of Arts, Sciences and Education, two undergraduates from the School of Engineering, Land Surveying and Geospatial Sciences, one undergraduate from the School of Architecture, one undergraduate from the School of Business Administration, and one from the Graduate School. The seven students who participate in the Academic Council must be selected by the Student Council.

The faculty collaborates extensively with the Academic Council. Its regulations state the inclusion of two professors from each undergraduate school, one from the graduate school, and one selected from all the academics units. All the Academic Council subcommittees are formed by faculty members to guarantee their participation in the decision-making process.

The Administration (**Figure 2**) is composed of the President, four (4) vice presidencies (Academic Affairs, Administration and Finance, Innovation in Retention, Persistence, and Student Success, and Enrollment Management and Student Services), Legal Counsel, Information Technology, Florida Campuses (Orlando and Miami), Additional Location (INTEC), Human Resources, Strategic Planning, Communications, Institutional Development, and Virtual Education and Innovative Learning.

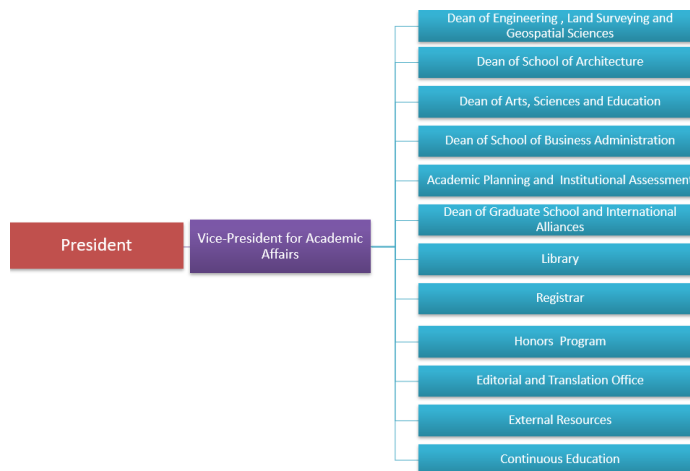
Figure 2: Administration Organizational Chart



A fact of one **success story** is that, although UPPR was attracting a significant large freshman class yearly, its enrollment was not increasing. The lack of growth in enrollment was caused by a persistence rate that has averaged 76% in the past decade. In 2023, the Vice President office for Innovation, Persistence, and Student Success was created to improve student retention, persistence, and graduation rate.

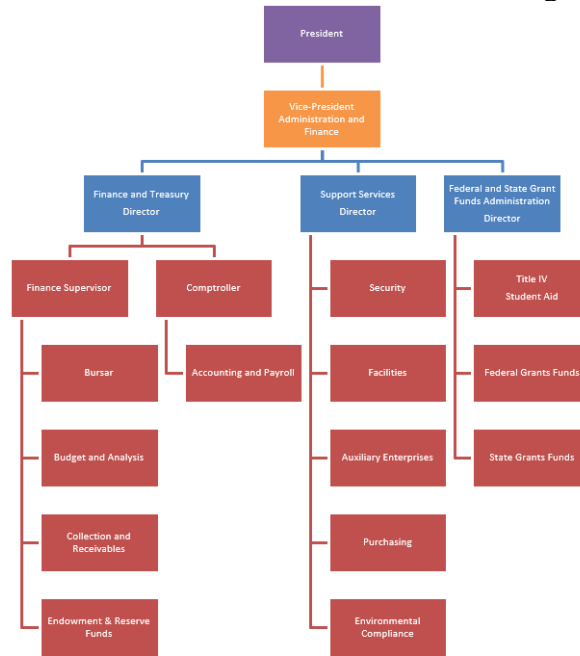
The VP Office for Academic Affairs (**Figure 3**) is composed of five deans, academic planning and institutional assessment, library, registrar, honors program, editorial, external resources, and continuous education departments.

Figure 3: VP Office for Academic Affairs Organizational Chart



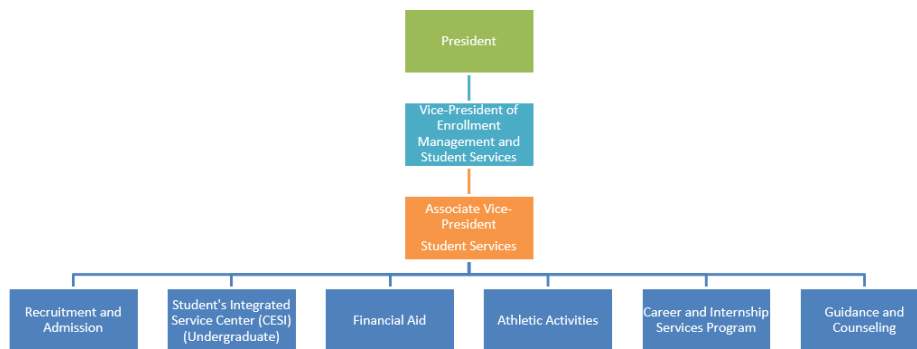
The VP Office of Administration and Finance (**Figure 4**) is composed of finance and treasury, support services and federal and state funds departments.

Figure 4: VP Office of Administration and Finance Organizational Chart



The VP Office of Enrollment Management and Student Services (**Figure 5**) is composed of an Associate VP, recruitment and admission, Student’s Integrated Service Center, financial aid, athletic activities, career and internships services, and guidance and counseling.

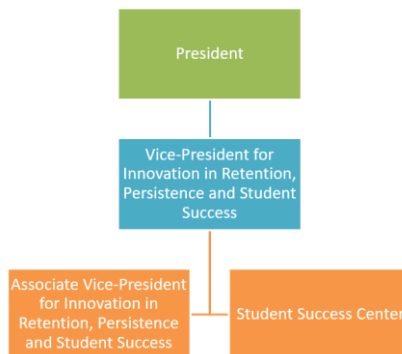
Figure 5: VP Office of Enrollment Management and Student Services Organizational Chart



A fact of another **success story** is that, although UPPR was graduating over 600 engineers, surveyors, architects, and business administrators yearly, its alumni and institutional development fund was not increasing. In the past decade, most of the development funds received came from companies’ donations rather than individual alumni. In 2023, the IDEA Center was created to integrate institutional development, career and internship services, and alumni.

The VP Office for Innovation in Retention, Persistence, and Student Success (**Figure 6**) is composed of the Associate VP, and the Student Success Center.

Figure 6: VP Office for Innovation in Retention, Persistence and Student Success
Organizational Chart



The Florida Campuses Organizational Chart (See Appendix C on page 112) is composed of a director, two academic directors, and two academic affairs coordinators among other members.

After analyzing the current organizational chart and structure and the academic record and curriculum vitae of the main administrators, this working group concluded that the roles and responsibilities of the administrators are clearly defined, their resumes are kept at the university Human Resources office, the executive and administrative leaders have adequate academic and work experience backgrounds, and they demonstrate knowledge and understanding of the institutional mission and goals and their role within it.

A fact of another **success story** is that the evaluation of the administrative and technical personnel is carried out annually and the information is used for promotions. The evaluation of UPPR top administrators was not carried out annually as the rest of the university employees. The Human Resources records show that the top university administrators were not consistently evaluated every year. In 2023, the university required that all university employees must be evaluated on a yearly basis.

As part of the research performed by this working group, the MSCHE Evidence of Institutional Capacity for Success for Standard VII Self-Evaluation Rubric was administered as a “Voice of the Customer” survey to the Board of Trustees, the President, the Administrative Board, the Academic Council and a sample of faculty, staff, and students of the university. (Evidence Inventory Institutional Self-Evaluation Rubric Standard VII_SVII.C1-5.R12-13). The academic departments collaborated in the administration of the survey. A breakdown of the sample per constituency is presented in **Table 1**:

Table 1: Initial Survey Participants - San Juan and Orlando Campus

Constituency	# of Participants (%)
Board of Trustees	7 (8%)
President	1 (1%)
Administrative Board	7 (8%)
Academic Council	20 (24%)
Faculty, Staff, and Students	50 (59%)
Total	85 (100%)

Table 1 illustrates that, initially, 85 subjects participated in this survey, including administrators, faculty, and students of San Juan Campus and Orlando Campus. Afterwards, the working group decided to exclude the answers submitted by the President from this analysis because he was just appointed by the Board of Trustees, changing the sample size to 84. Clearly, it assured the confidentiality of reporting results of the survey, including only constituencies of more than one participant.

Each survey question was evaluated regarding institutional policies, procedures, and structures. The evaluation levels were 3 (effective), 2 (somewhat effective), and 1 (ineffective). It can be noted that levels 3 and 2 act as one. The sum of the percentages relates to the effective level.

The survey results for Question 1. “A clearly articulated and transparent governance structure that outlines roles, responsibilities, and accountability for decision making by constituency, including governing body, administration, faculty, staff, and students.” is presented in **Table 2**.

Table 2: Survey Results Question 1

Constituency	Policies			Procedures			Structures		
	3	2	1	3	2	1	3	2	1
Board of Trustees	71%	29%	0%	57%	43%	0%	71%	14%	14%
Administrative Board	71%	29%	0%	14%	86%	0%	29%	57%	0%
Academic Council	60%	30%	10%	50%	45%	5%	50%	50%	0%
Faculty, Staff, and Students	88%	12%	0%	64%	36%	0%	76%	20%	4%

Considering levels 3 and 2 as one, **Table 2** illustrates that in general the Board of Trustees perception of the effectiveness of the university policies and procedures, is better or the same than the perception of the Administrative Board and Faculty, Staff, and Students. In structures, the Academic Council perceives them better or the same as the Board of Trustees and Faculty, Staff, and Students.

The survey results for Question 2. “A legally constituent governing body that:” is presented in **Table 3**.

Table 3: Survey Results Question 2

Constituency	Policies			Procedures			Structures		
	3	2	1	3	2	1	3	2	1
Board of Trustees	54%	40%	6%	52%	33%	14%	46%	35%	19%
Administrative Board	63%	25%	11%	49%	33%	17%	57%	25%	17%
Academic Council	46%	22%	33%	39%	29%	32%	40%	22%	38%
Faculty, Staff, and Students	62%	26%	13%	51%	33%	16%	48%	34%	18%

Considering levels 3 and 2 as one, **Table 3** illustrates that in general the Board of Trustees perception of the effectiveness of the university policies and procedures, is better than the perception of the other constituents. In structures, the Administrative Board perceives them better than the other constituents.

The survey results for Question 3. “A Chief Executive Officer who:” is presented in **Table 4**.

Table 4: Survey Results Question 3

Constituency	Policies			Procedures			Structures		
	3	2	1	3	2	1	3	2	1
Board of Trustees	64%	36%	0%	61%	32%	7%	57%	32%	11%
Administrative Board	82%	11%	7%	75%	18%	7%	75%	18%	7%
Academic Council	76%	14%	9%	76%	15%	9%	70%	19%	11%
Faculty, Staff, and Students	72%	16%	12%	64%	23%	14%	65%	21%	15%

Considering levels 3 and 2 as one, **Table 4** illustrates that in general the Board of Trustees perception of the effectiveness of the university policies and procedures, is better than the perception of the other constituents. In structures, the Administrative Board perceives them better than the other constituents.

The survey results for Question 4. “An administration possessing or demonstrating” is presented in **Table 5**.

Table 5: Survey Results Question 4

Constituency	Policies			Procedures			Structures		
	3	2	1	3	2	1	3	2	1
Board of Trustees	38%	55%	7%	40%	57%	7%	40%	48%	12%
Administrative Board	76%	24%	0%	71%	29%	0%	74%	24%	2%
Academic Council	74%	18%	8%	69%	25%	6%	64%	32%	4%
Faculty, Staff, and Students	63%	23%	11%	52%	34%	14%	48%	35%	17%

Considering levels 3 and 2 as one, **Table 5** illustrates that in general the Administrative Board perception of the effectiveness of the university policies and procedures, is better than the perception of the other constituents. In structures, again the Administrative Board perceives them better than the other constituents.

The survey results for Question 5. “Periodic assessment of the effectiveness of governance, leadership, and administration.” is presented in **Table 6**.

Table 6: Survey Results Question 5

Constituency	Policies			Procedures			Structures		
	3	2	1	3	2	1	3	2	1
Board of Trustees	0%	86%	14%	0%	86%	14%	0%	71%	29%
Administrative Board	0%	71%	29%	0%	71%	29%	0%	71%	29%
Academic Council	30%	30%	40%	15%	45%	40%	20%	45%	35%
Faculty, Staff, and Students	44%	26%	30%	36%	34%	30%	40%	34%	26%

Considering levels 3 and 2 as one, **Table 6** illustrates that in general the Board of Trustees perception of the effectiveness of the university policies and procedures, is better than the perception of the other constituents. In structures, the Faculty, Staff, and Students perceive them better than the other constituents.

Finally, the survey overall results are presented in **Table 7**.

Table 7: Survey Results Overall Results

Constituency	Policies			Procedures			Structures		
	3	2	1	3	2	1	3	2	1
Board of Trustees	50%	45%	5%	48%	43%	10%	46%	39%	16%
Administrative Board	68%	24%	7%	56%	33%	10%	62%	27%	11%
Academic Council	60%	20%	20%	54%	27%	19%	52%	27%	21%
Faculty, Staff, and Students	64%	23%	12%	53%	32%	15%	52%	31%	17%

Considering levels 3 and 2 as one, **Table 7** illustrates that in general the Board of Trustees perception of the effectiveness of the university policies and procedures, is better than the perception of the other constituents. In structures, the Administrative Board perceives them better than the other constituents.

AREAS OF STRENGTH

1. All the bodies that compose the Governance, Leadership, and Administration structure have adequate written regulations and bylaws.
2. The Board of Trustees is formed by a diverse and inclusive group of professionals with varied educational backgrounds. All members have the necessary educational and professional background to be part of the Board.
3. The Academic Council is very active and meets at least four times per year and issued several certifications per meeting.
4. The student participation in the Academic Council committees promotes a healthy dialogue and discussion of ideas resulting in a balanced functioning of the academic system.
5. The leadership and governance structure are effective in allowing the development and implementation of new academic programs, and changes to current ones.
6. The Institutional Strategic Plan has been revised and approved by the institutional leaders. (Institutional Strategic Plan 2016-2021_SVII.C1-5.R12-13 and Institutional Strategic Plan 2022-2027_SVII.C1-5.R12-13)
7. All institutional leaders are aware of the strategic initiatives defined in the university Strategic Plan.

OBSERVATIONS

1. UPPR may consider recommending the Board of Trustees to increase its participation in activities that promote direct communication with the university constituents.
2. UPPR may consider encouraging top administration to improve its evaluation plan.
3. UPPR may consider enhancing the communication between the top administrators and the university constituents, by suggesting regular meetings with faculty, staff, and students where daily issues can be discussed and encouraged.
4. UPPR may consider improving its procedures for assessing its governance, leadership, and administration.

CONCLUSION

One of the most significant features of the present Universidad Politécnica de Puerto Rico MSCHE Self-Study has been its historical coincidence with the establishment of the Institutional Strategic Plan for the years 2022 to 2027.

As reported in Chapter One: Standard I, the current mission and goals of UPPR were developed in conjunction with its strategic plan. Therefore, the external historical, economic, sociological, demographic, and governmental problems of Puerto Rico affecting higher education and UPPR and the analysis of the internal reality of the institution were shared by both; the Strategic Plan Committee and the Standard I of the Self-Study.

This also implied that all the rest of the standards findings (areas of strength and observations) were included in the main body of the Institutional Strategic Plan goals and objectives. In other words, UPPR Self-Study reflects a profound scrutiny and assessment of the institution's external and internal situations and the main issues presented in each of MSCHE standards.

