

# ***Architecture Program Report***

School of Architecture

Polytechnic University of Puerto  
Rico

September 7, 2023

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The logo for the National Architectural Accrediting Board (NAAB) is displayed in white on a black background. It consists of the letters 'NAAB' in a bold, sans-serif font. The 'N' and 'A' are connected at the top, and the 'A' and 'B' are connected at the bottom, creating a stylized, overlapping effect.

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## Architecture Program Report (APR)

2020 Conditions for Accreditation

2020 Procedures for Accreditation

<b>Institution</b>	<u>Polytechnic University of Puerto Rico</u>
<b>Name of Academic Unit</b>	School of Architecture
<b>Degree(s)</b> <i>(check all that apply)</i>  <b>Track(s)</b> <i>(Please include all tracks offered by the program under the respective degree, including total number of credits. Examples:   150 semester undergraduate credit hours   Undergraduate degree with architecture major + 60 graduate semester credit hours   Undergraduate degree with non-architecture major + 90 graduate semester credit hours)</i>	<input checked="" type="checkbox"/> <u>Bachelor of Architecture</u> Track: 213 semester undergraduate credit hours  <input type="checkbox"/> <u>Master of Architecture</u> Track: Track:  <input type="checkbox"/> <u>Doctor of Architecture</u> Track: Track:
<b>Application for Accreditation</b>	<b>Continuing Accreditation</b>
<b>Year of Previous Visit</b>	2015
<b>Current Term of Accreditation</b> <i>(refer to most recent decision letter)</i>	Continuing Accreditation (Eight-Year Term)
<b>Program Administrator</b>	Diana Rivera Rivera, M.Arch. (Dean)
<b>Chief Administrator</b> for the academic unit in which the program is located <i>(e.g., dean or department chair)</i>	Diana Rivera Rivera, M.Arch. (Dean)
<b>Chief Academic Officer of the Institution</b>	Miguel A. Riestra, Ph.D. (Vice-president of Academic Affairs)
<b>President of the Institution</b>	Ernesto Vázquez Martínez, Eng.
<b>Individual submitting the APR</b>	Diana Rivera Rivera, M.Arch.
<b>Name and email address of individual to whom questions should be directed</b>	Diana Rivera Rivera, M.Arch.

### Submission Requirements:

- The APR must be submitted as one PDF document, with supporting materials
- The APR must not exceed 20 MB and 150 pages
- The APR template document shall not be reformatted



## INTRODUCTION

### **Progress since the Previous Visit (limit 5 pages)**

In this Introduction to the APR, the program must document all actions taken since the previous visit to address Conditions Not Met and Causes of Concern cited in the most recent VTR.

*The APR must include the exact text quoted from the previous VTR, as well as the summary of activities.*

### **Program Response:**

In our previous VTR (2015) the visiting team identified four Conditions Not Met, two Student Performance Criteria Not Met and four Causes of Concern. (see Appendix 0-A-1-INTRO-2015-VTR).

### **Conditions Not Met**

#### **I.2.1 Human Resources and Human Resource Development: Faculty and staff.**

##### **2015 Visiting Team Assessment:**

*“Faculty and staff numbers have decreased in recent years, which leaves no support (other than directors) in the various research and support labs. A receptionist position was lost as well. Those functions are now being covered by remaining staff (Lourdes and Maribel) and work-study students (10-20 hours/week). These cuts are attributed to a dramatic drop in student enrollment, but resources seem stretched to the maximum, without backup. The team is concerned that positions are being cut while program needs and responsibilities are expanding. There are also concerns regarding access to new resources, such as the Materials Laboratory and Conservation Laboratory.”*

-To render most accessible and effective our various research and support resources like the Materials Laboratory four specific measures have been taken: 1). Expanding the number of hours that the lab director is present. The Dean requested an academic release to enable the director to dedicate more time to the laboratory, and less academic load; 2.) Reprogramming operation hours at times most convenient for students; 3.) Assigning faculty members to assist in the use of these facilities as part of their additional credit load 4.) Increasing work hours of work–study students trained in equipment performance.

-Since 2017 we recruited the following faculty members who also have administrative responsibilities: Evelyn Villalobos-Master of Conservation Program Coordinator, Alejandro Excia- Product Design Program Coordinator, Cecile Molina-Master of Landscape Architecture Program Coordinator and full-time professor for the LA program. Part-time professor Amy Pérez became full-time professor and Director of Academic Affairs.

-Our full-time faculty was reduced since 2015 from 11 to 8 (2020). As of Fall 2023, we have 10 full-time faculty.

- We have been able to supplement the needs of the program through part-time faculty members which bring diversity to the realm of professional practice experience.

- The commitment of our faculty, many of whom have been in our School for more than 20 years, is an important asset that helps our student body.

-Our school's physical resources are a key asset for the recruitment and retention of our student body by providing an ample studio space and providing tools, workshops, and labs which we keep up to date.

- We continue working on scheduled itineraries or by appointment and special hours available during high demand periods like mid-terms and finals.

#### **I.2.2 Administrative Structure and Governance:**

##### **2015 Visiting Team Assessment:**

*“Administrative: The number of programs at the school is growing (two have been newly implemented, and another is on the way), which has implications for the direction of the architecture program. The program is currently the direct responsibility of the dean, with significant help from an associate dean and administrative staff. Both the dean and associate dean have teaching responsibilities; the dean also maintains a professional practice.*



*The size of the administrative staff might be inadequate for future growth of the program to full capacity. There is strain on the current administrative staff as they support faculty, carry out administrative duties, and fulfill their need/desire to respond to students in a timely manner.”*

*“Governance: Some faculty are involved in policy and curriculum development through committees within the School of Architecture, including committees for curriculum and personnel. School faculty members participate in the University Academic Council. In all cases, faculty representatives are appointed by the dean (not equitable opportunity).*

*Student representatives from each program (one from the architecture program) participate in the University Student Council and are also appointed by the dean (not equitable opportunity).*

*There is no formal venue for students to participate in school/program governance, though the dean maintains a widely appreciated “open door” policy.”*

Administrative: Four programs complement the architecture offering: master of landscape architecture, bachelor in interior design, master of architectural conservation and rehabilitation and associate degree in product design. A director or coordinator oversees each program and reports to the dean of architecture. For the past three years the School of Architecture has strengthened the role of the Program Coordinators to provide as a liaison between the dean, academic director, faculty, and students from each program, while they also alleviate the dean from certain responsibilities and tasks that are program specific. This administrative team discusses progress reports of the programs, important matters to address, and assign tasks or resolve issues.

Governance: Faculty designation process to the university academic council and other committees be acknowledged as appointments made by the dean, together in consultation with the administrative team and coordinators. We acknowledge that these procedures should be inclusive. Within the school organization there are also designated coordinators per component (Representation, Design, History and Theory, Practice, Structures, and Technology). Most of the time, the appointee is a full-time faculty member because their contractual commitment to the school allows for these tasks to be executed with more flexibility. Nonetheless, a part-time faculty member may be appointed as well.

Two key student organizations repeatedly receive official support from the dean’s office and staff: AIAS and the university student council. We encourage periodical student assemblies and provide more open forums so the student body can take a more active role in the program’s governance. At the program level, meetings with the dean and academic director further the students’ appreciation of the school’s open-door policy.

#### **1.2.4 Financial Resources**

##### **2015 Visiting Team Assessment:**

*“The visiting team has determined the financial resources condition to be “inadequate.” In making this determination, the team recognized that the new/reconfigured architecture space was a significant financial commitment to the architecture program’s future by the administration. However, as important as this single step is to the program, the lack of reported information, required by the NAAB below, causes the team concern. The team was told that the overall budget for the architecture program is based on history, the enrollment count, and negotiations with the dean.*

*Additionally, while the team notes that the economy in Puerto Rico has suffered in recent years, it is the lack of transparency by, and information from, the university to the school that makes this item difficult to evaluate. That said, the loss of faculty positions, staff positions, and work-study assistants seems related to diminished financial support/resources.*

##### **Financial Resources Conclusions:**

*Overall, the team understands the poor economic conditions in the entire country; however, the team feels that the dean and the program need more financial information in order to better assist the university in the management of the resources.*

*Whether this is an attempt to raise revenue or to create an inclusive “design” program at the university, the program needs to be able to financially measure how it is doing and develop ways to increase its departmental budget while increasing total revenue for the university.*

*Further, the team is concerned, as noted, about the ability to sustain quality faculty at the current salary levels. This will have an effect on the overall program if and when the economy gains some ground in Puerto Rico.*



*The lack of information and other cited concerns are the reasons for the team's decision to rate this item as "inadequate."*

The institution has provided documentation to help understand the institution's and program's budget and financial reports. Appendix 0-C-1 and Appendix 0-C-2 provide a revised graph of the University's revenues vs expense from Academic year 2015-16 up to Academic year 2018-19 and a table showing the revenues and expenses from all sources throughout those years. The academic programs at the Polytechnic University operate with two types of budgets: the operational and discretionary. The operational budget oversees the administrative and faculty salaries as well as operational expenses and overhead costs. The discretionary budget is prepared every year with the Office of the Vice President for Administration and Finance and the Budget Office together with the Program Directors. See Appendix 0-C-3 and Appendix 0-C-4 for details and diagram of Budget Preparation Process. This assigned budget allows the program to allocate and distribute the money as it sees fit in the different items listed. See Appendix 0-C-5 for budget items and budget distribution.

The Office of Finance explained that the overhead expenses are calculated with a formula that assigns a cost per faculty head count of each department. This cost is added to the payroll and operational expenses to provide the total expenses per program. The deficit shown is related with the decrease in enrollment vs the increase in faculty head count shown along the years. In 2015, with the highest enrollment number and lowest head count number there was no deficit. However, with a decrease in enrollment and a continuous increase in part-time faculty, the net change of revenues and expenses does show a deficit. After discussions with the Budget and Finance Coordinator, regarding the revenue and expenses, to eliminate the program's deficit our goal is to reach enrollment of 400 students.

## **II.2.2 Professional Degrees and Curriculum**

### **2015 Visiting Team Assessment:**

*"As shown in the VTR for this section, 87 electives and general (non- architectural) studies courses, at 41% of the 213 total (trimester) credit hours, are required for the degree, which exceeds the minimum of 68 trimester hours required by the NAAB. However, the 213 trimester credit hours translate to the equivalent of 142 semester credit hours, falling short of the required 150 minimum required by the NAAB (225 trimester credit hours). This continues from the last accreditation visit of 2009, though the visiting team determined that the school had met this requirement, generally."*

Dean Betancourt formally questioned said understanding and, as such, it was eventually brought to the attention of the NAAB Board. The Board acknowledged the school's credit compliance as it was informed to Dean Betancourt by Helene Combs Dreiling, FAIA, Interim Executive Director, and Associate Director Ellen Cathey. An official letter was received from NAAB clarifying the subject (see Appendix D-1).

**A.9 Historical Traditions and Global Culture** *This criterion calls for understanding of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socio economic, public health, and cultural factors.*

### **2015 Visiting Team Assessment:**

*"Evidence of most requirements was found in ARCH 1010: History of Architecture, as well as ARHH 1010. As noted in the syllabus for ARHH 1010, Intro to Theory, "exposure of architectural thinking throughout time" brings about an understanding of global architectural theory through lectures and assigned readings. Evidence includes studies of ancient architecture-Roman, Greek, and Renaissance. Latin American, North American, and European cultures are discussed in HIST 2010 as they relate to the development of Puerto Rico, specifically. However, no evidence was found of content or outcomes related to historic traditions and cultures from Asia and African continents. Exposure to other cultures was provided in optional/ elective courses and study abroad. The students were lacking exposure to, and an understanding of, traditions in the Eastern cultures (especially Asia). The course projects and exams are in Spanish only."*



Four courses have been revised to incorporate subjects akin to Criterion A.9. ARHH 1010 [History of Architectural Space] informs and tests students on subjects like: primitive societies in Latin America, including Aztecs and the Maya; early civilization in Africa, Egypt, the churches at Lalibela; also, Islam and its influences in Spain and Spanish Colonial America. Examples from China (Han and Ming Dynasties) are India are discussed. In HIST 2010 [History of Puerto Rico in the Caribbean Context], students address the geopolitical importance of Africa during the slave trade and specific cultural practices of societies along the continent's Atlantic coast. Islamic influences are also studied as manifested in Puerto Rico, Cuba, and the Dominican Republic. HIST 4030 [Historiography], a course in which students debate divergent canons and ways of thinking by studying texts from East, West and North and South on a comparative basis. ARHH 3010 [Neo avant-garde and the Contemporary Scene] provides an overview of major late modern and contemporary developments in Japan and China.

***B.7 Financial Considerations*** *This criterion demands understanding of the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting.*

**2015 Visiting Team Assessment:**

*"This criterion is Not Met. While evidence was found through student tests in ARPP 3010 that showed practice/experience demonstrating student understanding of architect fees, project budgets, change orders, payment schedules, and market value and feasibility, no evidence was found related to life-cycle costs.*

*This criterion demands **understanding** of the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting."*

A sequence of seven courses have been aligned to organize related themes at different levels of complexity. In ARTE 2010 Materials and Methods, the concept is first introduced for students to build up their understanding. In ARRP 3010 Practice Experience, four classes articulate life-cycle cost considerations. In ARTE 4010 Electricity, Acoustics & Telecommunications, and ARTE 4020 Environmental and Mechanical Systems, students learn about the practical application of life-cycle analysis to better inform the selection process of one system over another about the needs of a specific project. Ad hoc Power Point presentations, examples presented on a comparative basis, and special lecturers help students understand the importance of building and operational costs, financial feasibility, construction estimating, and life-cycle cost accounting. The above-mentioned technology courses provide a basis for students to test their understanding of life-cycle costs when taking 400-level courses which require a broad-based approach to design: ARCH 4010 Advanced Design I, and ARCH 4030 Advanced Design III. Close to exiting the program, students take ARPP 5030 Office Management and Finances, a course in which life-cycle costs are presented as a "recap" of financing options, fiscal feasibility, and cost control. Our faculty keeps an on-going discussion about how to best underline life-cycle costs by prospectively integrating Criterion B.7 in Capstone Project courses (500-Level).

**Causes of Concern**

**A. Long-Range Planning and Support by the Administration.**

**2015 Visiting Team Comments:**

*"In some part due to the current economic environment, there is concern regarding the unknowns at the institutional level with respect to the financial planning and funding for the School of Architecture (ARQPOLI), as well as the administrative support provided for the school's leadership as the university develops additional programs related to architecture (Interior Design, Product Design, and Landscape Architecture). This is a private institution, and there are drivers beyond legacy (i.e., financially driven) that are of some concern to the visiting team."*

Adding programs has brought diversification, which has rendered expected results. An increase in students has brought new hiring and expanded our faculty. The structure of our curriculum (Fall, Winter, Spring) allows students to opt for different teaching philosophies within the school.

**B. Administrative Support**



**2015 Visiting Team Comments:**

*“There is an absence of a formal evaluation process and related policies regarding administrative positions (e.g., dean, upper administration).”*

The institution has been reliant on the relative effectiveness of the informal methods of evaluation with which it has operated for some time now as a small-scale institution.

The 2022-2027 Institutional Strategic Plan (ISP) has established a procedure to ensure that the resources 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 Coordinator of the ISP who reports to the President.

**C. Commitment to Faculty**

**2015 Visiting Team Comments:**

*‘Faculty are working without updated contracts and salaries. Tenure was eliminated several years ago, but multi-year contracts for full-time architecture faculty need to be resolved.’*

Contracts have been updated. As confirmed by the university’s Department of Human Resources, since August 2015, faculty contracts are renewed only on a yearly basis. An institutional moratorium on issuing multiyear contracts remains in force until these are revised.

**D. Facility Access and Security**

**2015 Visiting Team Comments:**

*“Students expressed concerns related to access to studios and resources in the facilities. Items have been stolen or vandalized in the new studio space. Students felt that these crimes were directly related to the open-door policy of their studios with regard to students from other colleges. The faculty also expressed concern over the lack of locks on their office doors. Faculty members do not leave nice books in their offices for fear of theft. The visiting team believes that the program administration is aware of these issues and will continue working to find solutions.”*

Security protocols have been rigorously enforced, students and faculty cooperate. Prevention, quick assistance, and responses to any situation are facilitated, given the fact that the university’s security office is housed within the first floor of the building where the school operates.

**Program Changes**

Further, if the Accreditation Conditions have changed since the previous visit, the APR must include a brief description of changes made to the program as a result of changes in the Conditions.

*This section is limited to 5 pages, total.*

**Program Response:**

- Significant efforts have been geared towards new opportunities for collaboration with National Park Service, the Puerto Rican Institute of Culture, Puerto Rico’s Tourism Department, and key community service organizations.
- New programs such as a major in Urban Planning, an associate degree in Product Design, and a graduate program in Architectural Conservation and Rehabilitation create an opportunity for collaboration, innovation, and empathetic enterprises with other disciplines. Having the landscape architecture program within the School of Architecture has enhanced the environmental and ecological knowledge within our design studio culture, while also stimulating a more comprehensive discussion on the interaction between the built and natural environment
- To address changes in the NAAB Conditions, the Dean has implemented a consultation process tiered for focused emphasis on the scope and curricular impact of the revised conditions. In parallel, he has asked faculty to align these changes to the institutional learning objectives and assessment plan.
- Course syllabi are amended to best reflect the renewed expectations of the NAAB conditions.
- Studio culture has been adapting to new ways of learning, although, as a school, we still believe the the face to face.



- During the past couple of years, the school has been recruiting younger part-time faculty who bring fresh ideas, and technological knowledge that complements the experience of recurring faculty members.
- A high percentage of the part-time faculty are also practicing professionals which who remain up to date with current issues in the professional environment.
- A new faculty member that have joined our program since 2017 are Raúl Rivera-Ortiz, former president of the Puerto Rico Licensing Board, who is the school's Licensing Advisor.
- Our workshops have been upgraded with a new CNC machine (since Spring 2021) and a new laser cutter (since Spring 2023) providing student with additional tools.
- Our Digital Archive is focusing on the documentation of student work and research projects.
- We are updating all the program information on the Institution's website to assure it is available to the public and to comply with NAAB requirements.
- A comparative matrix was created to identify areas that we need to address and improve in program and student criteria.
- To address PC. 1 Career Paths, the School has appointed architect Raúl Rivera-Ortiz as our Licensing Advisor. Rivera-Ortiz lectures on the licensing procedures and NCARB requirements every academic term (Fall/Winter/Spring).
- The landscape architecture consultant has been an integral part of this group of experts by integrating ecological issues in design studios and other elective courses, helping us address the Program Criteria 3- Ecological Knowledge and Responsibility.
- The course ARCH 4030: Advanced Design II is a comprehensive design course that requires students to demonstrate the integration of all aspects of design and technological concepts. The use by students of thematic consultants is highly recommended throughout the duration of the course.
- The program is assessing the incorporation of design synthesis and building integration in earlier design courses like ARCH 1030 (last design of first year) and ARCH 2030 (last design of second year) where a stronger demonstration of synthesis, analysis and the integration of building and context should be required.



## NARRATIVE TEMPLATE

### 1—Context and Mission

To help the NAAB and the visiting team understand the specific circumstances of the school, the program must describe the following:

The institutional context and geographic setting (public or private, urban or rural, size, etc.), and how the program’s mission and culture influence its architecture pedagogy and impact its development. Programs that exist within a larger educational institution must also describe the mission of the college or university and how that shapes or influences the program.

*Program must specify their delivery format (virtual/on-campus).*

#### **Program Response:**

The campus of the Polytechnic University of Puerto Rico (PUPR) is located in an urban locale in the metropolitan area of San Juan. It covers approximately ten acres in downtown Hato Rey, the financial center of Puerto Rico. It is currently composed of six buildings, utilized for academic, administrative, athletic, and parking purposes. These buildings and associated grounds comprise the so-called "campus core", around which all academic activities revolve. Most of our courses are offered on campus.

The School of Architecture, also known as ARQPOLI, will celebrate its 28th year, with over 400 enrolled students. An institutional open-admissions policy remains one of our finest mechanisms for affording variety and change to be a part of the school’s daily life. Much of the internal discussion, which drives the evolution of the school, comes from the diversity of its student body. At the level of the dean’s office, the decentralization of decision levels has led to more direct and wide communication venue with the faculty and student body.

As part of the Institutional Strategic Plan 2022-2027 and the self-study process for the reaffirmation of accreditation by the Middle States Commission on Higher Education (MSCHE) on Spring 2024, Polytechnic University of Puerto Rico has revised the institution’s mission:

*“The Polytechnic University of Puerto Rico provides opportunities to individuals from diverse backgrounds to cultivate their potential for leadership, productivity, and competitiveness with the aim of contributing to society. PUPR achieves its mission by serving individuals from different academic, economic, geographical, and ethnic contexts through exposure to intellectual, scientific, humanistic, and technological advancement, and by applying innovative methods of delivery”.*

The principle of the provision and enablement of higher education to disadvantaged students has guided the institution’s history through the years. The mission has evolved also acknowledging the need for inclusion with the recognition of critical thinking as part of its idiosyncrasy by applying innovative methods of delivery. The emphasis given to sustainability is one of the conditions that notably assist in the fulfillment of a socially responsible world. Polytechnic University of Puerto Rico provides opportunities for individuals from diverse backgrounds. It includes financially disadvantaged students, individuals from public high schools, working adults, and high academic achievers.

The mission of the architecture program of ARQPOLI reflects its main goals and the direction in which to advance:

*“Through joint intellectual, humanistic, creative and technical pursuits, the School of Architecture encourages individuals from diverse backgrounds to acquire the knowledge, skills and sense of social responsibility that are considered to be fundamental to a discipline concerned with the betterment of the human condition and the physical environment. By expounding an understanding of historical processes, rapidly-advancing technology and ever-present social predicaments, the school empowers students to exercise their potential for service, collaboration, creativity, productivity, leadership and civic engagement within society.”*



In terms of architectural education, our rationale (at an undergraduate level) of research as resource and learning tool has promoted intellectual curiosity among students, while simultaneously expanding the scope of subject matters and design themes beyond local architectural practices. Most importantly, the open admissions policy at Polytechnic addresses a larger demography of students interested in the academic and cultural challenges of studying Architecture. ARQPOLI has focused its civic responsibility on rendering the profession as an accessible goal, articulating pedagogical strategies that will allow students to achieve such goals. Throughout its history, the program has established its place in architectural education with the recognition and preservation of design and research as interdependent realms that are nurtured with the inclusion of diverse interests and strategies. The program has consolidated what we understand to be its differentiating features: its orientation towards design as research and the emphasis on critical thinking.

The program's role in and relationship to its academic context and university community, including how the program benefits—and benefits from—its institutional setting and how the program as a unit and/or its individual faculty members participate in university-wide initiatives and the university's academic plan. Also describe how the program, as a unit, develops multidisciplinary relationships and leverages unique opportunities in the institution and the community.

### **Program Response:**

Polytechnic University of Puerto Rico, a private, non-profit, was founded in September 1966. After almost six decades and expanded offerings, it remains the largest private engineering school in Puerto Rico and the only one in the Metropolitan San Juan area. It is also the largest private Hispanic-serving engineering school in the United States and its territories. What started as an adult, evening, community-based institution has gradually become more of a traditional day school, serving a large population of underprivileged students, always representative of a diverse spectrum. To date, PUPR has performed as a teaching institution, but current developments foretell expanded research commitments in the future.

During the fall of 1995, PUPR established its New School of Architecture, the second in Puerto Rico since 1965, and now the largest of the Island. By adding Architecture amongst its offerings, La Poli, as many refer to the university, reinforced its interdisciplinary commitment to the environment, the construction industry, and the need to promote a sound and sustainable future for both. The program was created on the belief that another architecture school in Puerto Rico could greatly enrich professional growth and debate in the island. Thus, Polytechnic University would be an excellent setting for the new program given the fact of the already established professional programs in Engineering and Surveying, all happening within a single institution.

The program serves as a complementary academic space that enables compliance with the Institutional Learning Objectives. For example, being the major creative and design-oriented component in campus, where degrees in engineering predominate, the program provides an additional space that potentially stimulates curiosity and knowledge transfer among disciplines. Moreover, the influential way in which the program has grown and matured has made possible the transformation of several academic initiatives into other programs of undergraduate and graduate studies, increasing the academic offerings of the PUPR. For example, the School of Architecture, which recognized as vital the subject of Landscape Architecture, sponsored the professionalization of such discipline in the country through the creation of the Graduate Program in Landscape Architecture. Other feature that has distinguished ARQPOLI is being the only school in the Caribbean with an Architectural Conservation Laboratory that has set pedagogical guidelines at a bachelor's level and the creation of Graduate Program in Architectural Conservation and Rehabilitation.

By operating as part of the only university in the island that brings together all branches of the construction industry under one campus, our school encourages interdisciplinary initiatives. Students and the faculty alike benefit from this, and the program is nurtured by having access to the university's resources and facilities including Science and Engineering laboratories. Specialists in each branch of Engineering often participate in courses, they also directly assist and mentor architecture students on special projects. The physical proximity among these professionals and students truly translates into intellectual accomplishments.



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 other enriching extra-curricular and professional development activities (e.g., sixteen-year Professional Development Program in Transportation Infrastructure Inspection - PDPTII PUPR/ACI-Herzog. This year participants are six, four engineering students and two architecture students.

Our annual Summer Program is an opportunity to connect with the community. The program includes faculty and architecture students as teaching assistants. As a closing event, there is an exhibition open to the public. During the summer 2023, participants were able to use the Virtual and Innovation Center (VEIL). At VEIL, they explored Virtual reality tools and recorded a presentation of their work at their recording studio.

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 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.

This includes training in interface equipment, Cengage eBooks and WebAssign, 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.

The ways in which the program encourages students and faculty to learn both inside and outside the classroom through individual and collective opportunities (e.g., field trips, participation in professional societies and organizations, honor societies, and other program-specific or campus-wide and community-wide activities).

### **Program Response:**

The program strives to promote a positive and respectful learning environment among students, faculty and staff through a clear Studio Culture Policy. The school of Architecture promotes a dynamic environment where critical thinking, teamwork and leadership are the basis of an education which will provide students the tools and experience necessary to develop a passion for knowledge for the rest of their lives. As the main basis of the development of a healthy studio culture, ARQPOLI propose a curriculum centered in the early insertion of the students in the principles and concepts of architecture as a profession. We encourage that the studio stimulate debate, criticism between equals, sharing of knowledge by all and interaction with other professions and outside communities.

The school offers five programs: Bachelor of Architecture, Bachelor of Interior Design, Master in Landscape Architecture, Master in Architectural Conservation and Rehabilitation, Associate Degree in Product Design. A Major in Urban Planning is offered in the architecture program. The school provides a wonderful and ample place for learning. With imagination and careful planning, its physical facility encourages the use of an open plan as a communication tool between students and faculty. Many of the students that graduate from our program pursue graduate studies. Their careers range from working at local and international firms, establishing construction and development companies, and occupying management and strategic planning positions in the public sector among many other professional niches. New emerging practices such as environmental designers and computer fabrication also form part of our graduate's experiences. In general, our alumni are actively involved with professional associations such as the AIA, and the Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR, College of Architects and Landscape Architects of Puerto Rico). The student organization (AIAS) is committed to assessment issues, having grown fully within a school more openly committed to divulge a more inclusive learning culture.



Annually, our students participate in the event “Parking Day”, which is coordinated with AIA and CAAPPR. In Puerto Rico this initiative started in our Master of Landscape Architecture program.

Our school hosted visits from Tulane University and Harvard University. Both programs engaged in research visiting and documenting conditions of our local communities.

Tulane University (Summer 2023):

<https://www.nps.gov/articles/000/heritage-risk-resiliency-documentation-program.htm>

Harvard University (Fall 2023):

<https://www.qsd.harvard.edu/course/island-of-enchantment-atmospheric-grounds-fall-2023/>

Our agreement with ETSAM Escuela Técnica Superior de Arquitectura de Madrid (UPM) provides for student and faculty exchange. Each year, a professor from ETSAM (Arch. Pedro Urzaiz) teaches fourth year Design Studio (Winter term) and a group of students goes to ETSAM to study abroad for one academic term (Spring term).

### **Summary Statement of 1 – Context and Mission**

*This paragraph will be included in the VTR; limit to maximum 250 words.*

#### **Program Response:**

The School of Architecture, also known as ARQPOLI, was founded in 1995. This next visit, Spring 2024, the program will celebrate its 28th year, with over 400 enrolled students, with conviction and constant self-criticism. The program has evolved from one rooted in the Caribbean as a region, into one that understands the Caribbean as one condition to be considered in a larger frame. Much of the internal discussion, which drives the evolution of the school, comes from the diversity of its student body.

PUPR’s program of Architecture is the only Architecture program in Puerto Rico with a structure of three academic terms (Fall, Winter, Spring). This structure allows the offering of two course editions during the academic year, providing flexibility when customizing each academic schedule. ARQPOLI has focused its civic responsibility on rendering the profession as an accessible goal, articulating pedagogical strategies that will allow students to achieve such goals.

At the level of the dean’s office, the decentralization of decision levels has led to more direct and wide communication venue with the faculty and student body. Throughout its history, the program has established its place in architectural education with the recognition of design and research as interdependent realms that are nurtured with the inclusion of diverse interests and strategies. The program has consolidated what we understand to be its differentiating features: its orientation towards design as research and the emphasis on critical thinking.