To conclude, UPPR Self-Study process, findings, and observations constitute the gist of all future institutional developmental activities. It is also concluded that these developments also assure the quality of the academic undergraduate and graduate programs, and most of all, the institutional future financial stability and sustainability.

APPENDIX

A. STEERING COMMITTEE AND COMPOSITION OF WORKING GROUPS

Dr. Miguel A. Riestra, Accreditation Liaison Officer (ALO) and President of the Steering Committee

PhD; VP for Academic Affairs; Director, Planning and Development Office

Arch. Diana Rivera, Chair of the Steering Committee

MArch; Dean, School of Architecture; SLA Coordinator, Architecture Program; Member, Institutional Student Learning Assessment Committee

Prof. Mildred Agosto, Co-chair of the Steering Committee

MPH Biostatistics; Associate Professor and Mathematics Coordinator of Preparatory Courses, Mathematics and Science Department; Assistant of VP for Academic Affairs and Assistant of ALO for UPPR MSCHE Self-Study

STANDARD I – MISSION AND GOALS

Chairperson: Enrique Muñoz, PhD; Dean, School of Business Administration; SLA Coordinator, School of Business Administration; Member, Institutional Student Learning Assessment Committee

Co-chair: Amado Vélez, MSCE, PE; Associate Professor, Civil and Environmental Engineering, and Land Surveying Department

1. Virginia Dessús, PhD; Head, Socio-Humanistic Studies Department
2. Ernesto Forcino, EdD-Math; Associate Professor, Mathematics and Science Department
3. Cuauhtémoc Godoy, EdD, PE.; Associate Dean, School of Engineering, Land Surveying and Geospatial Sciences; Director, Virtual Education and Innovative Learning Center (VEIL Center)
4. Carlos González, PhD; Dean, School of Engineering, Surveying and Geospatial Sciences
5. Manuel Sicre, MBA; Instructor, School of Business Administration, Miami Campus
6. Ángel Vélez, PhD; Associate Professor, Mathematics and Science Department
7. Eduardo Veras, PhD in Mechanical Engineering; Associate Professor, Mechanical Engineering Department, Orlando Campus
8. Yan Casanova Mirabal, Student Mechanical Engineering Department

STANDARD II – ETHICS AND INTEGRITY

Chairperson: Martha Dumois, PhD; Professor, Mathematics and Science Department

Co-chair: Julio Hernández, MSEE; Associate Professor and Associate Director of Electrical and Computer Engineering, and Computer Science Department

1. Mayra López, MA; Registrar, Director, Student Exchange Program

2. Rafael Nieves, Pharm.D.; Associate Professor, Industrial Engineering Department
3. Bernardo Restrepo, PhD in Mechanical Engineering; Professor, Mechanical Engineering Department, Orlando Campus
4. Neysha Rivera, BA in Humanities; Graduate Affairs Office Supervisor, Graduate School
5. Luis H. Rodríguez, JD; Associate Professor, School of Business Administration
6. Osvaldo Sánchez, MBA; Instructor, School of Business Administration, Miami Campus
7. Miguel Soto, MEM; Associate Professor, Mathematics and Science Department
8. Sergio Villoldo, MBA; Administrator, Financial Aid Office
9. Omar Cepeda Torres, Student Biomedical Engineering Department

STANDARD III – DESIGN AND DELIVERY OF THE STUDENT LEARNING EXPERIENCE

Chairperson: Miriam Pabón, PhD, PE; Dean, Graduate School and International Alliances

Co-chair: Rafael Nieves, Pharm.D.; Associate Professor, Industrial Engineering Department

1. Jorge Ayala, PhD; Professor, Management Engineering, INTEC (additional location) - Dominican Republic
2. Digna Delgado, MLS; Director Library
3. Iris Gutiérrez, MBA; Instructor, School of Business Administration, Miami Campus
4. Janet Irizarry, PhD; Associate Professor School of Business Administration
5. Sonia Mojica, MBA; Associate Professor, School of Business Administration
6. Félix Nevárez, PhD in Engineering and Applied Sciences; Associate Professor, Electrical and Computer Engineering Department, Orlando Campus
7. Carlos Pons, PhD; Associate Professor, Assistant to the Department Head in Student Affairs, Industrial and Systems Engineering Department
8. Blanca Tallaj, MSIE; Professor, Electrical and Computer Engineering, and Computer Science Department; SLA Coordinator, Electrical Engineering Program; Co-Coordinator, Institutional Student Learning Assessment Committee; Co-Coordinator, Undergraduate Research Program for Honor and Outstanding Students (URP-HOS)
9. Génesis Jaime Morales, Student Chemical Engineering Department

STANDARD IV – SUPPORT OF THE STUDENT EXPERIENCE

Chairperson: Horacio García, MEM; Dean, School of Arts, Science and Education

Co-chair: Elsa N. Zayas, MA; Associate VP for Enrollment Management and Student Services

1. Thais Álvarez, JD; Instructor, School of Business Administration, Miami Campus
2. Virginia Dessús, PhD; Head, Socio-Humanistic Studies Department
3. José D. Guerra, Physics MS; Instructor and Director, Mathematics and Science Department
4. Carmen Lara, EdD; Associate Professor, Mathematics and Science Department
5. Milagros Martínez, PhD; Head, Education Department; Director, Center for University Progress (CPU)
6. Carlos A. Osorio, PhD (c); Civil Engineering, Orlando Campus Academic Director
7. Carlos Pérez, MBA; VP for Enrollment Management and Student Services

8. José Pertierra, MBA; Assistant Director, Mechanical Engineering Department
9. Lourdes Ramírez, BA; Registrar and Finance Officer, Miami Campus
10. Nidnal Ramírez, MA; Associate Professor, Socio-Humanistic Studies Department
11. Omayra Rivera, EdD; Institutional Researcher, Planning and Development Office
12. Lilliam Román, EdD Education; Student Online Integrated Services Development & Career Services Coordinator, Adjunct Professor, Orlando Campus
13. Ginger Rossy, MSCE; Assistant Professor, Civil and Environmental Engineering, and Land Surveying Department
14. Christian Villalta, PhD in Civil Engineering; Associate Professor, Civil and Environmental Engineering Department; SLA Coordinator, Environmental Engineering Program; Member, Institutional Student Learning Assessment Committee
15. Juan Quiñones Kientz, Student Electrical Engineering Department

STANDARD V – EDUCATIONAL EFFECTIVENESS ASSESSMENT

Chairperson: María García, PhD; Department Head and Associate Professor, Industrial and Systems Engineering Department; SLA Coordinator, Industrial and Systems Engineering Program; Co-Coordinator, Institutional Student Learning Assessment Committee

Co-chair: Blanca Tallaj, MSIE; Professor, Electrical and Computer Engineering, and Computer Science Department; SLA Coordinator, Electrical Engineering Program; Co-Coordinator, Institutional Student Learning Assessment Committee; Co-Coordinator, Undergraduate Research Program for Honor and Outstanding Students (URP-HOS)

1. Ana G. Alicea, MA; Associate Professor, Socio-Humanistic Studies Department; SLA Coordinator, Socio-Humanistic Studies Department; Member, Institutional Student Learning Assessment Committee
2. Moisés Ángeles, PhD in Civil Engineering, MS Mechanical Engineering; Associate Professor, Mechanical Engineering Department; SLA Coordinator, Mechanical Engineering Program; Member, Institutional Student Learning Assessment Committee
3. Héctor Cruzado, PhD in Wind Science and Engineering; Professor, Civil and Environmental Engineering Department; SLA Coordinator, Civil Engineering Program; Member, Institutional Student Learning Assessment Committee
4. Carlos M. De La Torre, BSEE, MECpe; Assistant Professor, Electrical and Computer Engineering Department; SLA Coordinator, Computer Engineering Program and Computer Science Program; Member, Institutional Student Learning Assessment Committee
5. Giselle Garriga, MIS Information Science and Technology; Library Information Literacy Program; Member, Institutional Student Learning Assessment Committee
6. Elba Herrera, MS Chemical Engineering; Department Head and Professor, Chemical Engineering Department; SLA Coordinator, Chemical Engineering Program; Member, Institutional Student Learning Assessment Committee
7. José A. Martínez, MSCE; Professor, Civil and Environmental Engineering Department; Co-Coordinator, Institutional Student Learning Assessment Committee

8. Raúl Matos, PhD in Geographic Information Systems, Geospatial Science and Technology Graduate Program; Associate Professor; SLA Coordinator, Land Surveying and Mapping Program; Member, Institutional Student Learning Assessment Committee
9. Minette Morales, MS Interior Design; Lecturer II, School of Architecture; SLA Coordinator, Interior Design Program; Member, Institutional Student Learning Assessment Committee
10. Enrique Muñoz, PhD; Dean, School of Business Administration; SLA Coordinator, School of Business Administration; Member, Institutional Student Learning Assessment Committee
11. Adriano Parisi, PhD; Coordinator of Chemistry, Environmental and Civil Engineering Labs; Occupational Health and Safety Liaison; Adjunct Professor of Chemistry, Material Engineering and Environmental courses; SLA Coordinator, Chemical Engineering Program; Member, Institutional Student Learning Assessment Committee, Orlando Campus
12. José Riollano, MSEE; Professor and Curriculum Coordinator, Electrical and Computer Engineering, and Computer Science Department; Member, Institutional Student Learning Assessment Committee
13. Diana Rivera, MArch; Dean, School of Architecture; SLA Coordinator, Architecture Program; Member, Institutional Student Learning Assessment Committee
14. Fredeswinda Rodríguez, MS Mathematics and MPH Biostatistics; Associate Professor, Mathematics and Science Department; SLA Coordinator, Mathematics and Science Department; Member, Institutional Student Learning Assessment Committee
15. Migdalia Roldán, MBA; Academic and Student Affairs Coordinator; Member, Institutional Student Learning Assessment Committee, Miami Campus
16. Jairo J. Rondón, PhD; Associate Professor, Biomedical Engineering Department; BME Laboratory Coordinator, ABET Coordinator; SLA Coordinator, Biomedical Engineering Program; Member, Institutional Student Learning Assessment Committee
17. Daimarik Torres, MEnvM; Graduate Services Developer; SLA Coordinator, Graduate School; Member, Institutional Student Learning Assessment Committee
18. Christian Villalta, PhD in Civil Engineering; Associate Professor, Civil and Environmental Engineering Department; SLA Coordinator, Environmental Engineering Program; Member, Institutional Student Learning Assessment Committee
19. Elián Santana Vega, Student School of Architecture

STANDARD VI – PLANNING, RESOURCES, AND INSTITUTIONAL IMPROVEMENT

Chairperson: Cuauhtémoc Godoy, EdD, PE; Associate Dean, School of Engineering, Land Surveying and Geospatial Sciences; Director, Virtual Education and Innovative Learning Center (VEIL Center)

Co-chair: Carmen Maldonado, EdD Science; Auxiliary Professor, Mathematics and Science Department

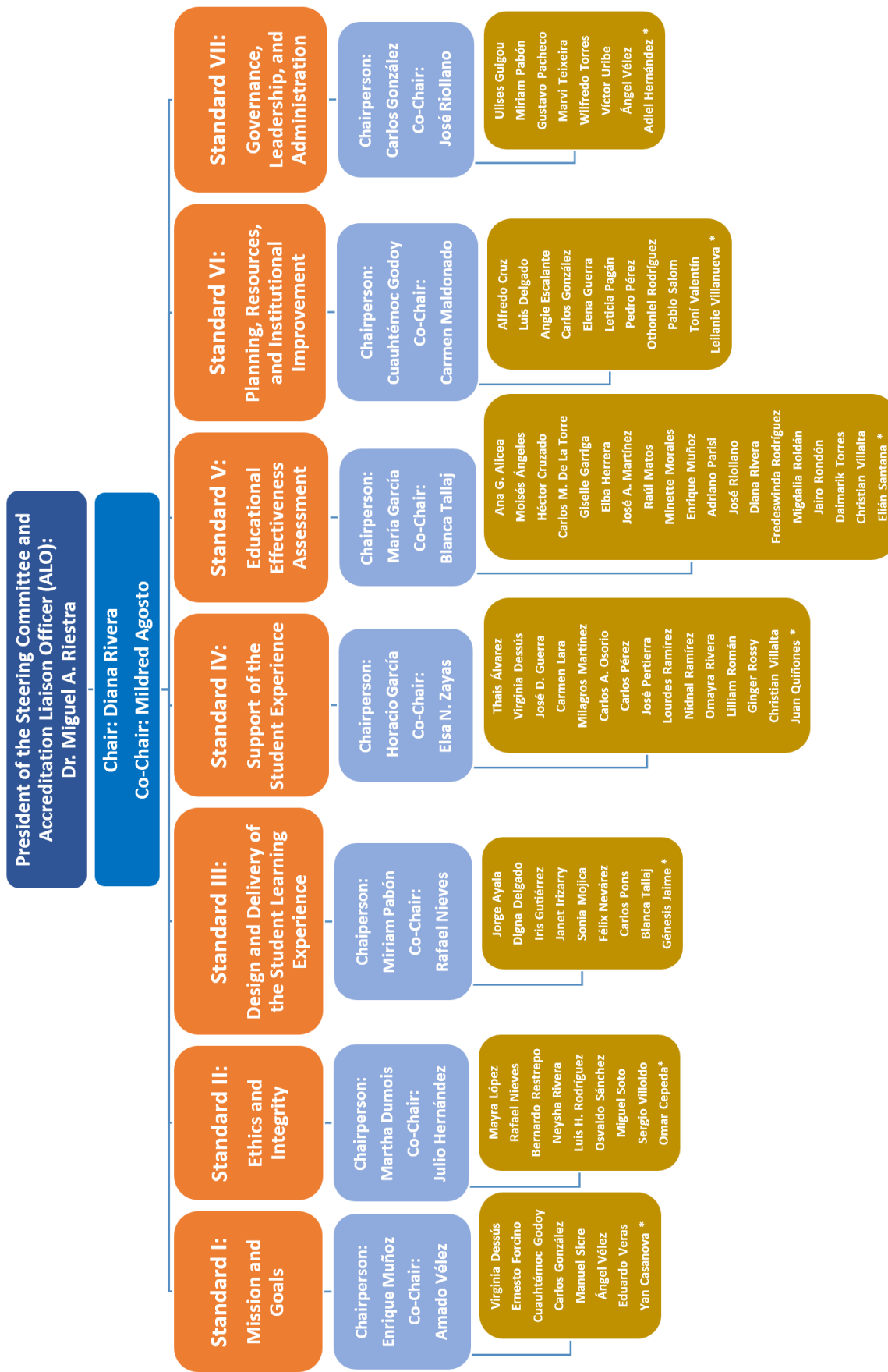
1. Alfredo Cruz, PhD; Coordinator and Professor, Graduate School
2. Luis Delgado, PhD in Entrepreneurial Management of International Business; Florida Campuses Director
3. Angie Escalante, EdD; Director, Institutional Development, Employment & Alumni Center (IDEA)
4. Carlos González, PhD; Dean, School of Engineering, Surveying and Geospatial Sciences
5. Elena Guerra, MBA in General Management; Academic Coordinator and Academic Alliance Support – Graduate School
6. Leticia Pagán, PhD; Associate Professor, Graduate School
7. Pedro Pérez, MIS; Director, Information Technology Office
8. Othoniel Rodríguez, PE, PhD; Professor, Electrical Engineering and Computer Science Department
9. Pablo Salom, MBA; Director for Federal and State Grant Funds Administration
10. Toní Valentín, MEd in Instructional Design and Educational Technology; Instructional Designer, VEIL Center
11. Leilanie Villanueva Ortega, Student Industrial Engineering Department

STANDARD VII – GOVERNANCE, LEADERSHIP, AND ADMINISTRATION

Chairperson: Carlos González, PhD; Dean, School of Engineering, Surveying and Geospatial Sciences

Co-chair: José Riollano, MSEE; Professor and Curriculum Coordinator, Electrical and Computer Engineering, and Computer Science Department; Member, Institutional Student Learning Assessment Committee

1. Ulises Guigou, MBA, MS Mechanical Engineering; Associate Professor, School of Business Administration, Miami Campus
2. Miriam Pabón, PhD, PE; Dean, Graduate School and International Alliances
3. Gustavo Pacheco, PhD, PE; Professor, Civil and Environmental Engineering and Land Surveying Department
4. Marvi Teixeira, PhD; Professor, Graduate School
5. Wilfredo Torres, MEM; Associate Professor, Electrical and Computer Engineering, and Computer Science Department; Director, Honors Program
6. Víctor Uribe, PhD in Civil Engineering; Associate Professor; Civil Engineering Department, Orlando Campus
7. Angel Vélez, PhD; Associate Professor, Mathematics and Science Department
8. Adiel Hernández Santiago, Student Biomedical Engineering Department



* Student

Revised: 11/28/2023

B. CONTINUOUS IMPROVEMENT: SUCCESS STORIES

STANDARD I: MISION AND GOALS

- As part of the strategic planning process, the institutional mission was revised. As a result, the mission statement was enhanced. Even though the essence remains the same, the mission statement was rewritten to capture in one sentence the fundamental purpose of UPPR.
- To implement the methodology recommended by SCUP, the strategic plan committee reviewed the institutional vision statement, in the same manner as the mission was reviewed. The strategic plan committee wanted to capture, in the clearest way possible, the main elements that composed the institutional vision.
- As a start for the strategic plan implementation process, the President of the university appointed two university officials and a consultant to restructure all aspects that correspond to the new mission, its goals, and objectives.
- During the institutional strategic planning process 2022-2027, the strategic plan committee decided to choose and explicitly define the institutional values, this was a first in UPPR's history.