## 2—Shared Values of the Discipline and Profession

The program must report on how it responds to the following values, all of which affect the education and development of architects. The response to each value must also identify how the program will continue to address these values as part of its long-range planning. These values are foundational, not exhaustive.

**Design:** Architects design better, safer, more equitable, resilient, and sustainable built environments. Design thinking and integrated design solutions are hallmarks of architecture education, the discipline, and the profession.

### Program Response:

The discipline of architecture, as we understand and teach at our school, provides solutions to problems, but also the opportunity to educate the client and exceed their expectations. In that aspect, with design courses, we take great care in experimenting with various sources of inspiration that could generate an architectural idea. Through critical thinking, experimentation and systematization, the student forms different solutions to the same design problem. This allows students to realize that the same problem may have multiple solutions and there is always an alternative that is better than others. In this way we express to our students that it is always better to consider more than one alternative to find the best solution to a design problem.

In its broadest sense, architecture comprises a wide spectrum of realms. It approaches buildings, heritage, infrastructure, outdoor as well as indoor spaces, landscape, and human participation. In this regard, cities, governments, and populations are facing extreme challenges regarding climatic transformations, urban instabilities, and economic fragilities. Rather than approaching these problems with a pessimistic view, the curriculum at ARQPOLI, sees it as an opportunity to expand new knowledge, multiply expanded fields and develop rigorous competencies.

Architecture, in its broad definition and in accordance with our curriculum, implies the participation of public, private and academic sectors in the task of promoting strategies and inspires further work that addresses knowledge and innovation; sustainability and environment; and variation and transformation. Many of our courses provide the students with the necessary intellectual tools to understand and value the gains and losses, successes and challenges, and threats and opportunities of our contemporary world.

The school's commitment to expand the critical body of architectural knowledge and innovation is exemplified by the central role that research, in every aspect of the word, plays in raising an awareness of the urgency and pertinence of our profession. The role of the theory and history courses is crucial in the understanding of the development of our built realm. Courses such as Historiography (HIST 3510), Mid-career research (ARCH 3010) and Capstone design I (ARCH 5010) expose the students to question and research the relevancy of contextual issues in the production of architecture. The methodologies of research and investigation are expanded in these courses to provide the students with the necessary tools to address relevant and contemporary problems and to understand the meaning of a good research as the basis of future interventions.

Fifth year's Capstone Design schedules and requirements are rigorously defined for all sections to help students organize their time and scope of work accordingly. The first trimester, Capstone Design I (ARCH 5010), addresses the research part, defining a problem that later evolves until it includes a program and a site. Second trimester Capstone Design II (ARCH 5020), addresses pre-design and development of a schematic design that embodies the intentions and issues that have been explored in the first trimester. The last trimester, Capstone Design III (ARCH 5030), addresses design development to a level of detail that varies in every project depending on the problem being explored and the architecture that seems consonant to it. In any case, the project scale and detail development have to be consistent with the need to corroborate the students' ability to address a wide spectrum of architectural and technical issues.



Non-Curricular activities that address this criterion:

Studio Culture Policy  
Park(ing) Day  
Summer Programs

The Institutional Strategic Plan 2022-27 was approved in November 27, 2023 and we are currently aligning our Long-Range Plan and Work Plan to the Institutional Strategic Plan 2022-27. NAAB 2020 Conditions will be included in our Long-Range Plan 2022-27.

**Environmental Stewardship and Professional Responsibility:** Architects are responsible for the impact of their work on the natural world and on public health, safety, and welfare. As professionals and designers of the built environment, we embrace these responsibilities and act ethically to accomplish them.

**Program Response:**

Sustainability and environment are relevant concepts that expose students to continuous sustainable practices through their five-year program. In addition to a curriculum that emphasizes social and technical aspects, other efforts compliment the school's commitment to the betterment of existing communities and the quality of life of its inhabitants. The concept of environment is introduced in the first and second year design courses ARCH 1010, ARCH 1030, ARCH 2010, ARCH 2030, and is understood as a complex relationship of facts, myths, historical accounts, material evidence and cultural backgrounds.

Intermediate Design I (ARCH 3010), the first studio of third year focuses on Historic Preservation's challenges and discursive methodologies. Students work in group at the beginning of the trimester and dedicate equal amount of effort to the analysis and valuation of the conditions of a site in relation to their historical value, as to design within the possibilities of architectural conservation. Usually, a context rich in historical layers is used as laboratory to expose students to the process of validation they would later use when defending their design strategy. Technical, theoretical, sociological and cultural discussions all come together in this course that prepares students for the next studio in the sequence, organized around the rubric of sustainable.

Non-Curricular activities that address this criterion:

Park(ing) Day  
Summer Programs

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**Equity, Diversity, and Inclusion:** Architects commit to equity and inclusion in the environments we design, the policies we adopt, the words we speak, the actions we take, and the respectful learning, teaching, and working environments we create. Architects seek fairness, diversity, and social justice in the profession and in society and support a range of pathways for students seeking access to an architecture education.

**Program Response:**

At the Polytechnic University of Puerto Rico, the diversification of the student body renders valuable support for the creative environment of an architecture school. This notion is present when considering multiple issues such as: technological or humanistic knowledge, individual research or collective work, theoretical discourse or material experimentation, and competitiveness or social



responsibility. Diversity is the very palpable reality of the program's everyday life as it is its driving force.

The institution has a minimum admission grade point average. However, these numbers are merely technical indicators that do not reflect the Program's higher goal. As the second school of architecture established in the country, the program is conscious of its role of providing an alternative for architectural education. An open admission policy brings together a wide spectrum of ages, personal interests and academic backgrounds; some students might face educational challenges while others come with overachieving profiles. Both extremes and the large middle region are confronted since the first year with all the main questions and issues regarding architectural design, theory and practice. First year is often described as an extended interview or exam. Students have the opportunity to start fresh regardless of previous educational experiences and prove to themselves and to the school his/her aptitude, commitment, talent and discipline within a creative environment.

The increasing levels of complexity are experienced gradually by the students. A careful selection process of faculty members and resources is essential to ensure that the curriculum demands are met. Each faculty member is strategically located throughout the program according to their ability to teach at specific pedagogical levels, and their professional and/or academic interests, and experience. For both faculty and students, there is a deliberate focus on diversity: diverse academic backgrounds, interests, research fields, disciplines, and design ideologies. The faculty mimics in composition the students' body heterogeneity.

The School makes unique contributions to the institution in the area of Equity, Diversity, and Inclusion; some of them are presented below.

1. ARQPOLI provides a designer approach in a technically oriented institution.
2. ARQPOLI attracts students sensible to the humanities (art, history and culture).
3. ARQPOLI contributes to the overall student retention statistics providing an alternative for students in other programs whose interests are driven to the creative process of architecture.
4. ARQPOLI Architecture Summer Program offers an alternative to explore studio culture as diversity.
5. Student's assemblies and the dean's office focus groups contribute to the program's self-assessment.

Non-Curricular activities that address this criterion:

- Studio Culture Policy
- AIAS Student Chapter
- UPPR-Student Organizations
- Summer Programs

The Institutional Strategic Plan 2022-27 was approved in November 27, 2023 and we are currently aligning our Long-Range Plan and Work Plan to the Institutional Strategic Plan 2022-27. NAAB 2020 Conditions.

**Knowledge and Innovation:** Architects create and disseminate knowledge focused on design and the built environment in response to ever-changing conditions. New knowledge advances architecture as a cultural force, drives innovation, and prompts the continuous improvement of the discipline.

**Program Response:**

The last trimester of the fourth year studio sequence, Advanced Design III (ARCH 4030), is aimed at integrating technology, structural design, infrastructure, materiality and program design into a large project of enough complexities.



Fifth year's Capstone Design schedules and requirements are rigorously defined for all sections to help students organize their time and scope of work accordingly. The first trimester, Capstone Design I (ARCH 5010), addresses the research part, defining a problem that later evolves until it includes a program and a site. An architectural artifact must be produced in Capstone. This reflects the school's conviction that even the most radical theoretical departure can produce an actual building. Here, building is essential to the impact the school wants to have promoted in Capstone, where pertinence is a key issue of the projects' discussion. However, this does not mean that students who prove the relevance of using a hypothetical scenario as a Capstone project are dissuaded if the case is made clearly in favor of experimentation and the production of an alternative architecture as a legitimate contribution to architectural knowledge.

Proximity to engineering programs promotes interaction among faculty and students of both programs. Efforts to increase interdepartmental collaboration have permitted an exchange of knowledge and resources, including the use of sophisticated equipment and technical support. The part-time faculty challenges the school's teaching activities with their new design sensibilities, pedagogical experiments, and critical mind.

The school makes unique contributions to the institution in the area of Knowledge and Innovation; some of them are presented below:

1. ARQPOLI provides several task forces Architectural Conservation and Rehabilitation.
2. The program's Lecture series and seminars have attracted a wider audience, beyond the academic community.
3. The university's continuing education program.
4. Polimorfo, ARQPOLI's official journal, publishes research topics brought to the attention through coursework and visiting lecturers.
5. The school's facilities are open to students of the university during extended hours and 24 hours at specific periods.
6. Closeness and communication to engineering disciplines, their faculty and students.
7. Up to date library services and excellent online resources.
8. Interaction with other programs is reflected in the following areas:
  - a. Students learn foreign languages as elective courses in the Socio- Humanistic Department.
  - b. Sustainability projects are promoting collaborative work among the different departments.
  - c. The Landscape Program shares faculty members with the school, and its resources are open to students particularly those in Mid-Career research and Capstone courses.

Non-Curricular activities that address this criterion:

UPPR Career Development (IDEA)  
Summer Programs

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**Leadership, Collaboration, and Community Engagement:** Architects practice design as a collaborative, inclusive, creative, and empathetic enterprise with other disciplines, the communities we serve, and the clients for whom we work.

**Program Response:**

In third year, ARCH 3010 several approaches to identify scale of projects suitable for managing issues of composition, site design, materiality, infrastructure and lifestyle. Instead of offering a specific solution for addressing sustainable design, the course is aimed at letting students work with the many variables (both material and conceptual in nature) that define the problems and



the possibilities of sustainability. Technical, theoretical, sociological and cultural discussions all come together in this course that prepares students for the next studio in the sequence, organized around the rubric of sustainable design.

Advanced Design II (ARCH 4020) addresses urban design and has been a vehicle for collective work and collaboration with non-profit and community-based organizations. The first trimester, Capstone Design I (ARCH 5010), addresses the research part, defining a problem that later evolves until it includes a program and a site. Here, building is essential to the impact the school wants to have promoted in Capstone, where pertinence is a key issue of the projects' discussion.

Most faculty members combine teaching with a professional practice. Some of these professors are consultants in the construction industry while others are respected artists, state employees, or recognized designers. Junior faculty brings new questions and theoretical frameworks. Together with the more experienced professionals and their perspective these inquiries provide an atmosphere of open debate and discussion.

The school makes unique contributions to the institution in Leadership, Collaboration, and Community Engagement; some of them are presented below:

1. Collaborations and alliances with other programs, institutions, community-based organizations and non-profit task forces increase the Institution's involvement in social, academic, cultural, and professional spheres. Some of these include:

- Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
- American Institute of Architects (AIA)
- State Office of Historic Preservation -Puerto Rico (SHPO-PR)

2. Flexible administrative structure allows for fast responses to changing conditions and opportunities.

- Heritage Risk & Resiliency Documentation Program- Summer 2023  
Tulane University / National Center for Preservation Technology and Training-U.S.  
National Park Service (NCPTT) / Puerto Rico State Historic Preservation Office (PRSHPO)

The Caribbean multi-racial and multi-cultural context in which our school is located is imperative, and we understand design from this background and condition. Therefore, design courses expose students comparatively to different contexts and realities with diverse design qualities or achievements. The exercises are intended to activate creativity in improvised contexts, to present architecture as an organizer of the public or community space, and to show that all citizens should have the right and the same access to good design. Moreover, the exercises are intended to introduce students to architecture as a vehicle to improve the conditions of those communities. In some courses, students also can directly exchange ideas with a community, which has led to simple projects that participants have had the opportunity to build. Also, several of the capstone projects are also testing this approach trying to respond to the diversity of clients and inhabitants developing examples of affordable housing that are not only creative solutions to the housing problem but also improvements to the community.

Our school cares about educating responsible citizens who are inserted in different areas of society and profession. The diversity of graduates working in the committees of the Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR). Graduate architects of our school have developed creative enterprises. For example, using new technologies that allow other architects to build new textures and shapes by creating custom-perforated panels that have opened the doors to creativity rather than being limited by the existing suppliers.

Non-Curricular activities that address this criterion:

AIAS Student Chapter



## Summer Programs

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**Lifelong Learning:** Architects value educational breadth and depth, including a thorough understanding of the discipline's body of knowledge, histories and theories, and architecture's role in cultural, social, environmental, economic, and built contexts. The practice of architecture demands lifelong learning, which is a shared responsibility between academic and practice settings.

### Program Response:

Both professional architectural organizations CAAPPR and AIA Puerto Rico sponsor competitions that include categories of students' work. We encourage students to participate in these events, especially the annual prize, awarded by CAAPPR, for the best Thesis or Capstone projects among the three architecture schools in the Island. The library hosts an Information Library Program which provide the student with conferences and workshops to familiarize them with the facilities and its organization and to integrate the electronic indexes, databases, serials publications standards and the use of library resources to the curriculum.

By providing knowledge and skills in investigation and problem solving, the school engages the student in a lifelong process of intellectual exploration, reflection, and development. In parallel, information about what the career entails and its related opportunities are integral to the student's education. Problem solving begins with addressing what you do as questionable, and the why you do it, as ponderable. Pertinence becomes central in the Capstone projects (ARCH 5010, ARCH 5020, ARCH 5030). Together with **Intermediate Design I (ARCH 3010)** and Mid-Career Research course (ARCH 3030) they offer the students the opportunity to explore their own questions and define a preliminary agenda for their future.

### Non-Curricular activities that address this criterion:

Studio Culture Policy

AIAS Student Chapter

UPPR-Student Organizations

Summer Programs

The Institutional Strategic Plan 2022-27 was approved in November 27, 2023 and we are currently aligning our Long-Range Plan and Work Plan to the Institutional Strategic Plan 2022-27. NAAB 2020 Conditions will be included in our Long-Range Plan 2022-27.



### 3—Program and Student Criteria

These criteria seek to evaluate the outcomes of architecture programs and student work within their unique institutional, regional, national, international, and professional contexts, while encouraging innovative approaches to architecture education and professional preparation.

#### 3.1 Program Criteria (PC)

A program must demonstrate how its curriculum, structure, and other experiences address the following criteria.

#### Curriculum Map

The highlighted gray cells in the curriculum map indicate which student outcomes a course supports. The assessment calendar for SOs and ILOs is done using this map. Strategic courses are selected from a pool of courses supporting a given outcome. (See Appendix 3)

MATRIX  
ARQPOLI - School of Architecture  
NAAB Program and Student Criteria

		Primary Evidence: <b>M</b> - Level III course - <b>Mastered</b> : The outcome is expected to be attained by the end of this course.		Secondary Evidence: <b>I</b> - Level I course - <b>Introduced</b> : Students are introduced to the skill in this course.		R - Level II course - <b>Reinforced</b> : The skill is further developed/practiced.	
		First Year	Second Year	Third Year	Fourth Year	Fifth Year	Electives
		ARCH 1010: Basic Design I					
		ARCH 1011: History of Architecture Lab					
		ARCH 1020: Basic Design II					
		ARCH 1010: Architectural Representation I					
		ARTE 1010: Introduction to Technology					
		ARCH 1030: Basic Design III					
		ARCT 1010: Introduction to Theory					
		ARCT 1011: Introduction to Theory Lab					
		ARCH 2010: Design Fundamentals I					
		HIST 2010: History of Puerto Rico in the Caribbean Context					
		ARCH 2020: Design Fundamentals II					
		ARTE 2010: Materials & Methods					
		ARCH 2030: Design Fundamentals III					
		ARCC 2010: Architectural Representation II					
		ARCH 2010: History of Modern Architecture					
		ARCH 3010: Intermediate Design I					
		ARPP 3010: Practice Experience					
		ARCH 3020: Intermediate Design II					
		ARST 3010: Structural Concepts I					
		ARCH 3010: Neo-Avant Garde and the Contemporary Scene					
		ARCH 3030: Intermediate Design III (Mid-Career Research)					
		ARST 3020: Structural Concepts II					
		ARTE 3010: Site Planning					
		ARCH 4010: Advanced Design I					
		ARST 4010: Structures III: Steel					
		ARTE 4010: Electrical and Acoustics					
		ARCH 4020: Advanced Design II					
		ARST 4020: Structures IV: Concrete					
		ARTE 4020: Environmental Systems					
		ARCH 4030: Advanced Design III					
		HIST 3510: Historiography					
		ARCH 5010: Capstone Design I					
		ARPP 5010: Ethics					
		ARCH 5020: Capstone Design II					
		ARPP 5020: Construction Documents					
		ARCH 5030: Capstone Design III					
		ARPP 5030: Management and Finances					
		History or Theory 400-L					
		Representation 400-L					
		Technology or Structure 400-L					
PC	Program Criteria						
PC 1	Career Path						
PC 2	Design						
PC 3	Ecological Know. & Respo.						
PC 4	History & Theory	I	I				
PC 5	Research & Innovation	I	I				
PC 6	Leadership & Collaboration						
PC 7	Learning & Teaching Culture	I	I				
PC 8	Social Equity & Inclusion						
SC	Student Criteria						
SC 1	BSW in the Built Environ.						
SC 2	Professional Practice						
SC 3	Regulatory Context						
SC 4	Technical Knowledge						
SC 5	Design Synthesis						
SC 6	Building Integration						

The formal process by which our program measures, analyzes, and implements changes to improve student learning has been developed from varied, informal student evaluation practices that have been carried out throughout the years, even if then lacking a consistent structure per se. The establishment of more clear assessment goals within the last years has enriched and allowed us to expand these. In our assessment plan, assessment takes place at direct and indirect levels and by means of different tools and methods. The assessment process is initiated at course level and enhanced by analysis at program and component levels. Required by accrediting institutions, various tools of cyclical reporting grant the program a comprehensive understanding of progress related to the assessment process.

At Program level:

1. Student's evaluation of all course sections and professor each trimester.
2. Faculty, students, and alumni surveys.
3. The program outcomes Outcomes Assessment Committee assists component coordinators and faculty members in the preparation and evaluation of rubrics and diagnostic tests.
4. Analysis of alumni performance in the Architectural Registration Exam (ARE)



At Course level:

1. Team revision of student work by professors integrating related course components.
2. Individual rubrics to assess projects, texts, and assignments, as well as courses.
3. Diagnostic testing: before and after examinations at selected courses.
4. Oral and written reports.
5. Critiques of student work complemented by professionals invited as jurors.
6. Dean's dialogue with professor regarding student evaluations.

Assessment activities can be summed up as follows: MEASUREMENT initiates at course level; ANALYSIS is undertaken at component and administration levels. IMPROVEMENTS are then originated at program level, trickling down to the components and the courses.

Below you will find the Bachelor of Architecture program and Student Criteria Matrix, where it is shown in detail the shared values, program criteria and student criteria in relation to the Bachelor of Architecture program.



**Matrix**

School of Architecture

Polytechnic University of Puerto Rico

	Year 3				Year 4				Year 5			Non-Curricular Activity						
	FA	WI	SP		FA	WI	SP		FA	SP								
	ARCH 3010	Intermediate Design I			ARCH 4010	Advanced Design I			ARCH 5010	Capstone Design I								
	ARPP 3010	Practice/Experience			ARCH 4020	Advanced Design II			ARPP 5010	Ethics								
	ARHH 3010	Neo-Avant Garde and the Contemporary Scene			ARTE 4020	Environmental Systems			ARCH 5030	Capstone Design III								
	ARCH 3030	Intermediate Design III (Mid-Career Research)			ARCH 4030	Advanced Design III			ARPP 5030	Management and Finances								
	ARTE 3010	Site Planning			HIST 3510	Historiography												
<b>Shared Values</b>																		
Design	X									X								
Env. Stewardship & Professional Respon.	X																	
Equity, Diversity & Inclusion																		
Knowledge & Innovation							X		X									
Leadership, Collab. & Community Engmt.	X				X				X									
Lifelong Learning	X								X									
<b>Program Criteria</b>																		
PC.1 Career Paths		X							X		X							
PC.2 Design					X					X								
PC.3 Ecological Know. & Respon.						X												
PC.4 History & Theory			X					X										
PC.5 Research & Innovation	X								X									
PC.6 Leadership & Collaboration		X						X										
PC.7 Learning & Teaching Culture				X														
PC.8 Social Equity & Inclusion					X	X												
<b>Student Criteria</b>																		
SC.1 HSW in the Built Environ.					X			X										
SC.2 Professional Practice		X																
SC.3 Regulatory Context					X			X										
SC.4 Technical Knowledge					X			X										
SC.5 Design Synthesis					X			X										
SC.6 Building Integration								X										

**PC.1 Career Paths**—How the program ensures that students understand the paths to becoming licensed as an architect in the United States and the range of available career opportunities that utilize the discipline’s skills and knowledge.

**Program Response:**

Under Puerto Rico’s legal framework, two distinct but interrelated organizations regulate and oversee the practice of architecture: the Puerto Rico Architects and Landscape Architects Registration Board (the Registration Board), and the College of Architects and Landscape Architects of Puerto Rico (Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico or-CAAPPR). The Registration Board administers the licensing process which currently closely follows NCARB’s



policies while the Colegio, being a public interest corporation created by a state public law, groups all the architects seeking to practice in the Puerto Rico jurisdiction. Membership in the Colegio is a mandatory requirement for practice which bestows the Colegio with a significant impact on the regulatory environment of the profession, the ethical and professional conduct framework of the profession, as well as the deployment and record keeping of continued education requirements. **The intricacies of the co-existence of these two legal bodies are a cornerstone subject matter for ARPP 3010: Practice/Experience, ARPP 5010: Ethics, and ARPP 5030: Office Management and Finance courses.**

It is important to underline that under the provisions of the Registration Board's enacting law the requirement for professional licensure is a two-tiered process. The first tier requires enlisting with the Registration Board as an Architect-In-Training (AIT) upon graduation from an NAAB accredited professional program (or Board accepted equivalent). Upon this first tier inscription, a certificate is issued by the State that allows the AIT to get enrolled in the CAAPPR. Once these requirements are met, the graduate then may initiate taking the Architects Registration Examination (ARE) divisions and start the clock and record keeping for the two-year supervised practical experience requirement. This experience must be certified by the supervising licensed professional as per the Registration Board. Upon completing the two-year supervised practical experience period, and having passed all ARE divisions, the candidate may apply for Licensed Architect status.

Though as of the date of this report the legal requirement of the supervised practice experience does not mandate NCARB's Architectural Experience Program (AXP), the architecture curriculum, through its practice components, fosters students to enroll in the AXP at the earliest possible time. Two considerations are brought to bear: an approved AXP record is a supervised practice experience accepted by the Registration Board as unequivocal evidence of compliance with the experience required toward licensure, and the AXP's based NCARB Certificate facilitates registration in the other 53 NCARB's jurisdictions. The historical close relationship between the school and the CAAPPR, allows to periodically bring representatives from the Registration Board and the CAAPPR for lectures on the licensing process, the registration examination and practical experience, the intern development program and enrollment into the CAAPPR. Besides, the School encourages graduating students to become registered as Architects in Training soon after graduation and follow with enrollment in the CAAPPR.

The school in many ways continuously fosters students' relationship with the profession and professional organizations. Seminars, lectures, exhibitions, and conventions sponsored by the CAAPPR, the American Institute of Architects Puerto Rico Chapter and other organizations are well attended by students. Of particular interest and engagement are the charrettes, frequently organized by the CAAPPR with considerable participation of students from the school. In these charrettes, students have successfully engaged in teamwork within a professional context, working with architects, planners, real estate experts and landscape architects.

Though NCARB Certificate is not a requirement for licensure in Puerto Rico, it still is a highly regarded credential and a desirable convenience in terms of registration in other NCARB jurisdictions. Confident of the opportunities will grant its students in the near future, the school endorses NCARB registration, and to that effect schedules yearly orientations regarding related licensing and registration information.

**Non-Curricular activities that address this criterion:**  
**NCARB Architecture Licensing Advising**  
**AIAS Student Chapter**  
**UPPR Career Development (IDEA)**

**Our program's Student Learning Assessment Plan was revised in November 15, 2022 and is in the early stages of implementation and we do not have data for all assessment instruments.**



**PC.2 Design**—How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

**Program Response:**

One of the recurring themes related to our students, especially beginners, is to understand the difference between qualities of design. This helps students make a critical assessment of the built environment around them. As an expected consequence of coming from diverse backgrounds, our students arrive with different levels of contact with art and architecture. Considering this, ARQPOLI exposes students to the difference among suitable and unreliable design approaches. The process to eradicate prejudices on the responsibilities and possibilities of design start with Basic Design courses such as: Design courses ARCH 1010, ARCH 1020 and ARCH 1030 and especially Architectural History \ARHH 1010. To develop basic abilities, we also offer an elective course on Space Visualization ARCC 0100. The course History of Architecture introduces students to the most valuable examples of architecture, from Antiquity to current times, always elucidating how they can be appraised exemplary. This course concludes with a design project that tests how profoundly the students have understood historical ideas, in order to re-interpret a contemporary object. On the other hand, in the Spatial Visualization ARCC 0100 and Basic Design ARCH 1010 courses, the students \ design, learn to compose, discover qualities such as proportion and detail, realize that they can represent ideas with simple materials such as wood and cardboard, and understand that the good architectural work is the product of a proper "*parti*". The process of awareness is the foundation for all other levels and allows them to begin to develop a critical sense on the built environment and the positive impact good architecture could represent.

Consonant with the diversity of practices that architects may embrace, it has been important to identify these practices and the resultant role played by architects. Some of the courses, such as Management and Finances ARPP 5030, and Practice and Experience ARPP 3010, are focused on showing students the different practices in which an architect can exercise their profession. In addition, the school has always integrated architects with a multidisciplinary practice at the Lectures Program. At these lectures, the students have had the opportunity to see how architects can work in a variety of projects and companies, and most importantly, how architectural education can assist on interior design, industrial design, art installations or graphic design. They have also been able to appreciate the architect not only as a designer and project coordinator but also as an active member of a multidisciplinary team.

Non-Curricular activities that address this criterion:

Park(ing) Day:

Our program's Student Learning Assessment Plan was revised in November 15, 2022 and is in the early stages of implementation and we do not have data for all assessment instruments.

**PC.3 Ecological Knowledge and Responsibility**—How the program instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.

**Program Response:**

Sharing the campus with students and professionals from other specialties of the construction industry is a very enriching experience for our students. The Polytechnic University was originally founded as an Engineering and Surveying school and over the years has expanded its offering to include other academic careers including Business Administration, Architecture, Landscape Architecture and recently, Interior Design, among others. In this context, our school is constantly making efforts to teach our students that architecture is a multidisciplinary and collaborative discipline. Towards this direction we have developed vertical design studios that also include



students from different levels in a single course also incorporating students of Engineering disciplines to integrate their knowledge and collaboration. The ARPP 3010 course helps to elucidate the role of consultants and their importance in project development and coordination, always understanding the architect as a reliable and sensible interlocutor. This helps to familiarize our students with the scope of professionals that work together to create an architectural project and the importance of each one.

The architecture program at the school is currently focused on the responsible support of its very diverse student body. By opening opportunities for students and professors of the architecture and engineering programs to participate in collaborative effort, the students and faculty contribute to the diversification of the institution. The program also has endorsed collaborative community workshops, and vertical studios, which include Engineering, Landscape Architecture, Architecture and, more recently, Interior Design students. The opportunity for students to see an emphasis on different ways to practice has done a lot to address the major problems faced by the profession in Puerto Rico:

- A. Environmental concerns
- B. Economic crisis
- C. Decrease in population and aging of that population
- D. Technological changes

Non-Curricular activities that address this criterion:  
Park(ing) Day

Our program's Student Learning Assessment Plan was revised in November 15, 2022 and is in the early stages of implementation and we do not have data for all assessment instruments.

**PC.4 History and Theory**—How the program ensures that students understand the histories and theories of architecture and urbanism, framed by diverse social, cultural, economic, and political forces, nationally and globally.

**Program Response:**

The History of Architecture (ARHH 1010) establishes a chronology of compositional space in architecture. The Introduction to Architectural Theory (ARCT 1010) comes next in the sequence, revisiting previous chronologies through the historical text as evidence of the architectural artifact, which is also introduced as “text”. In this course contemporary polemics are discussed using the historical treatises as pretext for analyzing conditions that transcend periods and places. History of Puerto Rico in the Caribbean context (HIST 2010) is the next course; here, students develop a curiosity toward the historical genealogies that preceded them. The History of Modern Architecture (ARHH 2010) is next, a course that includes both object analysis and theoretical underpinnings of the first five decades of the Twentieth Century. In all these three courses, students must research and write a final paper where the notion of “problem”, “theoretical framework” and “object of analysis” are consistently used. These three concepts will be important terms in the Mid-Career Research and Capstone Project, where an independent curious mind is expected to flourish. Before Mid-Career Research, the Neo-Avant Garde and the Contemporary Scene (ARHH 3010) course completes the historical scope of architecture.