STANDARD II: ETHICS AND INTEGRITY

- Diversity, Inclusion, Integrity, and Equity are part of the values that UPPR has fostered through its mission and through activities in promoting and disseminating them in the community. Consequently, the policies that pertain to these values are continuously being reviewed for improvement. The Diversity, Equity, and Integrity Survey, administered in the fall and winter of 2023, reflects that 96% of students feel that the university honors its institutional values. These results justify the continued refinement of policies and the creation of activities for the academic community which promote institutional values.
- The revision of existing policies and their updating allowed 85% of the cases to be resolved through arbitration, 11% were resolved following the processes established in the Grievance Policies, and 3.7% of them were dismissed by one of the parties. All the grievance cases regarding students were successfully resolved.

STANDARD III: DESIGN AND DELIVERY OF THE STUDENT LEARNING EXPERIENCE

- Students participate in national extracurricular competitions, achieving top recognition in their fields. All academic departments and student organizations are encouraged to be involved in extracurricular activities, including local, national, and international competitions. For example, eight mechanical engineering students won First Place Overall and First Place Regular Class

Mission Performance in the Aero Design West competition organized by the Society of Automotive Engineers.

- The faculty knows the latest teaching methodologies and technological tools trends. Additionally, they were certified in online teaching due to the COVID-19 pandemic, and now they excel in using the mentioned methodologies and technological tools. All faculty members (PT and FT) were certified in online teaching due to the COVID-19 pandemic. An Institutional Certification Program was established to address online teaching during the COVID19 pandemic. The Institutional Certification Program offered by the Virtual Education and Innovative Learning Center permitted all faculty members (PT and FT) to use virtual methodologies and technological tools.
- The number of faculty members having a doctorate has increased over the last seven years. Also, the institution has a strong group of faculty members with master's degrees (115 as FA22). The academic departments established an objective to seek and recruit doctoral-level candidates and encourage faculty to complete their graduate studies. Over the last seven years, the number of faculty members with a doctorate has increased from 65 to 82.

STANDARD IV: SUPPORT OF THE STUDENT EXPERIENCE

- During Spring 2021, five Interdisciplinary Committees composed of faculty and administrators from all over the university's deanship and departments were appointed to assess the institution's student achievement performance. A fact of one success story is that the graduation rate has fluctuated between 10-25% over the last four years due to students' academic performance. Additionally, considering factors such as the pandemic, demographics, and economic conditions, enrollment has remained unchanged over the past eight years. Under the guidance of the Vice-president for Academic Affairs, the presidents of these committees form the Coordinating Committee to follow up on the activities and gather all five committee's reports. The findings and recommendations collected were analyzed, and an action plan has been established. Some of the actions recommended were: (1) Expand the Summer Bridge Camp, revise the tutoring, counseling, mentoring, and academic advising, (2) Revise admission policy to attract more talented students, (3) Raise funds for Honor Program, and (4) Revise the syllabus of the Adjustment to University Life course.
- UPPR's institutional values embrace the inclusion of people of diverse cultures, genders, races, preferences, and opinions that add different perspectives to our community. Therefore, the Vice Presidency of Enrollment Management of Student Services administered the Diversity, Equity, and Inclusion Survey with a sample of undergraduate students. This survey was developed as an exercise to understand the experiences and perspectives of the student body regarding diversity. The information received recognizes the institutional strengths related to diversity on our campus, and the necessary steps to take initiatives that improve the environment of diversity and inclusion. Alongside the efforts that the results of this survey will support, strategies will also be outlined to strengthen activities and processes related to the Title IX policy. UPPR reviewed said policy in 2023 and is organizing workshops for the university community (students, faculty, and staff) to inform them about Title IX updates and related aspects.

STANDARD V: EDUCATIONAL EFFECTIVENESS ASSESSMENT

- To facilitate the process of evaluating the attainment of the institutional learning goals (ILOs), during 2022, automatic and homogenous data collection forms were created to help integrate the assessment results from different academic areas. This facilitates the documentation of the results of the areas analysis and continuous improvement efforts. It also supports the preparation of institutional reports and the identification of actions that must be carried out at the institutional level. Students admitted to UPPR present lags in critical thinking, teamwork, problem-solving, and oral and written communication skills. 72% of Institutional Learning Outcomes (ILOs) exceeded the 70% goal. To continue improving by exceeding the goal, strategies have been implemented at the level of courses and programs to improve scientific reasoning skills, critical thinking, and technological competencies from the first year of studies.
- Based on the assessment results multiple actions have been implemented, including training and development of the faculty. (e.g. workshops, conferences, and certifications in educational innovation, technological tools, and assessment of student learning coordinated or offered by the Virtual and Innovation Center-VEIL). UPPR's objective of training and reinforcing the use of the Blackboard platform was accelerated in COVID-19 Pandemic as a means to support the teaching-learning process and innovation in the classroom. 100% of the faculty have been certified in using the platform and more than 80% use it as a learning assessment tool. In addition, UPPR has offered several workshops aimed at improving the teaching-learning process.
- UPPR's open admission policy allows every student to have the opportunity to study engineering or other careers offered by the institution. High school students have the lowest scores in mathematics with scores between 445 and 457 between 2018 and 2022, on the College Board test. The Summer Bridge Mathematics program, offered by UPPR in the summer, allows placing students who demonstrate academic achievement in more advanced mathematics courses in the first quarter of study. Between 2019 and 2022, the success rate of students in the course they were placed has been, on average, 97%

STANDARD VI: PLANNING, RESOURCES, AND INSTITUTIONAL IMPROVEMENT

- UPPR's strategic plan provides the primary framework for decision making at the university and advancing the university's mission. The institution has historically been successful in managing and aligning its planning, resource allocation and assessment processes to ensure alignment of resources with UPPR strategic plan, goals, and priorities. This process allows for both long- and short-range planning, assessment, and development of objectives with measurable outcomes.
- UPPR is a highly tuition-dependent university with over 81% of its income coming from tuition and fees (as of July 2022). The university enrollment was 4,528 students for the Fall 2021 term. This enrollment represents a reduction of 1,413 students (26% decrease) when compared against the historic highest enrollment of 5,491 students in Fall 2007 term. Due to this

enrollment decline, the university continued with the implemented human resource restructuring plan in the administrative offices and academic departments. The human resources restructuring plan has effectively downsized the university to match its current student enrollment. The next steps are some additional expenses reduction measures adopted by the institution: energy conservation projects, strict purchasing procedures and vendor agreements.

- To increase the pool of prospective students, the 2016-2021 Strategic Goal 3 activities contemplated development of new degrees aligned with national priorities and industry needs. During said period a total of 10 academic programs were developed to enhance the institutional academic offering including: one (1) associate degrees, five (5) bachelor's degrees, and three (3) master's degrees level programs, as well as a graduate certificate program.
- As the strategic activity called for the development of online programs, the online modality of all general studies courses for all undergraduate programs and the online modality of general engineering courses for all undergraduate engineering programs were developed. As a result of these developments the number of institutional online courses offered grew from 186 courses in Fall 2016 term to 387 courses in Fall 2021 term, that is an increase of 201 courses (108% increase). Similarly, the institutional duplicated online enrollment grew from 1,768 students in Fall 2016 term to 4,198 students in Fall 2021 term, that is an increase of 2,430 duplicated students (137%).
- Even though total UPPR student enrollment has remained relatively stable over the past eight years (a net increase of 45 students when Fall 2016 term enrollment is compared to Fall 2021 term enrollment), the university revenues have increased during the same period. This is the result of the following two major actions:
 1. The university ability to request and receive federal and local external funds added over \$50M in the past eight years
 2. The gradual increase in fees and tuition.

As a result, during the same period the university dependency on tuition and enrollment fees was reduced from 87.5% in 2012-2013 to 81% in 2019-2020. This is a significant reduction from a 96.4% in FY 2005, a trend which should continue in the next cycle as outlined in the Strategic Goal V which seeks to strengthen the institution's financial position, its sustainability, and an effort to responsibly manage the institutional resources as outlined in the 2022-2027 ISP.

STANDARD VII: GOVERNANCE, LEADERSHIP, AND ADMINISTRATION

- Although UPPR was attracting a significant large freshman class yearly, its enrollment was not increasing. The lack of growth in enrollment was caused by a persistence rate that has averaged 76% in the past decade. In 2023, the Vice President office for Innovation, Persistence, and Student Success was created to improve student retention, persistence, and graduation rate.
- Although UPPR was graduating over 600 engineers, surveyors, architects, and business administrators yearly, its alumni and institutional development fund was not increasing. In the

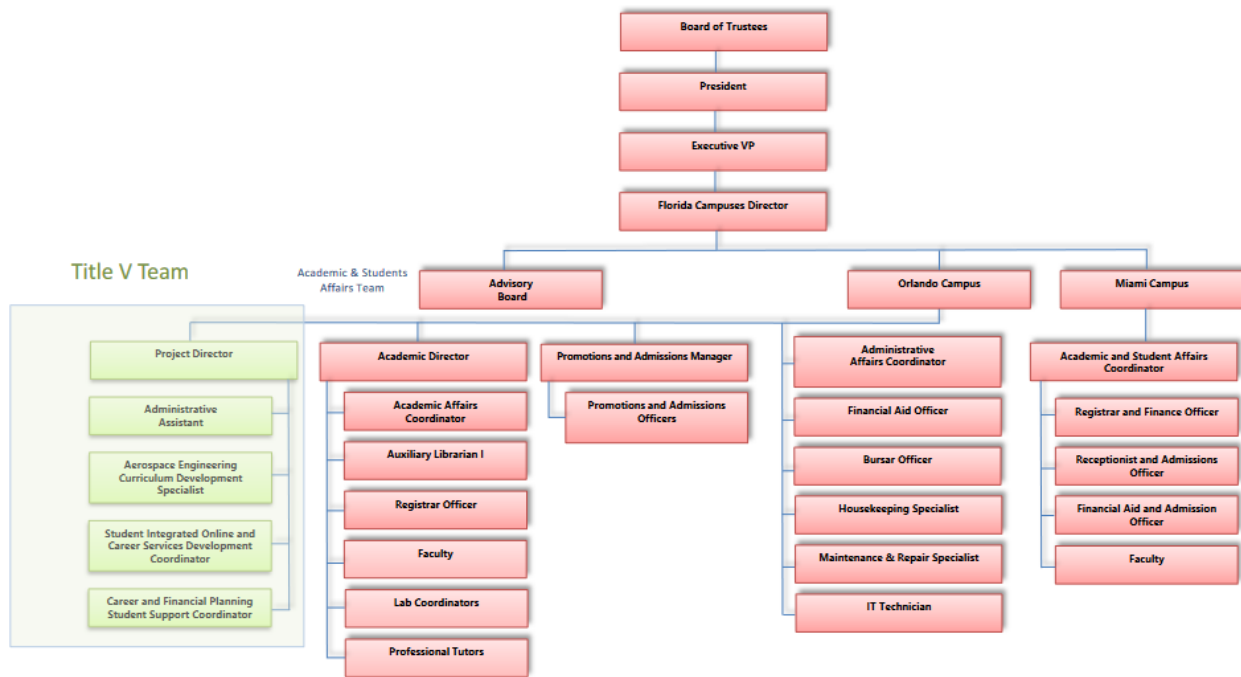
past decade, most of the development funds received came from companies' donations rather than individual alumni. In 2023, the IDEA Center was created to integrate institutional development, career and internship services, and alumni.

- The evaluation of the administrative and technical personnel is carried out annually and the information is used for promotions. The evaluation of UPPR top administrators was not carried out annually as the rest of the university employees. The Human Resources records show that the top university administrators were not consistently evaluated every year. In 2023, the university required that all university employees must be evaluated on a yearly basis.

C. FLORIDA CAMPUSES, ADDITIONAL LOCATION, AND INSTRUCTIONAL SITE

1. FLORIDA CAMPUSES (ORLANDO AND MIAMI)

Organizational Chart



ORLANDO CAMPUS

Introduction

Universidad Politécnica de Puerto Rico (UPPR), is mentioned as Polytechnic University of Puerto Rico (PUPR) in the Florida Campuses’ report. Its Orlando Campus (PUPR-O) considers the same policies, diversity, equity and inclusion practices, its mission, and goals through its strategic plan. PUPR-O offers undergraduate programs leading to a Bachelor of Business Administration (BBA) with academic tracks in Accounting, Entrepreneurship, General Management, and Marketing; a Bachelor in Science in Construction Management¹, Bachelor of Science in Computer Science, Bachelor of Science in Civil Engineering, Bachelor of Science in Mechanical Engineering, Bachelor of Science in Computer Engineering, Bachelor of Science in Environmental Engineering, and a Bachelor of Science in Electrical Engineering.