The dialectical relationship between the discipline and the practice of architecture is a recurrent theme of the curriculum in many instances. It is the school's belief that any contemporary discussion on architectural practice should be based on a previous understanding of the historical developments. Beginning with Introduction to Architectural Theory ARCT 1010, the history of the profession is analyzed as the result of an ever-changing social and economic environment that includes the emergence of the Industrial Revolution, the Nation-State discourse, among others. Later in the curriculum, History of Puerto Rico in the Caribbean Context (HIST 2010) localize the discussion, exploring the country's transformations from an agrarian subsistence economy into an industrial and post-industrial market economy. The social and cultural subplots that are part of these



historical developments predict some of the contemporary tensions between architecture as a commodity and architecture as an instrument of social advancement.

The fourth-year design studio sequence is a laboratory for design exploration of social and environmental issues. The sequence starts with housing ARCH 4010 followed by urban design ARCH 4020. This course addresses urban design, it combines the scale of cartographic analysis and its interest for territorial visions, geography and “big picture” issues, with the human realm of experience and urban form. The tension between these two scales is embedded in the exercises, forcing students to struggle with the graphic, diagrammatic analysis of territorial extension versus the phenomenological challenges of urban experience. This course has also been a vehicle for collective work and collaboration with non-profit and community-based organizations.

Mid-Career Research (ARCH 3030) has been a landmark course in the school and continues to be now with the possibility of exploring the architectural implications of History. After Mid-Career Research, students are ready for the more insightful inquiries of Historiography (HIST 3510) and Ethics (ARPP 5010), two courses that prelude the challenges of the first trimester of Capstone. Here students research a problem or condition before identifying suitable site and program as laboratory of the theoretical problem. In fifth year, the integration of Theory and History as a designer tool is expected; because Capstone is a moment for students to research through design engaging architecture both formally and discursively.

Non-Curricular activities that address this criterion:  
Lectures

Our program’s Student Learning Assessment Plan was revised in November 15, 2022 and is in the early stages of implementation and we do not have data for all assessment instruments.

**PC.5 Research and Innovation**—How the program prepares students to engage and participate in architectural research to test and evaluate innovations in the field.

**Program Response:**

By the end of the fourth year, students are prepared for the challenges of the fifth year Capstone project, a-year-long studio directed towards the exploration of the students’ own interests and concerns. This studio is also the student’s opportunity to establish his or her own ambitions, goals, and interests. As part of these new interests, the Capstone Studio research has transformed and expanded its explorations to innovative research projects that considers the role of architecture and its relationship to engineering technologies.

Non-Curricular activities that address this criterion:  
Lectures  
UPPR Career Development (IDEA)

Our program’s Student Learning Assessment Plan was revised in November 15, 2022 and is in the early stages of implementation and we do not have data for all assessment instruments.

**PC.6 Leadership and Collaboration**—How the program ensures that students understand approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts, and learn how to apply effective collaboration skills to solve complex problems.

**Program Response:**

Third year design studios are thematic in nature. Every trimester the courses are organized around a specific aspect of design, relevant to the school’s vision and to a contemporary global scene as well.



Intermediate Design I ARCH 3010, the first studio of third year focuses on Historic Preservation's challenges and discursive methodologies. Students work in group at the beginning of the trimester and dedicate equal amount of effort to the analysis and valuation of the conditions of a site in relation to their historical value, as to design within the possibilities of architectural conservation. Usually, a context rich in historical layers is used as laboratory so as to expose students to the process of validation they would later use when defending their design strategy. Technical, theoretical, sociological, and cultural discussions all come together in this course that prepares students for the next studio in the sequence, organized around the rubric of sustainable design. The course has experimented with several approaches. Later attempts have identified a scale of project suitable for managing issues of composition, site design, materiality, infrastructure, and lifestyle. Instead of offering the specific solution for addressing sustainable design, the course is aimed at letting students work with the many variables (both material and conceptual in nature) that define the problems and the possibilities of sustainability.

The Intermediate Design I course (ARCH 3010) is taken by students the same term as the Practice/Experience (ARPP 3010) course. Practice is entangled with the comprehensive understanding of the social, professional, political and economic forces that define the boundaries of practice as part of larger historical processes. This is the kind of overlapping and knowledge cross-referencing that the curriculum actively looks for.

Third Year unfolds a rather wide scope of Technology, Structures and Practice themes. The last trimester of fourth year tests the knowledge previously developed as part of the course Advanced Design III (ARCH 4030), where a complex program has to be developed into a building with particular emphasis on the coordination of infrastructural systems from a construction document mentality. Advanced Design III (ARCH 4030) combines previous knowledge to a large-scale project within an urban setting. This course combines the architectural demands of a mixed-use building with the socioeconomic and technical considerations taught in previous technology and professional practice courses. The course Advanced Design III (ARCH 4030) provides evidence of Leadership and Collaboration.

Non-Curricular activities that address this criterion:  
AIAS Student Chapter  
UPPR Career Development (IDEA)  
UPPR-Student Organizations

Our program's Student Learning Assessment Plan was revised in November 15, 2022 and is in the early stages of implementation and we do not have data for all assessment instruments.

**PC.7 Learning and Teaching Culture**—How the program fosters and ensures a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.

#### **Program Response:**

At PUPR, tasks of importance within the school are often delegated to students that volunteer to design posters, flyers, invitations and touring guest lecturers around the city. The students participate actively in the university's Campus Tour for High School students. They are also hired as teacher's assistants for the Summer Program in Architecture, offered in June, and selected students present their projects to would-be designers, and discuss their academic experiences.

The composition of jurors; the debate format of several courses; all succeed in projecting the enriched layers of learning and the profession itself. The latter, in particular, is felt more accessible and real when ARQPOLI underlines close ties with professional organizations like the Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR), the architect's association, and the Puerto Rico AIA Chapter. Also, the School fosters collaboration with the private sector and government, which already appeals to the school, in significant numbers, for summer and part-time



job recruitment. Civic leaders and public officers alike have joined juries. All this promotes support and encouragement for students to assume leadership roles.

The program strives to promote a positive and respectful learning environment among students, faculty, and staff through a clear Studio Culture Policy. Both through the pedagogical practices and posters affixed around the studio, the students are aware of the policies based upon the following principles.

***Design Studio:***

*The school of Architecture of the polytechnic University promotes a dynamic environment where critical thinking, teamwork and leadership are the basis of an education which will provide students the tools and experience necessary to develop a passion for knowledge for the rest of their lives, this ensuring they have an excellent opportunity to the successful in whatever they choose to do.*

*The design studio by its own multidisciplinary nature, emphasizes communication collaboration and the security of all its components. The school expects the students, faculty, administrative staff and support personnel to contribute and facilitate the development of the students in the school. We believe that optimism, respect for each other, sharing of goals, innovation and bonding are values that must be present at all times in a successful studio culture policy.*

*As the main basis of the development of a healthy studio culture, ARQPOLI propose a curriculum centered in the early insertion of the students in the principles and concepts of architecture as a profession. We encourage that the studio stimulate debate, criticism between equals, sharing of knowledge by all and interaction with other professions and outside communities.*

***Balance of Interest:***

*There is a world outside of the design studio. Students at ARQPOLI must seek balance in their lives and the academic responsibilities, by taking advantage of all the opportunities offered by the University such as electives from other disciplines, membership in student organizations, study trips and community service.*

***Time Management:***

*Architecture as a discipline requires the student to invest a lot of his time in academics. At ARQPOLI the student is exposed early on to great time stress, tensions, and the usual design studio process leading to a final presentation jury. Because of this, the faculty is required to encourage the student to organize his thoughts and to develop skills in managing the time allotted for each phase of the design process. Our studio culture is based upon the student being conscious of the time schedule, time distribution and the need of a personal time agenda needed to completed the volume of works in the studio.*

***Evaluation and Critiques:***

*ARQPOLI promotes within the faculty the use of a just, fair and objective evaluation of student works. The School believes that a clear process of critics and evaluation is the basis for identifying in the student areas strength, areas of progress and areas in needs of further development. The School encourages the individual student critique as part of the studio culture, preliminary group pin-ups and final group critics based upon an established format given to the student. The entire critique process must give the student a clear understanding of the material, guidance to his studio works, and the necessary self-assurance in order to develop his innate abilities to his individual capacity,*



*The school recognizes that critiques are a necessary and integral part of the studio culture and is the principal way the faculty can evaluate the student works. The critic, either individual or in-group, gives the opportunity to discuss in the studio every day.*

*The school recognizes that the critique can be held in different forms, but always with respect, professionalism objectivity and ethics.*

**Diversity:**

*The open admissions policy of ARQPOLI looks to obtain the most diverse student body possible. The school believes that architectural education is a social project and that we integrate cultural, demographic, race, class, gender and sexual orientation differences in our student body.*

*ARQPOLI believes in everyone having the opportunity, free of prejudice to develop through his or her actions, capacity and works to gain their goal in life and the profession of architecture.*

Non-Curricular activities that address this criterion:

NCARB Architecture Licensing Advising:

Studio Culture Policy

AIAS Student Chapter

Park(ing) Day

Study Abroad Programs

Our program’s Student Learning Assessment Plan was revised in November 15, 2022 and is in the early stages of implementation and we do not have data for all assessment instruments.

**PC.8 Social Equity and Inclusion**—How the program furthers and deepens students’ understanding of diverse cultural and social contexts and helps them translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities.

**Program Response:**

The nature of the school and its diverse population, together with curricular, co-curricular and extracurricular activities contribute to achieve the outcomes of the architectural education and students’ perspective.

Cultural exchange is an organic aspect of the student body as each student is compelled to interact with many forms of “otherness”. Our school has a diversified student body, in terms of race, gender, and especially regarding socioeconomic levels because of the open admission policy. By “open admission” we refer to lower admission standards than other architecture programs in the island. No portfolio or interview is required since art education is not readily available in the private and public school system in the island. At the School of Architecture, the definition of professional goals and the vision to achieve them feeds from this interpersonal environment that embraces and values cultural differences.

In addition, student perceptions of context are being progressively enriched by a student body profile which, despite being mainly Puerto Rican, already includes many students of Dominican, Colombian and Argentinean origin and Chinese ancestors. Insistence on team effort proves to be a catalyst in fostering respect for students who may be considered different from the rest.

The students’ awareness of diversity as value is further enhanced by our Study-abroad program, which enhances awareness of diversity as a value. Traveling, literally and conceptually, further enhances students’ awareness of diversity as value exposing them - not just to other cultures- but also to the nature of education and international practice and expertise elsewhere. Travel is promoted in studio courses or the Study Abroad Program. Our main Study Abroad Programs are



with Madrid and Guatemala. Professor Pedro Urzaiz, from ETSAM-Madrid, is our visiting professor every Winter term. Generally, our students opt to Study Abroad in ETSAM on Spring term.

Non-Curricular activities that address this criterion:

Studio Culture Policy

Park(ing) Day

Lectures

Study Abroad Programs

UPPR-Student Organizations

Our program's Student Learning Assessment Plan was revised in November 15, 2022 and is in the early stages of implementation and we do not have data for all assessment instruments.

### 3.2 Student Criteria (SC): Student Learning Objectives and Outcomes

A program must demonstrate how it addresses the following criteria through program curricula and other experiences, with an emphasis on the articulation of learning objectives and assessment.

**SC.1 Health, Safety and Welfare in the Built Environment**—How the program ensures that students understand the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities.

#### Program Response:

One of the advantages of the trimester format is its capacity to incorporate a variety of subjects and themes within a short period of time. The curriculum grew out of adapting the theory of sedimentation of knowledge, already explained, to the time slots allowed by the trimester format. The Technology and Practice Sequence is uniformly inserted in the curriculum. In their first-year students have taken at least one course of the four sequences. As it is stated in the curriculum, a student that finishes his/her third year has already completed 50% of the Technology and Practice sequence. This includes a Practice and Experience course (ARPP 3010). In first year is introduced technology in the second trimester (ARTE 1010), including principles of sustainability, vernacular and contemporary systems and general construction concepts, second year follows with Materials and Methods (ARTE 2010) just when studio projects start requiring more specificity and detail.

Our program's Student Learning Assessment Plan was revised in November 15, 2022 and is in the early stages of implementation and we do not have data for all assessment instruments.

**SC.2 Professional Practice**—How the program ensures that students understand professional ethics, the regulatory requirements, the fundamental business processes relevant to architecture practice in the United States, and the forces influencing change in these subjects.

#### Program Response:

Courses and experiences on professional practice are introduced early in the curriculum, breeding trust among students in the prospects of professional practices and helping to bridge the gap between academic life and professional life. Confidence in the professional registration process is throughout the curriculum as it is crucial for later effectiveness in an individual's professional development and practice. Specific emphasis of NCARB's registration examinations subdivisions was considered in the thematic organization of Technology and Structures courses. Additionally, students are exposed to other subjects of the professional registration examination and professional practice, such as programming and pre-design tasks. Skills regarding these subjects are addressed in studio courses beginning the second and through the fifth year. In parallel, scale and square footage controls begin to increase appropriately as a designer's concern by the end of first year. These are all skills for which dexterity depends on daily familiarity.



The nature of the profession is discussed from both a local and foreign perspective, raising not just the issue of student's evolution to professional life, but the possibility of transforming it from a critical point of view. By the time students reach their third year, most start to work in architect or engineer's offices. This early immersion into the environment of a firm demystifies the practice from preconceived notions. Once students reach their fourth year, classroom discussions are enriched by their case study experiences in architectural offices.

A fundamental and specific step toward a sound preparation to transitioning into internship and licensure are the triad of courses on professional practice: ARPP 3010: Practice Experience, ARPP 5010: Ethics, and ARPP 5030: Office Management and Finance. These courses progressively immerse the student in the realm of practice environment and the concerns of professional conduct within the context of international, national, and state regulatory and legal aspects. Professional practitioners of a variety of fields are brought in as part of the learning experiences and methodologies employed to emphasize the multidimensional aspect of these important subjects. Case studies and hands-on practice are strategies employed.

Since its founding in 1995, the school has seen a profound change in the economy not only locally but also globally. The large architectural firms to which most of our graduates aspired have decreased in scale and number, and the less fortunate have closed operations. However, offices that have survived this change are small practices or those managed by a single professional architect and one or two assistants. This trend is becoming a more common practice. Other architects, graduates and AIT's have chosen to move to mainland USA, consequently taking advantage of the licensure reciprocity or, in the case of architects in training, the opportunity to complete their AXP and then completing that state's examination requirement.

Within this context, the courses ARPP 3010: Practice Experience, and ARPP 5030: Office Management and Finances, introduce the topic of entrepreneurship by presenting concrete examples of various practices in which some of our graduates are involved. This strategy has afforded the school the means to introduce the opportunity to meet graduates from ARQPOLI who have developed alternative models of practice, which use the wide range of knowledge acquired during their studies to create their own practice. Several students, feeling the need to further expand their knowledge and to diversify the practice of architecture have pursued graduate studies both within and outside the Island.