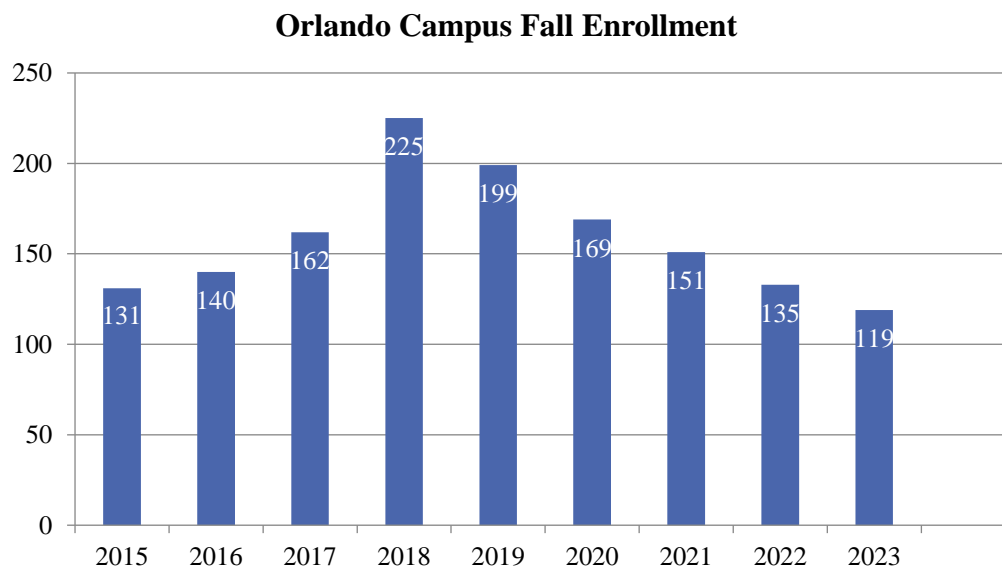
PUPR at Orlando offers graduate instruction leading to the degree of Master of Business Administration (MBA) and a Master in Engineering Management (MEM). Polytechnic University of Puerto Rico, Orlando Campus is licensed by the Commission for Independent Education of the State of Florida.

¹ Waiting for the Commission on Higher Education of Florida’s approval.

Characteristics

Enrollment

The following graph displays Polytechnic University Orlando campus nine-year of enrollment history for each year during fall.



The following graph displays a distribution of students entering PUPR-Orlando from Fall 2018 to Fall 2023 by enrollment status.

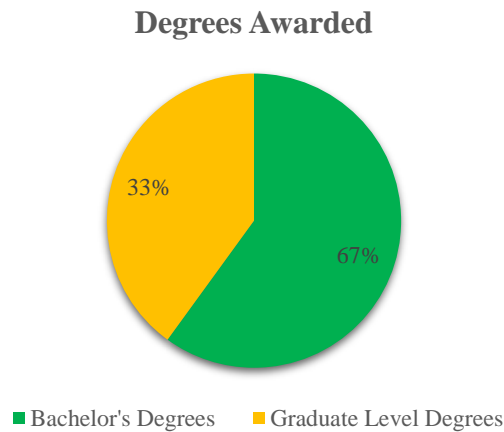
Enrollment Distribution by Category

The following table shows the enrollment distribution by category from Fall 2018 to Fall 2023:

	2018	2019	2020	2021	2022	2023
Undergraduate						
New	30	19	27	15	16	15
Continuing/Returning	134	142	116	115	99	87
Sub-Total	164	161	143	130	115	102
Graduate						
New	12	7	9	3	2	8
Continuing/Returning	38	31	17	18	18	9
Sub-Total	50	38	26	21	20	17
Overall Enrollment	214	199	169	151	135	119

Degrees Awarded

The following graph shows that 175 total degrees were awarded during the summer of 2018-2023. Of these, 117 (67%) were bachelor’s degrees and 58 (33%) were graduate level degrees.



Assessment

As a branch campus of the PUPR, the Orlando campus follows the same processes as the main campus. However, the fact that we are regulated by the Florida Department of Education and licensed by the Commission of Independent Education of the State of Florida, brings to play factors that are characteristic to this campus. In particular, the fact that courses are thought in English and the social and that the economic conditions our students face is different. Nevertheless, as the main campus, we monitor retention, graduation rate and grade average of our students through the following steps: identification of areas of improvement and diagnosis, grades records and graduation rate, remedial plan (Tutoring and Coaching), and results.

Identification of Areas of Improvement and Diagnosis

PUPR-O has a representative on the Institutional Student Learning Assessment Committee. Such representative assigns to the faculty the courses where they must collect outcomes following the assessment calendar dictated by each department on the main campus in San Juan. The same applies for the used rubric to assess the outcomes of a course. They are generated in San Juan by the Department to which the course belongs to. The following three rubrics are used:

- Civil and Environmental Engineering, and Land Surveying Department to assess courses from the Civil and Environmental Engineering program.
- Computer and Electrical Engineering, and Computer Science Department to assess the courses from the Electrical and Computer Engineering as well as Computer Science programs.
- Mechanical Engineering Department to assess courses from the Mechanical Engineering program.

Student Support Services

Student Learning Center

The Orlando campus Student Learning Center (SLC) is in the Administrative Office building which provides individual study areas, and library services. The administrative and technical support are mainly guided by the Main Library in San Juan, assisted by an auxiliary librarian located at the Orlando Campus. The SLC maintains computer-based, basic collections which

consists of over 65,000 volumes classified according to the Library of Congress Classification System. The Main Library specializes in land surveying, engineering, architecture, and business administration. At the present time, the main library subscribes to over 2,000 periodicals and publications.

Student Online Integrated Services

The Student Online Integrated Services Center (SOIS) is a service unit under the Student Success Center, which provides to the Orlando and Miami campuses, students online support services. Ten computer terminals equipped with cameras and headphones are available in the Center for students to connect to the online support services such as Ticket Platform to help streamline online student support services and provides all the context the student needs to resolve enrollment, complaints, virtual education, and Blackboard support, among others.

Another online service that the SOIS Center provides is the Handshake platform. Handshake helps students from different backgrounds get hired and launch their careers with no connections, experience, or luck required. The creation of a more streamlined and personalized process has been designed to assist in the transition from applicant to registered student, improving the preparation for academic success.

Admissions and Academics

The current onboarding process covers the period from first contact with admissions through registration and their first week of classes to assure students have access to the tools required for success (Internet/ student email account, My Poly portal, Blackboard, and virtual library). New student orientations on each academic term will cover topics including technology onboarding support, academic expectations, safety, and student behavior expectations. We also provide an online/virtual orientation for those who cannot or do not wish to come to campus for an in-person orientation experience.

PUPR-O provides accurate and comprehensive information regarding expenses, financial aid, and refunds. Also clearly stated policies and processes to admit, retain, and facilitate the success of students whose interests, abilities, experiences, and goals provide a reasonable expectation for success and are compatible with our institutional mission. (PUPR-O Catalog)

An online undergraduate/graduate catalog includes accurate information for prospective and current students, and a physical copy is available upon request. While the catalog remains the primary reference for academic policies and general information, the PUPR-O recognized the need to present information to students and families in more user-friendly formats through our website to convey information more clearly to students. These pages provide accurate and comprehensive information about tuition and fee costs, making this information readily available to prospective students and families while they are in the search phase of the admission process.

PUPR-O commitment to transparency is reflected in detail in which costs are also laid out in the application form so students are well-informed before they apply and prepare to invest in a college education. PUPR-O catalog explains the application and admissions process including details on student placement in English and Math courses, to improve their chances of advancing to and

completing college-level coursework. The Accuplacer placement test is mainly used to accommodate students in the corresponding developmental courses.

The following table shows the percentage of students enrolled in at least one MATH or English developmental course from 2018-2023. Through developmental courses, the students will be able not only to generate positive attitudes toward their studies but also to adapt better to the university environment and the demands of an academic program (PUPR-O catalog). Student performance in developmental courses remains a focal point given the importance of a strong start as a component for student success.

Term	Year	Total enrollment	Students enrolled in developmental MATH and English courses	%
OF	2018	225	56	24.89%
OW	2018	190	30	15.79%
OS	2019	201	31	15.42%
OU	2019	22	1	4.55%
OF	2019	199	32	16.08%
OW	2019	182	27	14.84%
OS	2020	176	28	15.91%
OU	2020	24	1	4.17%
OF	2020	169	36	21.30%
OW	2020	161	40	24.84%
OS	2021	167	30	17.96%
OU	2021	20	1	5.00%
OF	2021	151	31	20.53%
OW	2021	146	27	18.49%
OS	2022	131	9	6.87%
OU	2022	11	2	18.18%
OF	2022	133	20	15.04%
OW	2022	112	12	10.71%
OS	2023	123	22	17.89%
OU	2023	17	2	11.76%

Further assessment of student performance in development courses and their subsequent persistence and retention status is still recommended to help guide decisions around placement policies. PUPR-O faculty have been very empathetic and adaptive during the unexpected switch to online learning during the pandemic, keeping the human element and mentorship alive and well while students learned online. PUPR-O is committed to maintaining a culture of assessment that supports an excellent student educational experience in and out of the classroom and is informed by student voices. Great efforts to streamline services and processes across the campus include faculty referral of students. Any student identified as “at-risk” by faculty or staff as well as those on academic warning or probation are contacted by the Academic Director to identify areas of concern and provide support to help students work through challenges both in and outside of the classroom. Most faculty members refer students for math and engineering courses tutoring which form a significant portion of the study group support at the Orlando Campus. To encourage student use of tutoring supports, PUPR-O developed multiple options for students such as individual tutoring (online and face-to-face), which does not necessarily require an appointment. Faculty meetings are held every two weeks for discussion of their needs and continuous improvement.

Additionally, course evaluations administered each semester give students a voice to evaluate their instructors and their learning. Currently there are four full-time faculty members and approximately 23 part-timers, which are hired from the Orlando campus. More effort is still needed to increase mentorship of students. Despite all the above collaborative efforts, not all students know about or make use of the support services available to them. Continuous improvement in how we support students continues to be our aim and will benefit both the students and the college in its efforts to retain and help students graduate or achieve their academic goals.

MIAMI CAMPUS

Introduction

Polytechnic University of Puerto Rico, Miami Campus (PUPR-M) considers the same policies, diversity, equity and inclusion practices, its mission, and goals through its strategic plan. PUPR-M offers undergraduate programs leading to a Bachelor of Business Administration (BBA) with academic tracks in Accounting, Entrepreneurship, General Management, and Marketing; a Bachelor in Science in Construction Management², and a Bachelor of Science in Computer Science.

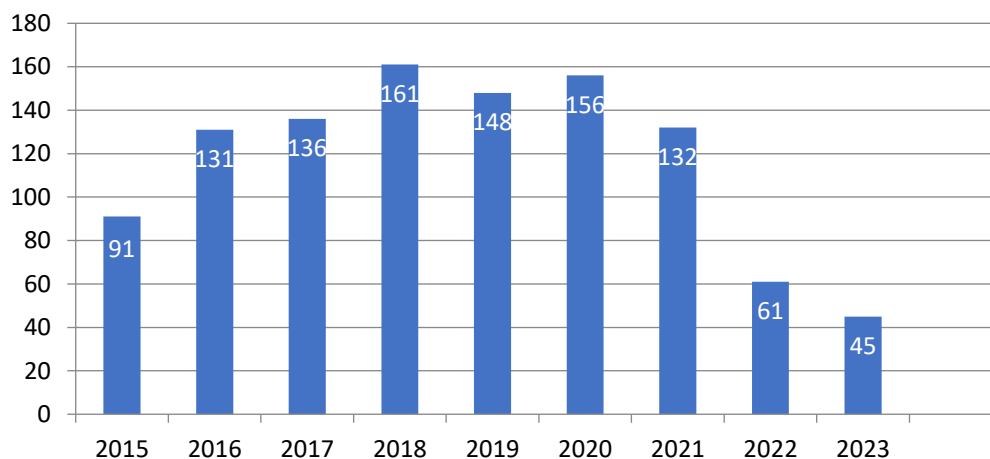
PUPR at Miami offers graduate instruction leading to the degree of Master of Business Administration (MBA) and a Master in Engineering Management (MEM). Polytechnic University of PR, Miami Campus is licensed by the Commission for Independent Education of the State of Florida.

Characteristics

Enrollment

The following graph displays Polytechnic University Miami campus nine-year of enrollment history for each year during fall.

Miami Campus Fall Enrollment History



² Waiting for the Commission on Higher Education of Florida’s approval.

The following graph displays a distribution of students entering PUPR-Orlando from Fall 2018 to Fall 2023 by enrollment status.

Enrollment Distribution by Category

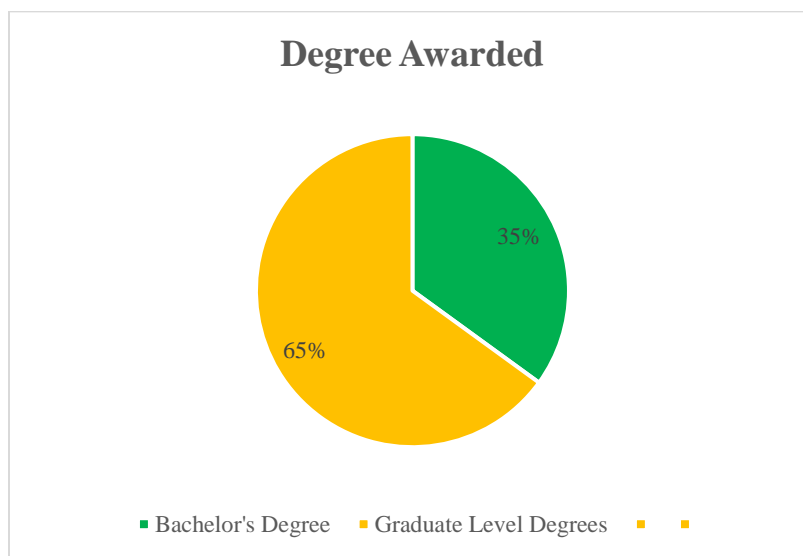
The following table shows the enrollment distribution by category from Fall 2018 to Fall 2023:

	2018	2019	2020	2021	2022	2023
Undergraduate						
New	15	12	19	10	0	0
Continuing/Returning	58	55	57	58	34	29
Sub-Total	73	67	76	68	34	29
Graduate						
New	18	17	20	10	1	0
Continuing/Returning	70	64	60	54	26	16
Sub-Total	88	81	80	64	27	16
Overall Enrollment	161	148	156	132	61	45

The student body of the Miami campus is slightly different to the main campus. They all are online students and are mostly working adults. Miami Campus new student enrollment has significantly decreased after the pandemic. A new marketing agency has been contracted to help with marketing and advertising. Still, more efforts are still needed to increase enrollment. Weekly meetings are held to discuss all strategic efforts, and results.

Degrees Awarded

The following graph shows that 208 total degrees were awarded during the summer of 2018-2023. Of these, 72 (35%) were bachelor’s degrees and 136 (65%) were graduate level degrees.



Assessment

As a branch campus of the PUPR, the Miami campus follows the same processes as the main campus. However, the fact that it is regulated by the Florida Department of Education and licensed by the Commission of Independent Education of the State of Florida, brings to play factors that are characteristic to this campus. In particular, the fact that courses are taught in English and the social and that the economic conditions our students face is different. Nevertheless, as the main campus, we monitor retention, graduation rate and grade average of our students through the identification of areas of improvement, grades records and graduation rate.

PUPR-M has a representative on the Institutional Student Learning Assessment Committee. Such representative assigns to the faculty the courses where they must collect outcomes following the assessment calendar dictated by the corresponding department on the main campus in San Juan. The same applies for the used rubric to assess the outcomes of a course.

Student Support Services

Description

Polytechnic University of Puerto Rico, Miami Campus offers students the opportunity to seek assistance in various aspects of the university, such as course registration, advisement, career information, and guidance in personal, and educational aspects that may hinder the students from attaining a college education. The services are aimed at assisting students in making appropriate educational, occupational, and personal choices.

The Academic Department offers students curriculum assistance and assists students individually in making appropriate vocational and personal choices. The office also coordinates assisted institutional services for students with special needs. Course selection is critical to student success; therefore, students should make an appointment with either the Academic or Student Affairs Coordinator for the accurate course selection prior to registration. Previously taken courses and the grades earned will be reviewed and analyzed for proper course placement.

Virtual Library Services

The library of the Polytechnic University of Puerto Rico Miami Campus is an academic unit that offers a virtual space through access to information resources and services. Library services are guided and supported by excellent professionals where the academic community can interact, develop skills, exchange ideas, discover new sources and create new knowledge resulting in an empowering lifelong learning experience.

The library collection is specialized to support the university's academic programs in General Education, Business Administration, Management, Entrepreneurship, among other fields. The collection includes over 200,000 publications, which are cataloged and searchable through the online catalog. The library is subscribed to thousands of online resources, including full-text electronic books, periodicals, and videos. Remote access to online resources is available through the library's website and blog.

At PUPR-M faculty and staff consider student support to be an essential part of everyone's job, regardless of its official position. In line with our overall value of "Excellence and Service", we

genuinely care about each student's success, and our support of their persistence and graduation is also a key part of ensuring the university's financial sustainability.

Admissions and Academics

The current onboarding process covers the period from first contact with admissions through registration and their first week of classes to assure students have access to the tools required for success (Internet/ student email account, My Poly portal, Blackboard, and virtual library). Online orientation is provided for those who cannot or do not wish to come to campus.

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2. ADDITIONAL LOCATION (INTEC)

Introduction

In 2002, the Council of Higher Education of Puerto Rico (now known as JIPs) authorized UPPR through certification 2002-125 to offer a Master in Engineering Management (MEM) through the online non-traditional methodology. UPPR started this offering through an international academic alliance with Technological Institute of Santo Domingo (INTEC) in Santo Domingo, Dominican Republic (<https://www.intec.edu.do/>). Later, in 2019, the JIPs authorized the MEM at

INTEC as an additional location through the certification 2019-068.

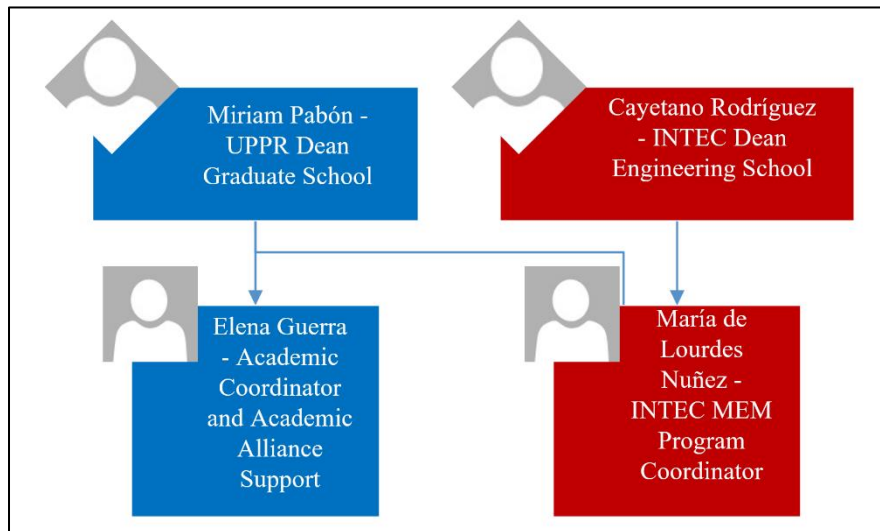
The academic alliance was launched to offer several programs. Moreover, the MEM program was the basis for pursuing more academic endeavors that enriched the Dominican Republic community and provided international educational experiences for faculty and students. One **success story** about this alliance is that it has been active for more than 20 years.

Administrative Structure

The educational agreement with INTEC is one of the academic alliance activities administered by the UPPR Graduate School. At UPPR, Dr. Miriam Pabón, Graduate School Dean, and Ms. Elena Guerra, Graduate School Academic Coordinator and Academic Alliance Support, manage the administrative and academic details of the programs offered through this alliance. They coordinate these efforts with Prof. María de Lourdes Núñez, the assigned liaison between the INTEC's School of Engineering and the UPPR Graduate School. In addition, Prof. Núñez reports to Eng. Cayetano Rodríguez, Dean of the Engineering School at INTEC.

This team organizes and facilitates current and new endeavors that could arise under the academic alliance. **Figure 1** presents the existing administrative structure, including positions and names.

Figure 1: Administrative Structure of UPPR-INTEC International Academic Alliance



Faculty

The program's educational model, offered through an agreement between UPPR and INTEC, allows faculty members from both institutions to teach courses. For example, UPPR faculty members teach eight of the thirteen graduate courses required to complete the Master's Program in Engineering Management, while INTEC faculty members teach five courses. By permitting both faculty groups to teach courses, the students are enriched by the academic vision of Puerto Rico (USA) and the Dominican Republic. One **success story** is that by hiring diverse faculty members to teach in this alliance, UPPR and INTEC increase cultural awareness, and professors share good practices from both countries.

Program Information

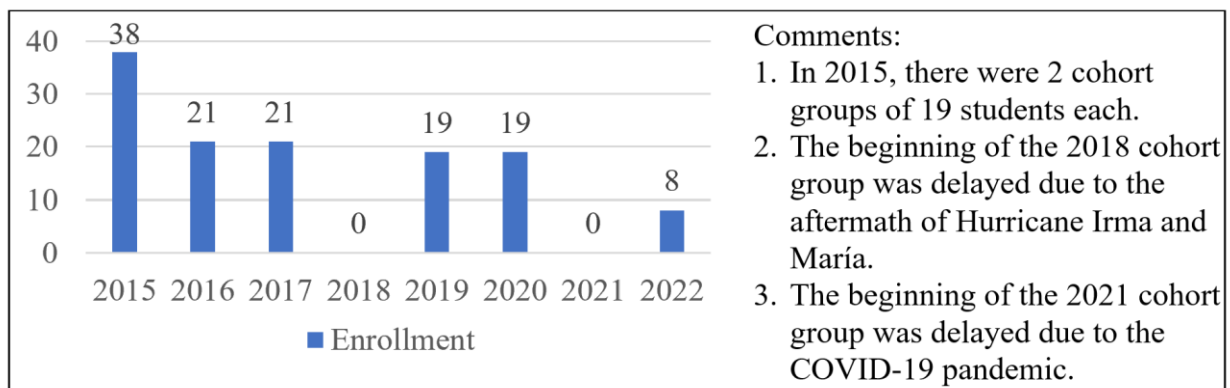
The MEM degree program is designed to prepare engineers and other professionals for managerial positions and responsibilities in technological and scientific organizations in industry, commerce, and public service, among other areas. The 39 credit-hours curriculum sequence includes 18 credit-hours in management general core courses, 12 in engineering management core courses, and 9 in emphasis courses (**Figure 2**).

Figure 2: MEM Program Curriculum

Management Courses (18 credit-hours)
MGM 5500 – Managerial Accounting
MGM 5700 – Probabilities and Statistical Methods
MGM 6070 – Human Resources Management
MGM 6560 – Management of Information Systems
MGM 6620 – Managerial Finances
MGM 6690 – Decision-Making Techniques
Engineering Management Courses (12 credit-hours)
MEM 5600 – Engineering Economic Analysis
MEM 6110 – Engineering Management I
MEM 6120 – Engineering Management II
MEM 6200 – Engineering Management Project
Emphasis Area Courses (9 credit-hours)
MEM 6610 – Productivity Management
MMP 6008 – Foundations in Quality Learning and Assurance
MMP 6518 – Project Management

Over the years, this alliance has maintained an active cohort group of students. **Figure 3** presents the total number of students enrolled for 2015 to 2022.

Figure 3: Total Number of Students Enrolled



A cohort of ten students started the Master in Manufacturing Competitiveness (MMC) program in August 2018 (certification 2001-135). The MMC degree program prepares professional engineers, scientists, and business administrators for managerial positions and responsibilities in manufacturing organizations. The program offers the opportunity to specialize in the major manufacturing sectors of Puerto Rico, such as the pharmaceutical, quality management, and high-tech areas.

The 39 credit-hours curriculum sequence includes 18 credit-hours in core courses, 12 in specialization courses, 6 in elective courses, and 3 in design project (**Figure 4**). Of the ten students, six completed the program in June 2020. Although the program seemed promising, a second cohort group was not planned due to the challenging external environment at that particular moment (i.e., the COVID-19 pandemic). As an alternative, a new and innovative venture is being pursued that will significantly impact the Dominican Republic graduate community. This initiative is born from the need for more faculty with PhD degrees in Engineering in the Dominican Republic's higher education institutions. This idea bridges the gap between institutional needs and regional research opportunities. It promises to enrich the educational experience by introducing cutting-edge knowledge, research, and industry-specific insights. This venture aims to empower graduate students with the skills and knowledge they need to thrive in a rapidly evolving professional landscape.

Figure 4: MMC Program Curriculum

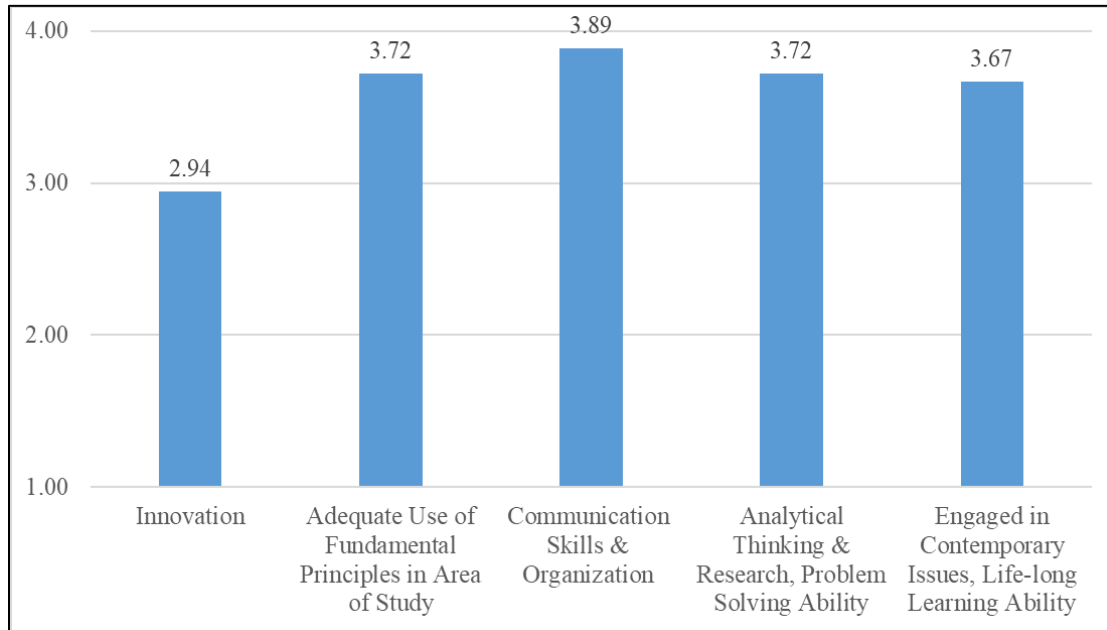
Core Courses (18 credit-hours)
MMP 6000 Advanced Statistics and Quality Improvement
MMP 6002 Operations Planning and Control
MMP 6006 Lean Manufacturing
MMP 6050 Materials Flow and Logistics
MMP 6052 Managerial Finances and Cost Accounting
GMP 6010 Professional Writing and Presentations
Specialization Courses (12 credit-hours)
MMP 6180 Material Handling Automation
MMP 6234 GMPs and Regulatory Issues
MMP 6236 Packaging Technology
MMP 6564 Process Validation and Technology Transfer
Elective Courses (6 credit-hours)
Elective Course
Elective Course
Design Project (3 credit-hours)
MMP 6700 – Design Project

Graduate Expo

UPPR Graduate Expo started at the academic alliance with the MEM eleventh group. The MEM students present their final project at the Expo. In the Expo, the projects are evaluated by a judge in terms of creativity or innovation, contribution to solving a problem, and applying concepts of areas of study. Judges assess the projects, and the evidence captured by the formal rubric is part of the Graduate School outcomes assessment plan.

The Expo rubric has a rating scale ranging from 1 to 4, where 1 equals not satisfactory, 2 is somewhat satisfactory, 3 is satisfactory, and 4 is highly satisfactory. The outcomes assessment direct measurement evaluation criteria demonstrate that the students perform at Satisfactory and Highly Satisfactory levels. **Figure 5** presents the specific results for each component measured at the Graduate Expo.

Figure 5: Graduate Expo Evaluation Criteria



Areas of Strength

1. The academic alliance between UPPR and INTEC has been actively sustained for 20 years.
2. More than 150 alumni of the MEM are from this program at INTEC, and many excel in their professional endeavors in the Dominican Republic and internationally (e.g., México and USA).

Opportunities

1. UPPR and INTEC could start a MEM cohort group (#13) in February 2024.
2. UPPR and INTEC could offer a PhD in Engineering and Applied Sciences as part of this alliance. After more than 20 years of partnership, the universities agree that offering this program will increase the opportunities for executing research and pursuing external funding together.

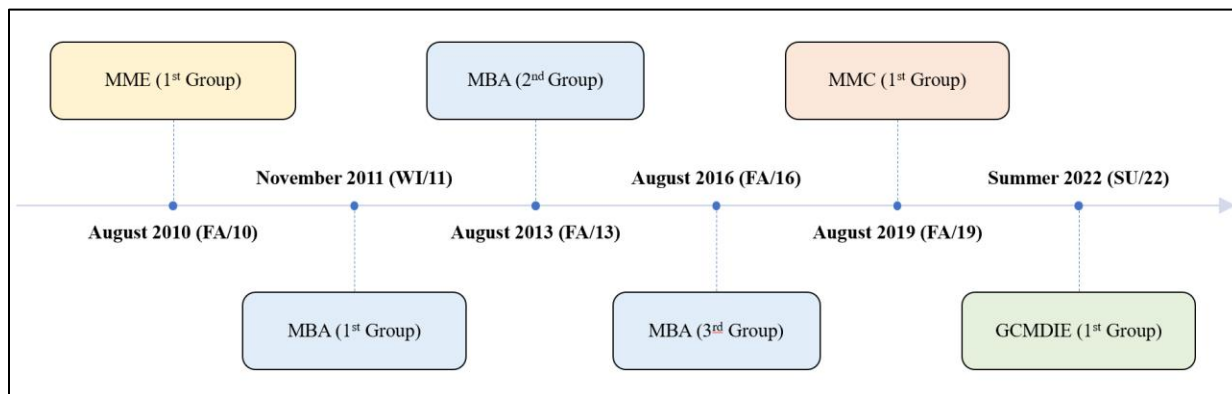
3. INSTRUCTIONAL SITE (BOSTON SCIENTIFIC)

Introduction

In 2011, the Council of Higher Education of Puerto Rico (now known as JIPs) authorized UPPR through certification ROA 2011-037 to offer the Master in Manufacturing Engineering (MME) on-site at Boston Scientific, Dorado PR. The employees' desire to pursue studies in different disciplines expanded the offering at this site by including the Master in Business Administration (MBA) (JIPs certification ROA 2012-031). In August 2019, a cohort group pursued the Master in Manufacturing Competitiveness (MMC) (certification 2001-135). More recently, Boston Scientific has shifted gears toward graduate certificates, starting with the Graduate Certificate in Medical Devices Industry Essentials (GCMDIE) (JIPs certification 2021-220). **Figure 1** presents the timeframe of the academic programs offered at Boston Scientific since 2011. One **success**

story about this alliance is the convenience of eliminating commuting to the San Juan metropolitan area to pursue a graduate degree.