Our program's Student Learning Assessment Plan was revised in November 15, 2022 and is in the early stages of implementation and we do not have data for all assessment instruments.

**SC.3 Regulatory Context**—How the program ensures that students understand the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in the United States, and the evaluative process architects use to comply with those laws and regulations as part of a project.

### **Program Response:**

First year's second studio, Basic Design II ARCH 1020, is organized around the rubric of spatial definition, spatial sequence, and spatial composition, each theme acquiring the form of an exercise. This course introduces the inhabitable space with initial research of the dimensions, extensions and representational possibilities. The last trimester of the first year's design sequence, Basic Design III ARCH 1030, introduces the notion of place using an abstract urban site that is analyzed in a collective, group project. The multiplicities that built up to create the notion of place are analogous to the "multiple" interpretations that students have of the same place. The design projects expose students to the implications discovered in their site analysis. They must define a conceptual standpoint from which to decide how to organize a program of low complexity working on the relationship of the new building to the many existing site conditions that they previously analyzed. The site is introduced here as a product of the design process itself, a selection of traits that are collected by the designer to represent the complexities of any given place; infinite notions of site are then confronted by the student/designer's subjective representation of it. This early introduction to



analysis proves valuable for the theoretical discussions that simultaneously are taking place in their history sequence, which starts at the same time as the design sequence; the logic of knowledge sedimentation here is at work.

Fourth year focuses on professional skills, the craftsmanship of design for more complex programs and site conditions. The first trimester of studio, Advanced Design I (ARCH 4010) addresses housing and brings together issues of technology and infrastructure previously introduced in the general sequence. A site with typically urban constraints is usually selected, reflecting a national consensus toward densification and better use of the land. The study of precedents is part of the course methodologies, as is the relationship between the private and public realms of housing as a problem. The connection to the urban fabric, which is an essential theme of this studio, prepares students for the next studio level, Advanced Design II (ARCH 4020). This course addresses urban design, it combines the scale of cartographic analysis and its interest for territorial visions, geography and “big picture” issues, with the human realm of experience and urban form. The tension between these two scales is embedded in the exercises, forcing students to struggle with the graphic, diagrammatic analysis of territorial extension versus the phenomenological challenges of urban experience. This course has also been a vehicle for collective work and collaboration with non-profit and community-based organizations that have limited resources to hire professional services for urban analyses and design.

Our program's Student Learning Assessment Plan was revised in November 15, 2022 and is in the early stages of implementation and we do not have data for all assessment instruments.

**SC.4 Technical Knowledge**—How the program ensures that students understand the established and emerging systems, technologies, and assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects.

**Program Response:**

The foundational aspects of Mathematics and Physics are covered in the first two years. Third Year unfolds a rather wide scope of Technology and Practice themes, starting with the Practice/Experience course (ARPP 3010), followed the next trimester by Structural Concepts I (ARST 3010) and ending with Structural Concepts II (ARST 3020) and Site Planning (ARTE 3010) in the last trimester. Steel and Concrete structural concepts are studied in fourth year's Structural Concepts III and IV (ARST 4010 and ARST 4020), respectively. Electrical and Acoustics (ARTE 4010) and Environmental Systems (ARTE 4020) are also part of the fourth-year sequence. The last trimester of fourth year tests the knowledge previously developed as part of the Technology/Practice sequence in the studio course, Advanced Design III (ARCH 4030), where a complex program must be developed into a building with particular emphasis on the infrastructural systems from a construction document mentality.

Our program's Student Learning Assessment Plan was revised in November 15, 2022 and is in the early stages of implementation and we do not have data for all assessment instruments.

**SC.5 Design Synthesis**—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.

**Program Response:**

Intermediate Design I ARCH 3010, the first studio of third year focuses on Historic Preservation's challenges and discursive methodologies. Technical, theoretical, sociological, and cultural discussions all come together in this course that prepares students for the next studio in the sequence, organized around the rubric of sustainable design. The course has experimented with



several approaches. Later attempts have identified a scale of project suitable for managing issues of composition, site design, materiality, infrastructure, and lifestyle. Instead of offering the specific solution for addressing sustainable design, the course is aimed at letting students work with the many variables (both material and conceptual in nature) that define the problems and the possibilities of sustainability.

Fifth year's Capstone Design schedules and requirements are rigorously defined for all sections to help students organize their time and scope of work accordingly. The first trimester, Capstone Design I (ARCH 5010), addresses research part, defining a problem that later evolves until it includes a program and a site. Second trimester Capstone Design II (ARCH 5020), addresses pre-design and development of a schematic design that embodies the intentions and issues that have been explored in the first trimester. The last trimester, Capstone Design III (ARCH 5030), addresses design development to a level of detail that varies in every project depending on the problem being explored and the architecture that seems consonant to it. In any case, the project scale and detail development must be consistent with the need to corroborate the students' ability to address a wide spectrum of architectural and technical issues.

An architectural artifact must be produced in Capstone. This reflects the school's conviction that even the most radical theoretical departure can produce an actual building. Here, building is essential to the impact the school wants to have promoted in Capstone, where pertinence is a key issue of the projects' discussion. However, this does not mean that students who prove the relevance of using a hypothetical scenario as a Capstone project are dissuaded if the case is made clearly in favor of experimentation and the production of an alternative architecture as a legitimate contribution to architectural knowledge.

Practice is entangled with the comprehensive understanding of the social, professional, political and economic forces that define the boundaries of practice as part of larger historical processes. The school firmly believes in bringing a historical perspective to all themes, including Technology and Practice. The Neo-Avant-Garde and the Contemporary Scene course (ARHH 3010), explore the cultural evolution of the architectural firm, supporting contemporary discussions that were addressed in the Practice/Experience (ARPP 3010) course taken by students the previous trimester. This is the kind of overlapping and knowledge cross-referencing that the curriculum actively looks for.

Our program's Student Learning Assessment Plan was revised in November 15, 2022 and is in the early stages of implementation and we do not have data for all assessment instruments.

**SC.6 Building Integration**—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

### **Program Response:**

The last trimester of the fourth-year studio sequence, Advanced Design III (ARCH 4030), is aimed at integrating technology, structural design, infrastructure, materiality, and program design into a large project of enough complexities. This course is viewed as a mini-Capstone project for its large scope, but it is less oriented toward the theoretical inquiries of Capstone. The course is organized around the housing project, Advanced Design I (ARCH 4010), which is used as a schematic design to produce an advanced developed set of drawings reflecting the technical and design course requirements. Fourth year focuses on professional skills, the craftsmanship of design for more complex programs and site conditions.

In Capstone Design sequence students research conditions and polemics of architectural practice. Construction Documents (ARPP 5020) and Management and Finances (ARPP 5030) are offered, counterbalancing the theoretical discussions of Capstone with practical insights into the dynamics of an architectural firm. In fifth year, students have the option of taking an elective course in



Technology or Structure. It is important to point out that issues of Practice have been part of the courses' content in the design sequence (with the inclusion of both hypothetical and real clients as example).

The last trimester, Capstone Design III (ARCH 5030), addresses design development to a level of detail that varies in every project depending on the problem being explored and the architecture that seems consonant to it. In any case, the project scale and detail development must be consistent with the need to corroborate the students' ability to address a wide spectrum of architectural and technical issues.

Our program's Student Learning Assessment Plan was revised in November 15, 2022 and is in the early stages of implementation and we do not have data for all assessment instruments.



## 4—Curricular Framework

This condition addresses the institution’s regional accreditation and the program’s degree nomenclature, credit-hour and curricular requirements, and the process used to evaluate student preparatory work.

### 4.1 Institutional Accreditation

The APR must include a copy of the most recent letter from the regional accrediting commission/agency regarding the institution’s term of accreditation.

#### Program Response:

The Architecture Program at Polytechnic University received accreditation from the *Puerto Rico Council for Higher Education* on August 30, 1995, based on a Final Report rendered by the agency to that effect. The license for the institution was renewed on December 18, 2015, valid until December 17, 2020 (see Appendix 4-1-A). The renovation of this license is still valid due to a delay in the renewal process (see Appendix 4-1-B). A letter the Puerto Rico Board of Post-Secondary Institutions (formerly Puerto Rico Council for Higher Education) from April 12, 2023 states:

*“If a license ends validity while a renewal process is still ongoing, without the institution’s negligence, the Council will consider the license valid until the renewal process is completed.”*

The *Middle States Commission on Higher Education* granted accreditation to UPPR since 1985. The most recent reaffirmation of accreditation was in 2015. The next Self-Study Evaluation is in the current year 2023-2024 (see Appendix 4-1-C).

### 4.2 Professional Degrees and Curriculum

The NAAB accredits professional degree programs with the following titles: the Bachelor of Architecture (B. Arch.), the Master of Architecture (M. Arch.), and the Doctor of Architecture (D. Arch.). The curricular requirements for awarding these degrees must include professional studies, general studies, and optional studies.

**4.2.1 Professional Studies.** Courses with architectural content required of all students in the NAAB-accredited program are the core of a professional degree program that leads to licensure. Knowledge from these courses is used to satisfy Condition 3—Program and Student Criteria. The degree program has the flexibility to add additional professional studies courses to address its mission or institutional context. In its documentation, the program must clearly indicate which professional courses are required for all students.

*Programs must include a link to the documentation that contains professional courses are required for all students.*

#### Program Response:

Polytechnic University offers a Bachelor of Architecture degree. Studies include three components to ensure technical competencies and critical thinking: general studies, professional studies, and an elective roster.



### Credit Distribution

General (non-architectural) Studies			Professional Studies		
Required credits with other than architectural content	63	30%	Credits with architectural content required of all students	117	55%
Elective credits with other than architectural content	24	11%	Elective credits with architectural content	9	4%
Total	87	41%	Total	126	59%
Total credit hours 213					

The curriculum sequence is available here: <https://www.pupr.edu/architecture-undergraduate/>

The course descriptions are available here: <https://www.pupr.edu/architecture-undergraduate/>

#### **Professional Core** (117 Credit-Hours)

##### **ARCC-Architectural Representation** (6 Credit-Hours)

<u>Course</u>	<u>Title</u>
ARCC 1010	Architectural Representation I
ARCC 2010	Architectural Representation II

##### **ARCH-Design** (60 Credit-Hours)

<u>Course</u>	<u>Title</u>
ARCH 1010	Basic Design I
ARCH 1020	Basic Design II
ARCH 1030	Basic Design III
ARCH 2010	Design Fundamentals I
ARCH 2020	Design Fundamentals II
ARCH 2030	Design Fundamentals III
ARCH 3010	Intermediate Design I
ARCH 3020	Intermediate Design II
ARCH 3030	Mid-Career Research
ARCH 4010	Advanced Design I



ARCH 4020	Advanced Design II
ARCH 4030	Advanced Design III
ARCH 5010	Capstone Design I
ARCH 5020	Capstone Design II
ARCH 5030	Capstone Design III

**ARCT - Theory**  
(3 Credit-Hours)

<b><u>Course</u></b>	<b><u>Title</u></b>
ARCT 1010	Introduction to Architectural Theory
ARCT 1011	Architectural Theory Recitation

**ARHH-History**  
(9 Credit-Hours)

<b><u>Course</u></b>	<b><u>Title</u></b>
ARHH 1010	History of Architectural Space
ARHH 1011	History of Architectural Space Laboratory
ARHH 2010	History of Modern Architecture
ARHH 2011	History of Modern Architecture Laboratory
ARHH 3010	Neo Avant-Garde and the Architectural Contemporary Scene

**ARPP-Practice**  
(12 Credit-Hours)

<b><u>Course</u></b>	<b><u>Title</u></b>
ARPP 3010	Practice / Experience
ARPP 5010	Ethics
ARPP 5020	Construction Documents
ARPP 5030	Office Management & Finances



**ARST-Structures**  
(12 Credit-Hours)

<u>Course</u>	<u>Title</u>
ARST 3010	Structural Concepts I
ARST 3020	Structural Concepts II
ARST 4010	Structures III: Steel
ARST 4020	Structures IV: Concrete

**ARTE-Technology**  
(15 Credit-Hours)

<u>Course</u>	<u>Title</u>
ARTE 1010	Introduction to Technology
ARTE 2010	Materials & Methods
ARTE 3010	Site Planning
ARTE 4010	Electricity, Acoustics & Telecommunications
ARTE 4020.	Environmental & Mechanical Systems

**4.2.2 General Studies.** An important component of architecture education, general studies provide basic knowledge and methodologies of the humanities, fine arts, mathematics, natural sciences, and social sciences. Programs must document how students earning an accredited degree achieve a broad, interdisciplinary understanding of human knowledge.

In most cases, the general studies requirement can be satisfied by the general education program of an institution's baccalaureate degree. Graduate programs must describe and document the criteria and process used to evaluate applicants' prior academic experience relative to this requirement. Programs accepting transfers from other institutions must document the criteria and process used to ensure that the general education requirement was covered at another institution.

*Programs must state the minimum number of credits for general education required by their institution and the minimum number of credits for general education required by their institutional regional accreditor.*

**Program Response:**

Bachelor of Architecture degree requires 30% (63 credits) of the total credit with other than architectural, general studies include: developmental studies component (maximum 27 credit-hours), socio-humanistic studies (27 credit-hours) and science and mathematics (9 credit-hours).

The general studies are available here: <https://www.pupr.edu/architecture-undergraduate/>. Under curriculum.



**Developmental Studies Component**

(Maximum of 27 credit-hours)

<b><u>Course</u></b>	<b><u>Title</u></b>
ATUL 0100	Adjustment to University Life
ENGL 0100	Preparatory English
ENGL 0110	English Grammar
SPAN 0100	Preparatory Spanish
SPAN 0110	Spanish Grammar
MATH 0102	Preparatory Mathematics
MATH 0106	Elementary Algebra
MATH 0110	Intermediate Algebra
SCIE 0110	Introduction to Physics

To register in any Professional Core Courses, students must have approved MATH 0102 Preparatory Mathematics. They must also have approved three credit-hours in either ENGL 0100 Preparatory English, or SPAN 0100 Preparatory Spanish.

**4.2.3 Optional Studies.** All professional degree programs must provide sufficient flexibility in the curriculum to allow students to develop additional expertise, either by taking additional courses offered in other academic units or departments, or by taking courses offered within the department offering the accredited program but outside the required professional studies curriculum. These courses may be configured in a variety of curricular structures, including elective offerings, concentrations, certificate programs, and minors.