Figure 1: Timeframe for the Academic Programs Offered at Boston Scientific



Administrative Structure

The educational agreement with Boston Scientific, Dorado PR, is one of the academic alliance activities administered by UPPR Graduate School. At UPPR, Dr. Miriam Pabón, Graduate School Dean, and Ms. Elena Guerra, Graduate School Academic Coordinator and Academic Alliance Support, manage the administrative and academic details of the programs offered through this alliance. Dr. Pabón and Ms. Guerra coordinate the educational efforts for this alliance with the Human Resources office at Boston Scientific. Our contact person on-site is Mr. Aleck De Jesús, Human Resources & Talent Development.

Program Information

Each master program (MME, MMC, and MBA) offered at Boston Scientific, Dorado PR is described below:

- The MME degree program is designed to prepare engineers for technical positions in quality, automation, or processes in the pharmaceutical and medical devices industries. The 39 credit-hours curriculum sequence includes core courses, specialization courses, elective courses, and a design project.
- The 48 credit-hours MBA degree program is designed to prepare professionals for managerial positions in various industries. This degree covers management core courses, business administration core courses, specialization courses, and elective courses.
- The MMC degree program prepares professional engineers, scientists, and business administrators for managerial positions and responsibilities in manufacturing organizations. The program offers the opportunity to specialize in the major manufacturing sectors of Puerto Rico, such as the pharmaceutical, quality management, and high-tech areas. The 39 credit-hours curriculum sequence includes core courses, specialization courses, elective courses, and a design project.

In contrast, the GCMDIE is a one-year program (18 credit-hours) focused on technical expertise in medical device manufacturing. **Table 1** presents the curriculum structure for each of these programs.

Table 1: Curricula Structure

<p style="text-align: center;">MME</p> <p style="text-align: center;">Core Courses (18 credit-hrs)</p> <p>MMP 6000 Advanced Statistics and Quality Improvement MMP 6002 Operations Planning and Control MMP 6002 Operations Planning and Control MMP 6005 Process Engineering MMP 6006 Lean Manufacturing GMP 6010 Professional Writing and Presentations</p> <p style="text-align: center;">Specialization Courses (12 credit-hrs)</p> <p>MMP 6141 Industrial Instrumentation MMP 6143 Process Control MMP 6244 Process Measurement and Control Standards MMP 6246 Industrial Systems Automation</p> <p style="text-align: center;">Elective Courses (6 credit-hrs)</p> <p>GMP 6510 Research Methodology MBA 5800 Leadership</p> <p style="text-align: center;">Design Project (3 credit-hrs)</p> <p>MMP 6700 – Design Project</p>	<p style="text-align: center;">MBA</p> <p style="text-align: center;">Management Core Courses (18 credit-hrs)</p> <p>MGM 5500 – Managerial Accounting MGM 5700 – Probabilities and Statistical Methods MGM 6070 – Human Resources Mgmt MGM 6560 – Mgmt of Information Systems MGM 6620 – Managerial Finances MGM 6690 – Decision-Making Techniques</p> <p style="text-align: center;">BA Core Courses (12 credit-hrs)</p> <p>MBA 5600 Managerial Economics MBA 5700 Managerial Marketing MBA 6830 Operations Management MBA 6900 Strategic Management</p> <p style="text-align: center;">Specialization Courses in General Mgmt (12 credit-hrs)</p> <p>MBA 5800 Leadership MEM 6420 Maintenance Management MMP 6560 Organizational Behavior MEM 6610 Productivity Management</p> <p style="text-align: center;">Elective Courses (6 credit-hrs)</p> <p>MGM 5800 Supply Chain Mgmt & Logistics MIE 7020 International Business Strategy</p>
<p style="text-align: center;">MMC</p> <p style="text-align: center;">Core Courses (18 credit-hrs)</p> <p>MMP 6000 Advanced Statistics and Quality Improvement MMP 6002 Operations Planning and Control MMP 6006 Lean Manufacturing MMP 6008 Foundations in Quality Learning and Assurance MMP 6052 Managerial Finances and Cost Accounting GMP 6010 Professional Writing and Presentations</p> <p style="text-align: center;">Specialization Courses (12 credit-hrs)</p> <p>MMP 6130 Six Sigma MMP 6190 Measuring and Managing Customer Satisfaction and Loyalty MMP 6250 Audit Program Management MMP 6256 Assessment Tools to Improve Business Performance</p> <p style="text-align: center;">Elective Courses (6 credit-hrs)</p> <p>GMP 6510 Research Methodology MBA 5800 Leadership</p> <p style="text-align: center;">Design Project (3 credit-hrs)</p> <p>MMP 6700 – Design Project</p>	<p style="text-align: center;">GCMDIE</p> <p style="text-align: center;">Core Courses (18 credit-hrs)</p> <p>BME 1010 Introduction to Biomedical Engineering BME 2110 Computer-Aided Drafting and Design BME 4990 Special Topics in Biomedical Engineering Industrial Automation Applications GMP 6010 Professional Writing and Presentations ME 6390 Special Topics in Mechanical Engineering Geometric Dimensioning and Tolerancing MGM 5700 Probabilities and Statistical Methods</p>

Throughout these years, there have been 6 cohort groups as part of this academic alliance. One group pursued the MME, three completed the MBA, one obtained the MMC degree, and one is

currently pursuing the GCMDIE. **Figure 2** and **Figure 3** summarize the number of cohort groups for each academic program and the number of participants per group.

Figure 2: Cohort Groups per Program

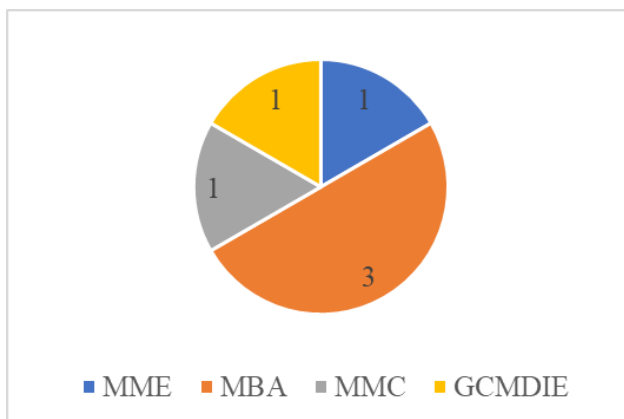
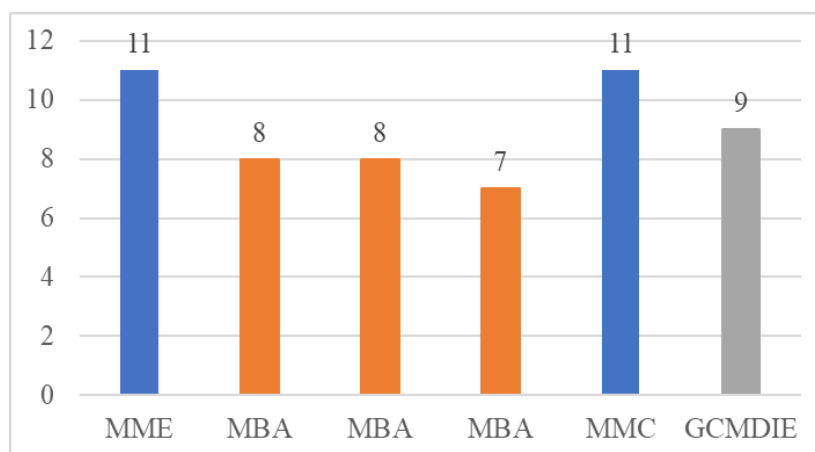


Figure 3: Students per Cohort Group



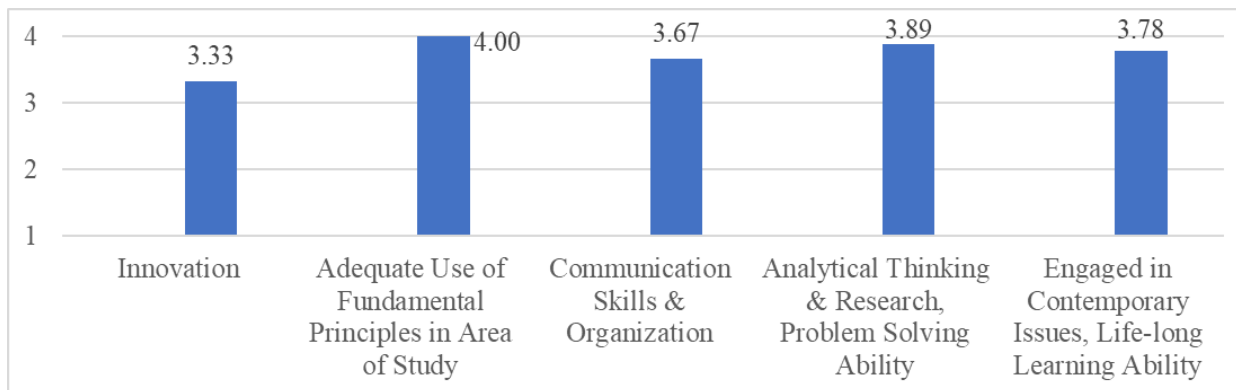
Graduate Expo

The MMC program group participated in the Graduate Expo. The students presented their final project at the Expo. In the Expo, the projects were evaluated by a judge in terms of creativity or innovation, contribution to solving a problem, and applying concepts of areas of study. Judges assessed the projects. Evidence captured by the Expo rubric is part of the Graduate School outcomes assessment plan.

The MMC students participated in the Graduate Expo. Since the required participation in the Graduate Expo started a few years ago, future MME and MBA students will have the opportunity to participate in the Expo. MMC students participated in the spring 2021 Expo, permitting the gathering of assessment data for this group. **Figure 4** presents the results of the Expo rubric. The rating scale ranges from 1 to 4, where 1 equals not satisfactory, 2 is somewhat satisfactory, 3 is satisfactory, and 4 is highly satisfactory. The outcomes assessment direct measurement evaluation criteria demonstrate that the students perform at Satisfactory and Highly Satisfactory levels. One

success story about the alliance is that the students join the Graduate Expo with other on-campus participants, bringing together two educational communities.

Figure 4: Graduate Expo Evaluation Criteria – MMC Cohort Group



Areas of Strength

1. By offering on-site programs at Boston Scientific in Dorado PR, UPPR facilitates that more professionals pursue graduate education.
2. At Boston Scientific on-site programs, the curriculum elective courses are chosen to develop the participants’ professional needs identified by the organization.

Opportunity

UPPR and Boston Scientific could identify new innovative education areas for the professionals in the organization.

D. SIGNIFICANT AWARDS OF STUDENTS' COMPETITIONS

LIST OF AWARDS OBTAINED BY THE STUDENT CHAPTERS OF CIVIL ENGINEERING AND ENVIRONMENTAL ENGINEERING

PROFESSIONAL ASSOCIATION	COMPETITION	PLACE EARNED	DATE	LOCATION
American Society of Civil Engineers	Service Activity Competition	Honorable Mention	March 12, 2016	2016 Southeast Student Conference University of Alabama Tuscaloosa, Alabama
American Concrete Institute	2015 Excellent University Award	Included in the list	April 17, 2016	2016 ACI Spring Convention Milwaukee, Wisconsin
American General Contractors	Cost Estimate Competition	First Place	May, 2016	San Juan, Puerto Rico
Solid Waste Association of North America	Solid Waste Student Design Competition	2016 Winner	August 25, 2016	WASTECON Indianapolis, Indiana
Solid Waste Institute for Sustainability	Project Presentation	2017 Winner	January 27, 2017	University of Texas Arlington, Texas
American Society of Civil Engineers	Service Activity Competition	First Place	March 18, 2017	2017 Southeast Student Conference Florida Atlantic University Boca Raton, Florida
American Concrete Institute	2016 Excellent University Award	Included in the list	March 26, 2017	2017 ACI Spring Convention Detroit, Michigan
American Society of Civil Engineers	Dynamic Dam	Third Place	March 3, 2018	2018 Southeast Student Conference University of Florida Gainesville, Florida
American Concrete Institute	2017 Excellent University Award	Included in the list	March 25, 2018	2018 ACI Spring Convention Salt Lake City, Utah
American General Contractors	Student Competition Decorative Concrete Design	First Place	August 25, 2018	Annual Convention Rio Grande, Puerto Rico
American Concrete Institute	2018 Outstanding University Award	Included in the list	March 24, 2019	2019 ACI Spring Convention Quebec City, Canada
American Society of Civil Engineers	Come Together Service Activity Competition	Third Place	March 30, 2019	2019 Southeast Student Conference University of Tennessee Knoxville, Tennessee
American General Contractors	Student Competition Water Filtration Design	First Place	August 24, 2019	Annual Convention Rio Grande, Puerto Rico
American Concrete Institute	2022 Outstanding University Award	Included in the list	April 2, 2023	2023 ACI Spring Convention San Francisco, California
American Society of Civil Engineers	2023 ASCE Innovation Contest	Second Place	March 25, 2023	University of North Florida Jacksonville, Florida
American Society of Civil Engineers	ASCE Concrete Bridge	Third Place	March 25, 2023	University of North Florida Jacksonville, Florida

MECHANICAL ENGINEERING DEPARTMENT

Rivera Viscal, A., Pertierra, J.R., Godwit, Design of a Twenty-Four Hour Hovering Machine, presented at AHS's 34th Design Competition (2017's Best New Entry Award)

Society of Automotive Engineers Intercollegiate Aero Design Competition

Third Place Overall SAE East 2020, Regular Class

Third Place Performance SAE East 2020, Regular Class

First Place Overall SAE West 2022, Regular Class

First Place Performance SAE West 2022, Regular Class

Third Place Overall SAE East 2023, Regular Class

Third Place Performance SAE East 2023, Regular Class

Third Place Design Presentation East 2023, Regular Class

First place Rocket team, Sponsor Honeywell

Third place Unmanned Aerial Vehicles - UAV Honeywell

VEX U ROBOTICS, Best Design and Creativity Award, World competence 20-23

Formula SAE vehicle, 2019 and 2023- Vehicles pass all inspection - Michigan

RIOT, Robotics, Participate the last two year.

MECHANICAL ENGINEERING DEPARTMENT
HIGHEST AND MOST IMPORTANT AWARD FOR THE INSTITUTION
WORLD CLASS COMPETITION

SAE INTERNATIONAL (Society of Automotive Engineers) - Los Angeles, California,
April 2022

First Place Overall SAE West 2022, Regular Class - (Design, Flight, and technical presentation)

First Place Performance SAE West 2022, Regular Class

POLYTECHNIC UNIVERSITY OF PUERTO RICO
 CHEMICAL ENGINEERING DEPARTMENT
 STUDENT AWARDS

Class of 2017 senior student Karla Del Campo Díaz won Second Place at COINAR Poster Competition. CIAPR, May 2017.



Class of 2019 senior students Joel Gaud Rivera & José R. Torres Morales won First Place – Team, at Bacardi Poster Competition, and Pedro Falcón Santiago won Second Place - Individual, at Bacardi Poster Competition. Bacardi Distillery, April 2019.



Class of 2021 senior student Paula A. Valentín Arboleda won **First Place** at the 2021 Undergraduate Research Program for Honors Students (URP-HS) Poster Competition. PUPR, August 2021.



Class of 2023 senior students Zuánichi Figueroa & Abraham E. Polanco Martínez won **First Place at the 2022 URP-HS Poster Competition**. PUPR, August 2021.



Class of 2024 senior students Vanessa M. Martínez Pérez & Génesis J. Jaime Morales won **Second Place at the 2022 URP-HS Poster Competition. PUPR, August 2022.**



The PUPR Chemical Engineering Team, finalists and champions at the 2022-2023 U.S. Department of Energy AlgaePrize Competition, won the Best Video Award at the NREL in Golden, Colorado. April 2023.



E. TABLES OF THE EVIDENCE INVENTORY BY STANDARD

Composition of the Evidence Inventory Committee:

The documents of the evidence inventory were uploaded to <https://compliance.pupr.edu> and to the MSCHE Portal after the approval of the following **Evidence Inventory Committee**.

Members:

1. Digna Delgado, MLS; Director Library
2. Pedro Pérez, MIS; Director, Information Technology Office
3. José Riollano, MSEE; Professor and Curriculum Coordinator, Electrical and Computer Engineering, and Computer Science Department; Member, Institutional Student Learning Assessment Committee; Co-chair of the Evidence Inventory Committee
4. Omayra Rivera, EdD; Institutional Researcher, Planning and Development Office
5. Antonio Tardí, MEM, MIS; Librarian of Special Collections and Historical Archive
6. Elsa Zayas, MA; Associate VP for Enrollment Management and Student Services; Co-chair of the Evidence Inventory Committee

Consultants:

1. Mildred Agosto, MPH Biostatistics; Associate Professor and Mathematics Coordinator of Preparatory Courses, Mathematics and Science Department; Assistant of VP for Academic Affairs and Assistant of ALO for UPPR MSCHE Self-Study; Co-chair of the Steering Committee
2. Diana Rivera, MArch; Dean, School of Architecture; SLA Coordinator, Architecture Program; Member, Institutional Student Learning Assessment Committee; Chair of the Steering Committee

Documents of the Evidence Inventory:

The following tables include the list of the documents as they appear in this report:



Standard I: Mission and Goals

Evidence number	Criterion	Requirement	Title of evidence	Page, section, or paragraph that is referenced	Explanatory note
SI-1	C1, C4	R7	Institutional Strategic Plan 2016-2021	p. 2	Strategic planning processes.
SI-2	C1, C4	R7	Institutional Strategic Plan 2022-2027	p. 17	Strategic planning processes.
SI-3	C1	R7	Institutional Strategic Plan 2022-2027	p. 58	Assistance by consultants and external experts.
SI-4	C1	R7	Institutional Strategic Plan 2022-2027	p. 21-31	Analysis of external factors.
SI-5	C1	R7	Institutional Strategic Plan 2016-2021	p. 3 par. 2	Previous mission statement.
SI-6	C1	R7	Institutional Strategic Plan 2022-2027	p. 18 par. 1-2	Current mission statement.
SI-7	C1	R7	Institutional Strategic Plan 2016-2021	p. 3 par. 3	Previous vision statement.
SI-8	C1	R7	Institutional Strategic Plan 2022-2027	p. 18 par. 3	Current vision statement.
SI-9	C1	R7	Institutional Strategic Plan 2022-2027	p. 46-57	Current strategic goals and objectives.
SI-10	C1	R7	Board of Trustees Certification – Approving Institutional Strategic Plan 2022-2027	-	Approval of the Institutional Strategic Plan 2022-2027.
SI-11	C3	R10	Student Support Services – PSE Report 2022	-	Accomplishments of student support services of PSE.
SI-12	C2	R10	President’s Memo – New Appointment 0523	-	President Appointed Dr. María G. Véaz.
SI-13	C1	R7	Institutional Strategic Plan 2022-2027	p. 20	Values for the first time established.

Standard II: Ethics and Integrity

Evidence number	Criterion	Requirement	Title of evidence	Page, section, or paragraph that is referenced	Explanatory note
SII-1	C1	R5-6	Faculty Employee Handbook	p. 35 par. 4	Academic freedom.
SII-2	C1	R5	Faculty Employee Handbook	p. 35 par. 5	Academic freedom.
SII-3	C1	R5	Administrative Employee Handbook	p. 38 par. 8	Intellectual property.
SII-4	C1	R5	Intellectual Property Policy	p. 1 par. 2	Intellectual property.
SII-5	C1	R5-6	Intellectual Property Policy	p. 5-6 sec. C	Intellectual property committee.
SII-6	C1	R5-6	Student Rules and Regulations	p. 3 art. I sec. 3-4	Intellectual property.
SII-7	C2	R5-6	Student Rules and Regulations	p. 4 art. II sec. 1-3	Respect for diversity.
SII-8	C2	R5	Administrative Employee Handbook	p. 18 par. 2-5	Respect for diversity.
SII-9	C2	R5-6	Procedure for Filing Complaints 2019	p. 1	Violation of rights.
SII-10	C2	R5	Student Rules and Regulations	p. 12-14 art. VI sec. 5-7	Complaint or grievance.
SII-11	C3	R5-6	Grievance Procedure	p. 1 sec. II	Submission of complaint or grievance process.
SII-12	C3	R5-6	Sexual Harassment Policy	p. 6 sec. 5	Submission of complaint or grievance process.
SII-13	C3	R5-6	Sexual Assault Policy	p. 8	Submission of complaint or grievance process.
SII-14	C3	R5-6	Drug and Alcohol Policy	p.1 par. 2	Process for complaint or grievance.
SII-15	C3	R5-6	Student Information Handbook	p. 6	Process for complaint or grievance.
SII-16	C3	R5-6	Institutional Security Policies	p. 1-9	Some policies established by the Security Office.
SII-17	C3	R5-6	Student Rules and Regulations	p. 13-14 sec. 5-6	Submission and process for complaint or grievance.
SII-18	C3	R5-6	Procedure for Grade Review Policy	p. 2 par. 3-5	Submission and process for complaint or grievance.
SII-19	C3	R5	Crisis Intervention Protocol	p. 5 sec. 8	Submission of complaint or grievance process.
SII-20	C3	R5-6	Suicide Prevention Protocol	p. 20	Prevention for a situation of grievance.
SII-21	C3	R5-6	Procedures for Students Complaints	p. 1	Process for complaint or grievance.
SII-22	C3	R5-6	Campus and Workplace Violence Prevention Policy	p. 2 sec. 6	Submission of complaint or grievance process.
SII-23	C3	R5-6	Cyberbullying Policy	p. 1	Submission of complaint or grievance process.
SII-24	C3	R5-6	Harassment Prevention on Online Communication	p. 1	Submission of complaint or grievance process.
SII-25	C3	R5-6	Protection Policy for Students Activated for Military Service	p. 1	Submission of complaint or grievance process.
SII-26	C4	R5-6	Faculty Employee Handbook	p. 47	Conflict of interest.

Evidence number	Criterion	Requirement	Title of evidence	Page, section, or paragraph that is referenced	Explanatory note
SII-27	C4	R5-6	Administrative Employee Handbook	p. 43-44	Conflict of interest.
SII-28	C4	R5-6	Policy on Conflict of Interest	p. 1-5	Conflict of interest.
SII-29	C4	R5-6	Payment Enrollment Policy	p. 1	Tuition costs and payment associated with debts on academic charges.
SII-30	C5	R5-6	Faculty Employee Handbook	p. 12	Equal Employment Opportunity (EEO) Policy.
SII-31	C5	R5-6	Administrative Employee Handbook	p. 10-12 p. 43-46	Hiring, evaluation, promotion, discipline, separation of employment.
SII-32	C5	R5-6	Faculty Employee Handbook	p. 19-22 p. 48-49	Hiring, evaluation, promotion, discipline, and separation of employment.
SII-33	C5	R5-6	Recruitment, Selection and Appointment Policy and Procedure	p. 1 sec. I	Hiring.
SII-34	C5	R5-6	Faculty Employee Handbook	p. 16	Affirmative Action Plan.
SII-35	C6	R5-6	Undergraduate Catalog: Academic Years 2020-2025 0922	p. 28 par. 1	Admission policy.
SII-36	C6	R5-6	Graduate Catalog: Academic Years 2020-2024 0922	p. 15 par. 1-13	Admission process.
SII-37	C7	R5-6, R11	College Financing Plan	UPPR Website	Site with all the financial information available for UPPR prospect students or students.
SII-38	C8	R11-12, R14	Institutional Federal Compliance Report	-	Detailed report of federal compliance about governance and financial compliance. It references the following document individually uploaded to MSCHE Portal: PUPR Single Audit Reporting Package
SII-39	C9	R5-6	Administrative Employee Handbook	p. 43-44 par. 5	Describes expected employee conduct.
SII-40	C9	R5-6	Grievance Procedure	p. 1 sec. II	Describes how to submit grievance.
SII-41	C9	R5-6	Faculty Employee Handbook	p. 25-26 par. 6-13	Describes expected employee conduct.
SII-42	C9	R5-6	Student Rules and Regulations	p. 3 art. I	Describes students' rights, duties, and responsibilities.
SII-43	C9	R12	Academic Integrity Policy	p. 3 par. 1	Describes expected student conduct.
SII-44	C9	R5	Student Rules and Regulations	p. 11 sec.1-8	Describes expected student conduct.

Standard III: Design and Delivery of the Student Learning Experience

Evidence number	Criterion	Requirement	Title of evidence	Page, section, or paragraph that is referenced	Explanatory note
SIII-1	C1	R9	Undergraduate Catalog: Academic Years 2020-2025_rev.0922	p. 288-317	Associate Degrees.
SIII-2	C6	R9	Graduate Project Expo Rubric	p. 1	Rubric used for evaluation.
SIII-3	C6	R15	Graduate Catalog: Academic Years 2022-2024_rev.0922	p. 31-109	Professor’s credentials by area of study.
SIII-4	C1	R8	Institutional Strategic Plan 2016-2021	p. 8	Strategic Goal 3: Foster institutional alignment with educational trends.
SIII-5	C1	R8	Academic Program Review Policy	p. 1	Policy for reviewing and academic program.
SIII-6	C1	R10	Undergraduate Catalog: Academic Years 2020-2025_rev.0922	p. 17	Outcomes and Student Learning Assessment.
SIII-7	C1	R8	Undergraduate Catalog: Academic Years 2020-2025_rev.0922	p. 52-317	Academic Programs.
SIII-8	C1	R8	Graduate Catalog: Academic Years 2022--2024_rev.0922	p. 31-109	Academic Programs.
SIII-9	C1	R9	Undergraduate Catalog: Academic Years 2020-2025_rev.0922	p. 21-51	Student Information and Services, Admissions, Financial Information and Services, and Academic Information and Services
SIII-10	C1	R9	Graduate Catalog: Academic Years 2022-2024_rev.0922	p. 10-28	General Services and Facilities, Student Information and Services, Admissions, Financial Information and Services, and Academic Information and Services
SIII-11	C1	R9	Undergraduate and Graduate Catalog Miami Campus: Academic Years 2022-2023_rev.1122	p. 24-45	General information to the students.
SIII-12	C1	R9	Undergraduate and Graduate Catalog Orlando Campus: Academic Years 2022-2023_rev.1122	p. 24-45	General information to the students.
SIII-13	C5	R8	Longitudinal Analysis of the 2013 to 2022 Institutional Exit Interview Survey Results	-	The exit interview is a survey administered by the IDEA Office in Collaboration with the Vice president of Enrollment Management and Student Services to graduating seniors when they pick up the cap and gown before graduation. This report is an analysis over time using data from 2013 to 2022, to study trends as part of a continuous improvement process.

Evidence number	Criterion	Requirement	Title of evidence	Page, section, or paragraph that is referenced	Explanatory note
SIII-14	C8	R8	Undergraduate Catalog: Academic Years 2020-2025_rev.0922	p. 43-51	Academic Information and Services.
SIII-15	C8	R8	Undergraduate and Graduate Catalog Miami Campus: 2022-2023_rev.1122	p. 46-54, 113-120	Information to determine the level of attainment of the student outcomes at the time of graduation.
SIII-16	C8	R8	Undergraduate and Graduate Catalog Orlando Campus: 2022-2023_rev.1122	p. 45-52, 192-199	Information to determine the level of attainment of the student outcomes at the time of graduation.
SIII-17	C8	R8	Academic Program Review Policy	p. 1	Policy for revisions of an academic program.
SIII-18	C8	R8	Academic Council Regulations 2016	p. 2-3	Academic Council Regulations 2016, Article II.
SIII-19	C8	R8	Academic Council Regulations 2016	p. 11-12	Academic Council Regulations 2016, Section 8.4.
SIII-20	C2	R15	Policies on Loads, Academic Discharges and Faculty Employee Compensation_rev.0615	p. 1-3	Policies on Loads, Academic Discharges and Faculty Employee Compensation.
SIII-21	C2	R15	Faculty Compensation Policies_rev.0615	p. 1	Faculty Compensation Policies.
SIII-22	C2	R15	Center for Professional Education and Training CEPA enrollment	p. 3	Information about discounts for Faculty members.
SIII-23	C2	R15	Faculty Employee Handbook_rev.0910	p. 21-22	Faculty Employee Handbook.
SIII-24	C2	R15	Institutional Research and Assessment page	-	Information and image of the webpage where Faculty Evaluation Forms are available.
SIII-25	C3, C4	R9	ADDENDUM - Undergraduate Catalog: Academic Years 2020-2025_rev.0922	p. 4	Description of course COOP 3010 Professional Practice, Career & Internship Services Program.
SIII-26	C4	R9	Graduate Catalog: Academic Years 2020-2024_rev.0922	p. 41	GMP 6050 – Professional Internship through COOP - Course Description.
SIII-27	C4	R9	Undergraduate Catalog: Academic Years 2020-2025_rev.0922	p. 76	ATUL 0100 – Adjustment to University Life - Course Description.

Standard IV: Support of the Student Experience

Evidence number	Criterion	Requirement	Title of evidence	Page, section, or paragraph that is referenced	Explanatory note
SIV-1	C6	R10	Graduation Rates Over Time - San Juan Campus @ 2021 IPEDS Report	-	IPEDS Report.
SIV-2	C1	R8	New Retention Model – PowerPoint Presentation June 2023	-	New Retention Model.
SIV-3	C1	R8	President’s Memo – New Appointment 0523	-	Appointment of a Vice President of Innovation, Persistence, and Students Success.
SIV-4	C6	R10	Historic Enrollment 2015-2023	-	Recruiting and Enrollment.
SIV-5	C1b, C1d	R8	Institutional Strategic Plan 2022-2027	Strategic Goal I p. 46	Strategic Goal I: Develop A Student-Centered Culture That Promotes Their Success.
SIV-6	C6	R8, R10	First-year students – Undergraduate Students Retention 2017-2021 Cohorts	-	First-year undergraduate students’ retention rate for the 2017-2021 period.
SIV-7	C1a	R8	Undergraduate Catalog: Academic Years 2020-2025 rev.0922	p. 3, 28-33	Admission Policy <ul style="list-style-type: none"> • Freshman Applicants • Eligibility Criteria for Undergraduate and Associate Degree Programs • Course Placement and Exemptions • Transfer Applicants • Special Students • Audit Students SIV- • Home Schooling • International Students • Admissions Procedure • Initial Orientation for Newly Admitted Students • Special Program for High School Student
SIV-8	C1a	R8	Graduate Catalog Campus: Academic Years 2022-2024 rev.0922	p. 3, 15-17	
SIV-9	C1a	R8	Undergraduate and Graduate Catalog Miami Campus: Academic Years 2022-2023 rev.1122	p. 4, 24-28	
SIV-10	C1a	R8	Undergraduate and Graduate Catalog Orlando Campus: Academic Years 2022-2023 rev.1122	p. 3-4, 26-32	
SIV-11	C1b	R8	Institutional Credit Validation and Exemption Policy_rev.0223	-	Holistic Evaluation Placement Test Transfer Credits Course Work Validation and Exemption Process
SIV-12	C1b,C6	R10	CPU (Student Served) @ 2016-2021	-	Center for University Progress (CPU) – Students Served.
SIV-13	C1b	R10	Report CPU FA20 Tutoring Service	-	Center for University Progress (CPU).
SIV-14	C2	R8	Institutional Credit Validation and Exemption Policy rev.0223	-	Already listed in SIV-11.