*The program must describe what options they provide to students to pursue optional studies both within and outside of the Department of Architecture.*

**Program Response:**

Bachelor of Architecture degree requires 11% (24 credits) of the total credit in elective credits with other than architectural content and 4% (9 credits) of the total credit in elective credits with architectural content. Since Winter 2021 the program has offered elective such as:

**Electives in Representation**

<b><u>Course</u></b>	<b><u>Title</u></b>
ARCC 0100	Spatial Visualization
ARCC 0120	Cyberpublications
ARCC 0130	Photoshop & Digital Imaging



ARCC 0170	Perspective
ARCC 0191	Visual Communication in Architecture
ARCC 0240	Introduction to Industrial Design
ARCC 0310	Color for Architects
ARCC 0315	Ceramics
ARCC 0330	Installations
ARCC 0403	Computer Aided Design II
ARCC 0403A	Computer Aided Design II-Revit
ARCC 0410	Digital Fabrication
ARCC 0420	Parametric Modeling & Digital Fabrication

#### **Electives in History**

<b><u>Course</u></b>	<b><u>Title</u></b>
ARHH 0400E	Introduction to Urban Planning
ARHH 0400F	Structure and Form of Urban Settlements
ARHH 0400G	Sustainable Urban Mobility Planning and Management
ARHH 0400H	Land Use Regulation and its Impact on the City
ARHH 0440	Advanced Topics on History

#### **Electives in Technology**

<b><u>Course</u></b>	<b><u>Title</u></b>
ARTE 0400A	Construction Details
ARTE 0400B	Architecture & Interior Design
ARTE 0410	Preservation Technology
ARTE 0440	Architecture & Light



### Electives in Interior Design

Course	Title
ARCH 1120	Analyzing Architecture
ARIN 2210	History of Furniture I
ARIN 2310	Color (Theory and Psychology)
ARIN 2320.	Materials (Textiles)

NAAB-accredited professional degree programs have the exclusive right to use the B. Arch., M. Arch., and/or D. Arch. titles, which are recognized by the public as accredited degrees and therefore may not be used by non-accredited programs.

*Programs must list all degree programs, if any, offered in the same administrative unit as the accredited architecture degree program, especially pre-professional degrees in architecture and post-professional degrees.*

#### **Program Response:**

The Bachelor of Architecture is the only Architecture degree offered at Polytechnic University of Puerto Rico.

The number of credit hours for each degree is outlined below. All accredited programs must conform to minimum credit-hour requirements established by the institution's regional accreditor. Programs must provide accredited degree titles, including separate tracks.

**4.2.4 Bachelor of Architecture.** The B. Arch. degree consists of a minimum of 150 semester credit hours, or the quarter-hour equivalent, in academic coursework in general studies, professional studies, and optional studies, all of which are delivered or accounted for (either by transfer or articulation) by the institution that will grant the degree. Programs must document the required professional studies courses (course numbers, titles, and credits), the elective professional studies courses (course numbers, titles, and credits), the required number of credits for general studies and for optional studies, and the total number of credits for the degree.

#### **Program Response:**

The curricular sequence (track of completion) with their credit hours of the Bachelor of Architecture of the Polytechnic University of Puerto Rico:



Year	FALL (FA) (also offered in Winter)*	WINTER (WI) (also offered in Spring)*	SPRING (SP) (also offered in FALL)*	Total Credits
I	Q 3 MATH 0102: Preparatory Mathematics Q 3 SPAN 0100: Preparatory Spanish or ENGL 0100: Preparatory English 6			48
	Q 4 ARCH 1010: Basic Design I Q 3 ARCC 1010: Architectural Representation I Q 3 MATH 0106: Elementary Algebra Q 3 ATUL 0100: Adjustment to University Life 13	Q 4 ARCH 1020: Basic Design II Q 3 ARHH 1010: History of Architecture Q 0 ARHH 1011: History of Architecture Lab. Q 3 ARTE 1010: Introduction to Technology Q 3 MATH 0110: Intermediate Algebra Q 3 SPAN 0100: Preparatory Spanish or ENGL 0100: Preparatory English 16	Q 4 ARCH 1030: Basic Design III Q 3 ARCC 2010: Architectural Representation II Q 3 ENGL 0110: English Grammar Q 3 SPAN 0110: Spanish Grammar 13	
II	Q 4 ARCH 2010: Design Fundamental I Q 3 ARCT 1010: Introduction to Theory Q 0 ARCT 1011: Introduction to Theory Lab. Q 3 SCIE 0110: Introduction to Physics Q 3 (E) _____: Representation 400-L 13	Q 4 ARCH 2020: Design Fundamentals II Q 3 ARTE 2010: Materials & Methods Q 3 HIST 2010: History of Puerto Rico in the Caribbean Context Q 3 MATH 1330: Precalculus I Q 3 SOHU 2010: Socio-Humanistic Studies I 16	Q 4 ARCH 2030: Design Fundamentals III Q 3 ARHH 2010: History of Modern Architecture Q 0 ARHH 2011: History Lab Q 3 SOHU 2020: Socio-Humanistic Studies II Q 3 MATH 1340: Precalculus II 13	42
III	Q 4 ARCH 3010: Intermediate Design I Q 3 ARPP 3010: Practice/Experience Q 3 ENGL 1010: The Essay as a Literary Genre a Literary Genre Q 3 SCIEN 2410: General Physics I 13	Q 4 ARCH 3020: Intermediate Design II Q 3 ARST 3010: Structural Concepts I Q 3 ARHH 3010: Neo-Avant-Garde and the Contemporary Scene Q 3 SPAN 1010: Linguistic Analysis of Literary Genres 13	Q 4 ARCH 3030: Intermediate Design III (Mid- Career) Q 3 ARST 3020: Structural Concepts II Q 3 ARTE 3010: Site Planning Q 3 SPAN 2010: Hispanic Literature Q 3 (E) _____: Open Elective 16	42
IV	Q 4 ARCH 4010: Advanced Design I Q 3 ARST 4010: Structures III: Steel Q 3 ARTE 4010: Electrical and Acoustics Q 3 (E) _____: Socio-Humanistic Studies or Languages 13	Q 4 ARCH 4020: Advanced Design II Q 3 ARST 4020: Structures IV: Concrete Q 3 ARTE 4020: Environmental Systems Q 3 (E) _____: History or Theory 400-L 13	Q 4 ARCH 4030: Advanced Design III Q 3 ENGL 2010: Analysis of World Literature Q 3 HIST 4030: Historiography Q 3 (E) _____: Open Elective Q 3 (E) _____: Open Elective 16	42
V	Q 4 ARCH 5010: Capstone Design I Q 3 ARPP 5010: Ethics Q 3 (E) _____: Technology or Structures 400-L Q 3 (E) _____: Open Elective 13	Q 4 ARCH 5020: Capstone Design II Q 3 ARPP 5020: Construction Documents Q 3 (E) _____: Open Electives Q 3 (E) _____: Open Electives 13	Q 4 ARCH 5030: Capstone Design III Q 3 ARPP 5030: Management and Finances Q 3 (E) _____: Open Elective Q 3 (E) _____: Open Elective 13	39

**4.2.5 Master of Architecture.** The M. Arch. degree consists of a minimum of 168 semester credit hours, or the quarter-hour equivalent, of combined undergraduate coursework and a minimum of 30 semester credits of graduate coursework. Programs must document the required professional studies classes (course numbers, titles, and credits), the elective professional studies classes (course numbers, titles, and credits), the required number of credits for general studies and for optional studies, and the total number of credits for both the undergraduate and graduate degrees.

**Program Response:**

Not applicable

**4.2.6 Doctor of Architecture.** The D. Arch. degree consists of a minimum of 210 credits, or the quarter-hour equivalent, of combined undergraduate and graduate coursework. The D. Arch. requires a minimum of 90 graduate-level semester credit hours, or the graduate-level 135 quarter-hour equivalent, in academic coursework in professional studies and optional studies. Programs must document, for both undergraduate and graduate degrees, the required professional studies classes (course numbers, titles, and credits), the elective professional studies classes (course numbers, titles, and credits), the required number of credits for general studies and for optional studies, and the total number of credits for the degree.



**Program Response:**

Not applicable

**4.3 Evaluation of Preparatory Education**

The NAAB recognizes that students transferring to an undergraduate accredited program or entering a graduate accredited program come from different types of programs and have different needs, aptitudes, and knowledge bases. In this condition, a program must demonstrate that it utilizes a thorough and equitable process to evaluate incoming students and that it documents the accreditation criteria it expects students to have met in their education experiences in non-accredited programs.

**4.3.1** A program must document its process for evaluating a student’s prior academic coursework related to satisfying NAAB accreditation criteria when it admits a student to the professional degree program.

*See also Condition 6.5*

**Program Response:**

Transfer applicants must have passed no fewer than nine transferable college credit-hours. They will be favorably considered for all academic work completed with a C or higher grade at each prior institution given that every course under consideration is required by the chosen program. Transfer credit-hours are limited to work satisfactorily completed at an accredited institution of higher education within a seven-year period immediately preceding application for admission. A transfer applicant will not be considered for admission if he or she is on academic probation, suspension, or dismissal from the previous institution.

All students who have passed nine transferable credit-hours at an accredited institution of higher education prior to applying for admission to PUPR must submit:

1. An application for admission. An application for admission will not be considered unless received on or before the application deadline indicated in the academic calendar. The institution reserves the right to refuse applications for admission once enrollment limits are reached.
2. An official transcript from each institution of higher education previously attended. The transcript should be sent directly from the institution(s) of origin to the Admissions Office. The transcript(s) must furnish a statement of good standing. Student copies of official transcripts are not acceptable. The applicant who is actively enrolled in another institution at the time of application should request a current official transcript to be forwarded immediately. An official transcript, including the final grades of the last quarter or semester of attendance, must be requested and sent to the Admissions Office.
3. A copy of the latest edition of the undergraduate catalog from each institution of higher education previously attended.
4. Payment of a thirty dollar (\$30.00) application fee with the completed application form. The application fee is non refundable and will not be applicable toward the student’s registration charges.
5. All transfer students must submit a letter of recommendation signed by the Dean of Student Affairs of the previous institution.
6. An Immunization Certificate (applies only to applicants under 21 years of age).
7. Foreigners must submit a copy of immigration status.



PUPR accepts credits obtained in military programs. The Admissions Office requires all military students, active or retired, to present the military transcript, which may include courses, workshops, trainings, and experiences. Once the application for admission is submitted, the Admissions Office staff study and compare it with the syllabi of the courses offered by the PUPR academic programs and decide how many credit-hours can be transferred to the applicants. Credits obtained at the SOCAD, SONAV, SOCMAR, and SOCCOAST may be considered as transfer credits after a comparative analysis of the courses offered at PUPR. PUPR will also consider courses obtained through internet, correspondence, and other distance learning education. It also includes courses approved through CIEP examinations. PUPR also accepts many forms of Professional Military Education (non-academic experience training) that have been evaluated by the American Council on Education as academic credits.

Transfer students interested in admission to the institutions Architecture program usually visit the school for a general orientation as to admission requirements and transfer credit policy. After the student is admitted to the program, the candidate reviews the transcript (portfolio and interview may be required) to determine the level at which student enters the program. The evaluation of architecture course equivalence is accomplished by comparing courses taken at the previous institution with ARQPOLI 's programs course objectives and the NAAB Performance Criteria assigned to the course considered. The assignment of credit is based on the associate dean's review recommendation.

Transfer students can be admitted to the program at any trimester with the recommendations of the Dean, Associate Dean or Academic Director. Students with transfer credits and High School students with advanced placement status cannot be guaranteed a full-time load of 12 credits every academic term because of the pre-requisite structure of the curriculum.

A maximum of 149 credit-hours can be accredited of the 213 required for a student to obtain a Bachelor of Architecture from ARQPOLI at Polytechnic University of Puerto Rico. A minimum of 64 credit-hours must be completed at the Institution in the courses specified below:

- DESIGN (28 credit-hours)
  - ARCH 3030, 4010, 4020, 4030, 5010, 5020, 5030
- HISTORY (6 credit-hours):
  - ARHH 3010, HIST 4030
- TECHNOLOGY (9 credit-hours):
  - ARTE, 3010, 4010, 4020
- PRACTICE (12 credit-hours):
  - ARPP 3010, 5010, 5020, 5030
- ELECTIVES 0400 L (6 credits hours):
  - ARHH 0400L, ARTE 0400L
- OPEN ELECTIVES - (3 credits)

The process for admitting transfer students is available at the following institutional web page link:  
<https://www.pupr.edu/es/admissions/prospective-students/>



**4.3.2** In the event a program relies on the preparatory education experience to ensure that admitted students have met certain accreditation criteria, the program must demonstrate it has established standards for ensuring these accreditation criteria are met and for determining whether any gaps exist.

**Program Response:**

Not applicable

**4.3.3** A program must demonstrate that it has clearly articulated the evaluation of baccalaureate-degree or associate-degree content in the admissions process, and that a candidate understands the evaluation process and its implications for the length of a professional degree program before accepting an offer of admission.

**Program Response:**

Not applicable



## 5—Resources

### 5.1 Structure and Governance

The program must describe the administrative and governance processes that provide for organizational continuity, clarity, and fairness and allow for improvement and change.

**5.1.1 Administrative Structure:** Describe the administrative structure and identify key personnel in the program and school, college, and institution.