Evidence number	Criterion	Requirement	Title of evidence	Page, section, or paragraph that is referenced	Explanatory note
SIV-15	C1a	R8	Undergraduate Catalog: Academic Years 2020-2025_rev.0922	p. 3, 34-42	Financial Information and Services Policies <ul style="list-style-type: none"> • Tuition and Fees for Undergraduate Programs • Payment of Tuition and Fees • Financial Delinquency • Refund Policies • Financial Aid Office • General Eligibility Requirements • Student Consumer Information • Application Process • Transfer Students • Awarding Process • Financial Aid Disbursements • Student Aid Cancellation and Refusals • Return of Financial Aid • Standard of Satisfactory Academic Progress for Students with Financial Aid • Probation or Suspension • Definitions • Students Rights and Responsibilities • Privacy Notice
SIV-16	C1a	R8	Graduate Catalog: Academic Years 2022-2024_rev.0922	p. 3, 18-23	
SIV-17	C1a	R8	Undergraduate and Graduate Catalog Miami Campus: Academic Years 2022-2023_rev.1122	p. 4, 30-38	
SIV-18	C1a	R8	Undergraduate and Graduate Catalog Orlando Campus: Academic 2022-2023_rev.1122	p. 4, 33-41	
SIV-19	C3	R8	Registry and Veterans Policies_rev.0820	p. 1-4	<ul style="list-style-type: none"> • Safe and Secure Students Academic Records and Transcripts Policy, Registrar's Office, as part of the administrative processes, is the maximum custodian of the academic records and the academic history reflected through the transcripts of students' credits. • Custody, Conservation, Protection of Confidentiality, and Access to Students' Academic Records Policy. • The custody, conservation, protection of confidentiality and access to students' academic records. • Protective measurement applied to students activated for military service Policy.
SIV-20	C3	R8	Information Technology Acceptable Use Policy	-	Acceptable use of computer and telecommunication equipment at UPPR.
SIV-21	C1a	R8	Undergraduate Catalog: Academic Years 2020-2025_rev.0922	p. 3, 21-27	Student Information and Services <ul style="list-style-type: none"> • Vice Presidency for Enrollment

Evidence number	Criterion	Requirement	Title of evidence	Page, section, or paragraph that is referenced	Explanatory note
SIV-22	C1a	R8	Graduate Catalog: Academic Years 2022-2024_rev.0922	p. 3, 13-14	Management and Student Services <ul style="list-style-type: none"> • Career & Internship Services Program • Integrated Student Service Center • Department of Athletic Activities • Institutional Development and Communications Office • Cultural Activities Office • Honor Program • Reserve Officers' Training Corps • Security Office • Office of Counseling and Psychological Services • AOD Program • Developmental Studies • Tutoring Services • Student Support Services Programs • Student Council • Student Organizations • Student Regulations • Academic Dishonesty and Plagiarism • Student Grievance Procedures • Health Service
SIV-23	C1a	R8	Undergraduate and Graduate Catalog Miami Campus: Academic Years 2022-2023_rev.1122	p. 3, 20-23	
SIV-24	C1a	R8	Undergraduate and Graduate Catalog Orlando Campus: Academic Years 2022-2023_rev.1122	p. 3, 23-25	
SIV-25	C4	R8	Registrar's Office - Student Handbook	p. 1-2	Student Services, Veteran Program, International Students, and Exchange Program.
SIV-26	C3	R8	Registry and Veterans Policies_rev.0820	p. 4	Already listed in SIV-19.
SIV-27	C6	R8, R10	Longitudinal Analysis of the 2013 to 2022 Institutional Exit Interview Survey Results	-	The exit interview is a survey administered by the IDEA Office in Collaboration with the Vice-presidency of Enrollment Management and Student Services to graduating seniors when they pick up the cap and gown before graduation. Annual reports are processed and published with the collaboration of the Office of Institutional Research. This report is an analysis over time using data from 2013 to 2022, to study trends, as part of a continuous improvement process.
SIV-28	C1c, C3, C6	R8, R10	Diversity, Equity, and Inclusion Student Survey Results - FA 2023 and WI 2023	-	Vice Presidency of Enrollment Management of Student Services administered the Diversity, Equity, and Inclusion Survey with a sample of undergraduate students.
SIV-29	C1c	R8, R10	Gender Discrimination Policy and Procedure Federal Department of Education - Title IX	-	This Policy and Procedure is designed to comply with the Education Amendments of 1972 on Title IX and Sex Discrimination.

Standard V: Educational Effectiveness Assessment

Evidence number	Criterion	Requirement	Title of evidence	Page, section, or paragraph that is referenced	Explanatory note
SV-1	C1-2	R9-10	UPPR webpage Licenses & Accreditations	UPPR webpage	Information about licenses and accreditations in the webpage.
SV-2	C1-2	R9-10	Undergraduate Catalog: Academic Years 2020-2025_rev.0922	p. 15-16	Licensure and accreditations.
SV-3	C2	R10	Regulations of the Institutional Student Learning Assessment Committee_rev.0823	-	Regulations of the Institutional Student Learning Assessment Committee.
SV-4	C1	R10	Memo Request Recertification of Institutional Learning Goals	-	Request for recertification of the Institutional Learning Goals.
SV-5	C1	R10	President Memo Ratifying Institutional Learning Goals_rev.0323	-	President ratifying Institutional Learning Goals.
SV-6	C1-3	R8-R10	Institutional Student Learning Assessment Plan_rev.0923	-	Established plan for the Institutional Student Learning Assessment.
SV-7	C1	R10	UPPR webpage Mission, Vision & Goals	UPPR webpage	About UPPR Mission, Vision & Goals, including Institutional Learning Goals (ILOs).
SV-8	C1	R10	UPPR webpage Academic Offerings Undergraduate Programs	UPPR webpage	Academic Offerings - Undergraduate programs. See student outcomes (program-level goals) on each academic program webpage.
SV-9	C1	R10	Undergraduate Catalog: Academic Years 2020-2025_rev.0922	-	Programs of study section. See student outcomes (program-level goals) on each academic program information. For example, pages 175-176 for the Electrical Eng Program. The same document is listed in SV-2.
SV-10	C1	R10	Graduate School Assessment Plan 2022 Template_rev.2023	-	Graduate School assessment plan using the 2022 program assessment plan template.
SV-11	C1	R9	Undergraduate Catalog: Academic Years 2020-2025_rev.0922	-	Program learning outcomes available to students. See Programs of Study section. For example, pages 175-176 for the Electrical Eng Program. Already listed in SV-2 and SV-9.
SV-12	C1	R9	UPPR webpage Academic Offerings Undergraduate Programs	UPPR webpage	Academic Offerings - Undergraduate programs. See student outcomes (program-level goals) on each academic program webpage. Already listed in SV-8.
SV-13	C2	R9-10	Academic Program Review Policy	-	Policy for reviewing an Academic Program.
SV-14	C2-3	R9-10	Academic Council Regulations 2016	Article II and Section 8.4	Regulations for evaluation and approval of programs and curricular changes.
SV-15	C1-2	R9-10	Institutional Strategic Plan 2022-2027	p. 46	Strategic Goal I.

Evidence number	Criterion	Requirement	Title of evidence	Page, section, or paragraph that is referenced	Explanatory note
SV-16	C1-2	R9-10	Institutional Strategic Plan 2016-2021	p. 8	Strategic Goal 3.
SV-17	C1-3	R9-10	2019 ABET Self-Studies	Chapter 5- Curriculum	Available upon request, available during the visit. ABET Self Studies of the following programs: a. Biomedical Engineering b. Chemical Engineering c. Civil Engineering d. Computer Engineering e. Computer Science f. Electrical Engineering g. Environmental Engineering h. Industrial Engineering i. Land Surveying and Mapping j. Mechanical Engineering
SV-18	C1-3	R8-10	Institutional Student Learning Assessment Plan_rev.0923	-	Already listed in SV-6.
SV-19	C1-3	R8-10	2019 ABET Self-Studies	Criterion / Chapter 3- Student Outcomes Criterion / Chapter 4- Continuous Improvement Criterion / Chapter 5- Curriculum	Already listed in SV-17.
SV-20	C1-3	R8-10	Program SLA Plan Template 2022_rev.0823	-	Template of the Program SLA Plan.
SV-21	C3	R10	Graduate Project Expo Rubric	-	Rubric for evaluation of projects in the Graduate Expo.
SV-22	C1	R9	UPPR webpage Library Services Information Literacy	UPPR webpage	Library Services Information Literacy.
SV-23	C1-3	R8-10	Program SLA Plan Template 2022_rev.0823	-	Template of the Program SLA Plan. Already listed in SV-20.
SV-24	C1-3	R8-10	Institutional Student Learning Assessment Plan_rev.0923	-	Established plan for the Institutional Student Learning Assessment. Already listed in SV-06 and SV-18.
SV-25	C1-3	R8-10	Program SLA Plan Template 2022_rev.0823	-	Template of the Program SLA Plan. Already listed in SV-20 and SV-23.
SV-26	C2-3	R8-9	ILO Results Excel Form Template	-	Template for the academic areas to report the ILOs assessment results.
SV-27	C3	R10	Longitudinal Analysis of the 2013 to 2022 Institutional Exit Interview Survey Results	-	Trends analysis of the Exit Interview results.

Evidence number	Criterion	Requirement	Title of evidence	Page, section, or paragraph that is referenced	Explanatory note
SV-28	C3	R8, R10	Institutional Strategic Plan 2022-2027	Environmental Factors section p. 25	List of the environmental factors that have been a challenge. The same document is listed in SV-15.
SV-29	C3	R8, R10	UPPR webpage Office of Institutional Research and Assessment	UPPR webpage	Office of Institutional Research and Assessment.
SV-30	C3	R10	VEIL Distance Education Evolution at PUPR Draft rev.0622	-	Evolution, expansion, and internationalization of online academic offerings at PUPR and VEIL center. Training and development of the Faculty.
SV-31	C3	R10	VEIL Timeline Online Academic Offerings Draft rev.0622	-	Timeline of online academic offerings. Training and development of the Faculty.
SV-32	C3	R8, R10	Math & Sciences Historic Summary Per Year from 2019-2020 to 2022-2023	-	Summary of innovation in the classroom, improvement of teaching methodologies, and support to online courses.
SV-33	C1-3	R9-10	2019 ABET Self-Studies	Criterion / Chapter 4- Continuous Improvement	Already listed in SV-17 and SV-19.
SV-34	C1-3	R8-10	PUPR Engineering ILOs Attainment Analysis based on ABET 2019 Self Study Reports rev.0423	-	Engineering Institutional Learning Goals (ILOs) Attainment Analysis Based on ABET Self-Studies 2019.
SV-35	C1-3	R8-10	Continuous Improvement from 2019 ABET Self Study Reports V3	-	Engineering Continuous Improvement Summary Report for ILOs Based on ABET Self-Studies 2019 results.
SV-36	C3	R10	VEIL Distance Education Evolution at PUPR Draft rev.0622	-	Already listed in SV-30.
SV-37	C3	R10	VEIL Timeline Online Academic Offerings Draft rev.0622	-	Already listed in SV-31.
SV-38	C3	R10	EE Advisory Board Survey on Changes to Power Track	-	Electrical Engineering Advisory Board Survey.
SV-39	C3	R8, R10	Institutional Strategic Plan 2022-2027	Strategic Goal I Objective 1.6 p. 46, 49	Objective 1.6 in Strategic Goal I. The same document is listed in SV-15 and SV-28.
SV-40	C3	R10	Longitudinal Analysis of the 2013 to 2022 Institutional Exit Interview Survey Results	-	Already listed in SV-27.
SV-41	C5	R8, R10	MSCHE Self-Evaluation SLA Processes Adapted PUPR 2020	-	Rubric for evaluating Student Learning Assessment Processes using an adapted version of the MSCHE 2008.

Standard VI: Planning, Resources, and Institutional Improvement

Evidence number	Criterion	Requirement	Title of evidence	Page, section, or paragraph that is referenced	Explanatory note
SVI-1	C1	R10	Institutional Strategic Plan 2022-2027	p. 18 par. 1-2	Institutional mission statement.
SVI-2	C1	R10	Institutional Strategic Plan 2022-2027	p. 58-59	Representatives that developed the document.
SVI-3	C3	R11	Budget FY-2024 Approved Distance Learning VEIL	-	Distance education budget.
SVI-4	C3	R11	Historic Enrollment 2015-2023	p. 1-2	Student enrollment between Fall 2015 to Fall 2023 trends.
SVI-5	C4	R11	Human Resources Cognos Census 2015 to 2022	-	Full time employee list with hiring information.
SVI-6	C1	R8	Certification Number 2021-095	p. 2	Certification of Biomedical Engineering Program.
SVI-7	C1	R8	Certification Number 2021-096	p. 2	Certification of BS in Industrial Engineering.
SVI-8	C1	R8	Certification Number 2022-317	p. 2	Certification of BS in Environmental Engineering.
SVI-9	C1	R8	Certification Number 2023-086	p. 2	Certification of BS in Computer Engineering.
SVI-10	C1	R8	Certification Number 2022-239	p. 2	Certification of BS in Computer Sciences.
SVI-11	C7	R11	Financial Statements PUPR FY-2022	-	Independent audit report.
SVI-12	C6	R11	Campus Development Plan 2020-2030	-	Development plan of San Juan and Florida campuses.
SVI-13	C5	R10	VP for Academic Affairs' Memo - Institutional Student Learning Assessment Committee	-	Memo from VP for Academic Affairs regarding the Institutional Student Learning Assessment Committee.
SVI-14	C3	R11	Budget FY-2024 Approved Distance Learning VEIL	-	Investment in Blackboard assessment reporting software (EAC).

Standard VII: Governance, Leadership, and Administration

Evidence number	Criterion	Requirement	Title of evidence	Page, section, or paragraph that is referenced	Explanatory note
SVII-1	C2	R13	Bylaws Universidad Politécnica de Puerto Rico	-	The bylaws specify the composition of the Board of Trustees of the Polytechnic University, including the terms, election, and appointment of members, the election of officers, and the appointment of committees; the nature and frequency of meetings; the rules of procedure for meetings and committees; and the provisions for amending and suspending bylaws.
SVII-2	C4	R12	Administrative Board Regulations	-	Regulations of the educational corporation. They contain the basic rules for the conduct of the corporation's business and affairs.
SVII-3	C4	R12	Academic Council Regulations 2016	-	Regulations that govern the Academic Council as the highest academic body of the Polytechnic University, responsible for the maintenance of standards of instruction, education, and examination within the University, with the right to advise the various Academic Schools on all academic matters.
SVII-4	C1-5	R12-13	Evidence Inventory Institutional Self-Evaluation Rubric Standard VII	-	Provided document by MSCHE as a rubric and used as the instrument for the survey.
SVII-5	C1-5	R12-13	Institutional Strategic Plan 2016-2021	-	UPPR's vision for the future and organization's goals and objectives.
SVII-6	C1-5	R12-13	Institutional Strategic Plan 2022-2027	-	UPPR's vision for the future and organization's goals and objectives.

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