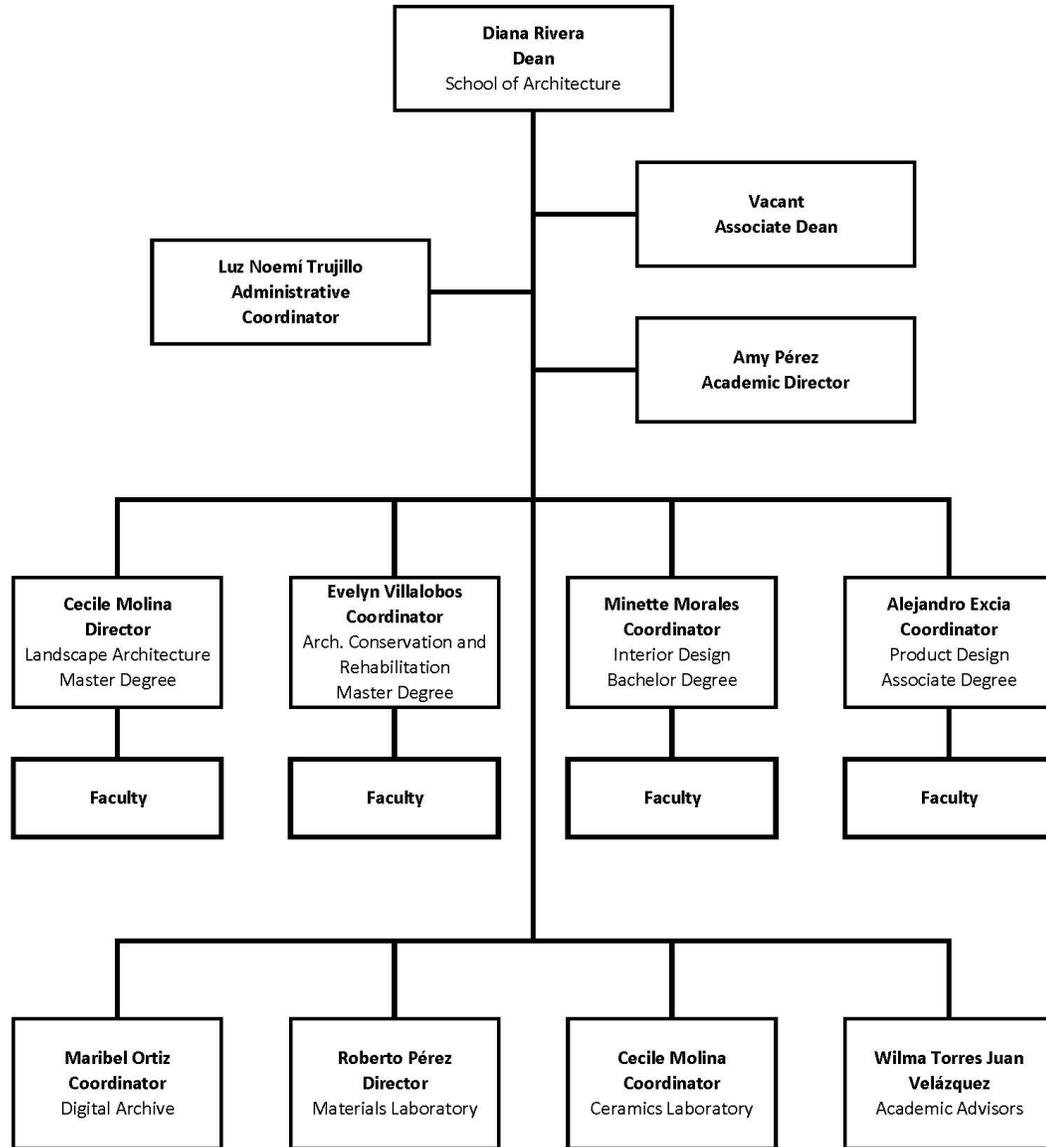
#### **Program Response:**

The program of Architecture at ARQPOLI has the same degree of autonomy that is afforded to other relevant professional programs in the Institution. Other degree programs offered in the same administrative unit as the accredited Architecture degree program are Bachelor of Interior Design, Master in Landscape Architecture, Master in Architectural Conservation and Rehabilitation, Associate Degree in Product Design and Major in Urban Planning.

The administrative structure includes the Dean, Associate Dean, Director of Academic Affairs, Administrative Coordinator, Director of Graduate Program in Landscape Architecture, Coordinator Interior Design Program, Coordinator Product Design Program, Mentors and Faculty.

The school also has professors which besides teaching work as Directors responsible for the following laboratories: Architectural Conservation Laboratory, Materials and Digital Fabrication Workshop, and Digital Media Archive.

The administrative structure of the program of architecture is provided below:





**5.1.2 Governance:** Describe the role of faculty, staff, and students in both program and institutional governance structures and how these structures relate to the governance structures of the academic unit and the institution.

**Program Response:**

The school allows opportunities to the faculty and students to participate in the governance of the program. The figure of coordinators was established in 2011 among the faculty to expand the path of communications at the five levels of the programs. Coordinators are responsible for following up on any curricular issues and developments that can be brought to the Dean's attention regularly. There is also a formal curriculum committee composed of faculty members established for an upcoming curricular revision.

The dean has also has been supportive of the existing AIAS chapter. The students groups form part of several focus groups held annually and the students have held two annual meetings where the Dean and his staff to listen to their concerns. The last meeting was held in April of 2014 and the proceedings were taped for future references. In all cases, the Dean has an open door policy so that any student can come in freely and if available can talk to him informally.

Opportunities for Involvement in Governance

Students

Student representation is guaranteed at the institutional level, as each department has a student representative at the Student Council. The Academic Council, the institutional body that oversees and reviews institutional curricular changes and all academic matters, also requires the participation of one student from the Architecture Department. Students also partake in governance through student assemblies where changes are brought to students' attention and student feedback on said matters and other pressing issues are sought. The AIA Student Chapter serves as a conduit to raise discussion and debate among students, on administrative or curricular matters.

Faculty

The Faculty is actively serving in various institutional committees such as the Steering Committee for Middle States Commission on Higher Education. An ongoing body is comprised by the Academic Council which has two members of the Architecture faculty as representatives and meets on a quarterly basis. Faculty participation in Departmental committees such as: Outcomes Assessment, Human Resources, Student Affairs, Curriculum, and Information Systems also ensure active faculty participation in administrative and academic affairs. Last but not least, faculty meetings offer an additional venue to contribute to further discussions. The faculty may actively in ad hoc committees to coordinate specific tasks and projects.

At institutional level, 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.

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.



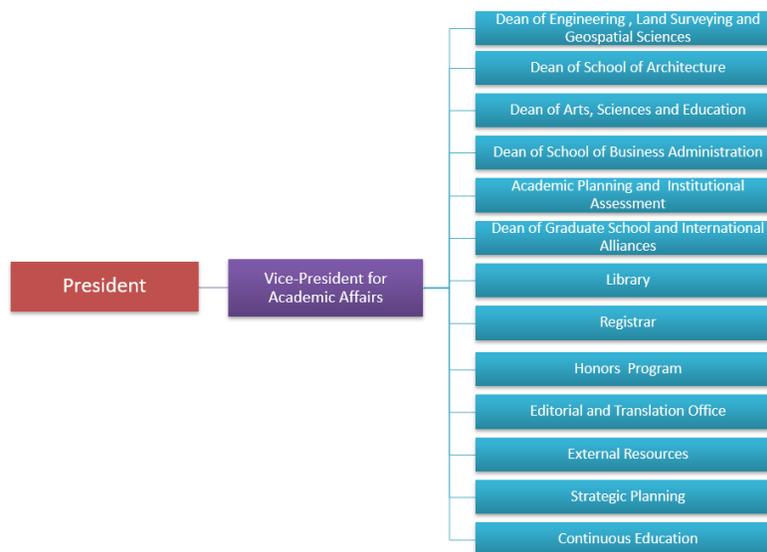
UPPR provides mechanisms that allow the input of students and faculty throughout all the governing structure. The Students Regulations establish a policy for the organization of the Student Council. The undergraduate and graduate students' representation assures the presence of that part of UPPR's constituents.

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

**Figure 3:** VP Office for Academic Affairs Organizational Chart



## 5.2 Planning and Assessment

The program must demonstrate that it has a planning process for continuous improvement that identifies:

**5.2.1** The program's multiyear strategic objectives, including the requirement to meet the NAAB Conditions, as part of the larger institutional strategic planning and assessment efforts.

### Program Response:

A work plan and progress report aligned with budget allocations, are submitted periodically to the administration. In accordance with such reports and the last Accreditation review recommendations the program's strategic plan is under revision to incorporate the newly revised educational objectives and goals. With this revision we strive to put in place an evaluation and assessment methodology,



that allows the program stay on track and effectively measure compliance with our mission and objectives.

Revision is done when the institution evaluates or makes changes to their Strategic plan and during our Self Evaluation Report. With the Institutional Strategic Plan 2022-2027, the program administration implements a method that allow us to do periodical and documented assessments.

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. 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 Coordinator of the ISP who reports to the President.

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 Long-Range Plan 2022-27 Is being revised; we acknowledge the former Long-Range Plan 2016-21 (See Appendix 5.2.1.1) and the strategic goals of the Institutional Strategic Plan 2016-21 for the basis of this revision (See Appendix 5.2.1.2). The Institutional Strategic Plan 2022-27 was approved in November 27, 2023 and we are currently aligning our Long-Range Plan and Work Plan to the Institutional Strategic Plan 2022-27.

The 2022-2027 Institutional Strategic Plan (ISP) is available at the following institutional web page link:

<https://www.pupr.edu/es/about/presidents-message/>

The Work Plan 2018-2019 (See Appendix 5.2.1.3) was the latest plan found from the program since the resignation of the former Dean. Since then, the program went through several changes that put a hold into developing these annual work plans until recently. The institutional strategic plan 2022-27 was approved in November 27, 2023, so the planning goals will be revised as well. The program is evaluating the status of this Work Plan 2018-2019 to establish where we are at and how we need to move forward.

## 5.2.2 Key performance indicators used by the unit and the institution

### Program Response:

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 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 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 Institution 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 for Student Affairs 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.

The Work Plan 2018-2019 (See Appendix 5.2.1.3) was the latest plan found from the program since the resignation of the former Dean. Since then, the program went through several changes that put a hold into developing these annual work plans until recently. The institutional strategic plan 2022-27 was approved in November 27, 2023, so the planning goals will be revised as well. The program is evaluating the status of this Work Plan 2018-2019 to establish where we are at and how we need to move forward.

### 5.2.3 How well the program is progressing toward its mission and stated multiyear objectives.

#### Program Response:

Since the previous accreditation review, we have worked on resolving and improving on the given recommendations. Recent administrative changes in the program, the School of Architecture and the University have affected the timeliness and completion with which we have been able to address these recommendations and changes.

-Update mission, educational goal and educational objectives revised by faculty and aligned with NAAB Conditions for accreditation.

-Strategic Plan- was revised to align with 2022-2027 Institutional Strategic Plan (ISP).

Our progress report of the Work Plan 2018-19 is included in Appendix 5.2.3



For each Specific Departmental Objectives (SDO) activities are listed and constitute the Long-range Plan from 2016-2021.

**SDO 1: To steer students towards a holistic practical educational experience so that our graduates are capable of meeting the basic demands of our profession with critical and ethical responsibility**

Actions:

1. Participate in ACSA's events and NAAB's orientations
2. Identify coordinators for each design levels and each curricular component
3. Restructure the Curriculum Committee
4. Revise all syllabus in accordance to outline learning outcomes

**SDO 2: To develop instruments and mechanisms to recognize and reward academic excellence among students and faculty**

Actions:

1. Establish the Departmental Personnel Committee
2. Promote Full-time faculty

**SDO 3: To encourage students to become architects responsible to the build heritage**

Actions:

1. Open to the community the Conservation Laboratory as resource
2. Stimulate the participation of students in competitions related to conservation and Documentation

**SDO 4: To encourage a constant interaction between academia and practice in order to help students' transition**

Actions:

1. Name a faculty member to establish and coordinate the Licensing Advising (AXP)
2. Further representation of the School at the Annual NCARB Meeting, IDP Division
3. Encourage participation of consultants from different fields in student juries, especially fourth and fifth year students
4. Encourage participation of other professionals related to Architecture in professional practice courses and Design juries
5. Incorporate Engineering Professors to the program.

**SDO 5: To strengthen the collaboration between the school and the community**

Actions:

1. Collaborate with high schools offering architecture design workshops.

**SDO 6: To develop the organizational structure, processes and infrastructure to support high quality education.**

Actions:

1. Incorporate to the administrative structure the Director of the Graduate School of Landscape Architecture and the Director of the Interior Design Program

**SDO 7: To increase the retention and graduation rates of the students of the Architecture Program**

Actions:



1. Revise the curricular sequence
2. Articulate the integration and sequence between the three level of Capstone Design

**SDO 8: To continue the improvement of the assessment processes associated with the teaching/learning dynamics and student learning outcomes**

Actions:

1. Establish the Departmental Outcomes Assessment Committee
2. Develop the Outcomes Assessment Plan

**SDO 9: To initiate the development of distance learning offerings**

Actions:

1. Presentation to faculty members on Quality Matters and Distance Learning
2. Identify faculty and courses to re-design for distance learning
3. Initiate distance learning courses in the Architecture curriculum

**SDO 10: To increase the offerings in the design fields**

Actions:

1. Inaugurate offering the Bachelor Degree on Interior Design
2. Develop a program on Industrial Product Design

**SDO 11: To continue to attract a diverse student body**

Actions:

1. Collaborate more actively with the Institution Admissions and Promotion Office to promote our program
2. Establish additional exchange agreements with other architectural schools' outside Puerto Rico

**SDO 12: To promote our programs within the academic community**

Actions:

1. Promote combined design studios with the Engineering and Management Programs
2. Promote Capstone joint projects among Engineering, Architecture and Landscape Architecture students
3. Encourage our students to participate in the Combine Graduate Studies Program.

**SDO 13: To increase presence within local and regional community**

Actions:

1. Work closely with the Institutions Development and Public Relations agency
2. Promote participation in professional and community initiatives

The 2022-2027 Institutional Strategic Plan (ISP) is available at the following institutional web page link:

<https://www.pupr.edu/es/about/presidents-message/>

**5.2.4** Strengths, challenges, and opportunities faced by the program as it strives to continuously improve learning outcomes and opportunities.

**Program Response:**

**Program strengths**



1. An open-admission policy that nurtures our diverse and competitive student body
2. The programs have a three-term structure.
3. The Architecture program offers a five-year professional degree.
4. University is located in a privileged location as part of San Juan's financial district.
5. The campus is a compact urban site, which is an example of sustainable land use accessible by mass transportation.
6. The Materials and Digital Fabrication Laboratory is equipped with up-to-date software and fabrication resources such as laser cutter, CNC, and 3D printers.
7. The Architectural Conservation Laboratory and research facility is unique in the Caribbean.
8. The Digital Media Archives serves as a repository of students work.
9. The Ceramics Laboratory provides a space to experiment with tridimensional or sculptural representations.
10. The program offers a broad design scope and promotes specialization through graduate studies or career choices.
11. Ample opportunities to study abroad through internship and exchange programs.
12. The pro-student empowerment encourages intellectual and critical spirit.
13. Opportunities for students to be involved in local and national organizations.
14. Opportunities to promote the integration among students and professors from different academic levels and departments.
15. An accessible faculty means direct communication with students.
16. The program enjoys a positive perception in the public eye due to alumni success.
19. The recruitment of alumni faculty raises the expectations for excellence.

#### **Program weaknesses and threats**

1. Salary of full-time and part-time faculty discourages the development of research and academic careers.
2. Other architectural school in another institution is attracting students with similar open policy and five-year program.
3. To expand the presence of sustainable design theory and practice and resources.
4. Limited study abroad programs offering
5. Limited endowment mechanism in order to promote public exhibits, publications and workshops for faculty and students

#### **Opportunities**

1. To take advantage of the international contacts brought by the study abroad programs and the lectures series to create a visiting critics/professors program
2. To increase the presence of the legal aspects of the profession in the general curriculum that should include both issues of practice, licensing, construction law, urban development, procurement and arbitration, among others
3. To integrate GIS as a research and pedagogical tool in both urban design courses and capstone projects
4. To enhance the presence and integration of Engineering personnel with the School
5. To expand the presence of BIM's methodologies in the design curriculum
6. To increase the presence of the building industry's representatives in juries and symposiums
7. To expand the relationship with other institutions and schools facing similar regional and cultural challenges
8. To increase the presence of Non-Western traditions with particular emphasis in the African heritage and its spatial and social living presence in current cultural patterns
9. To incorporate computer animation technology as a conceptual or representational tool in the design courses
10. To create, through the Digital Media Archives, a complete database of mid-career research papers, student's capstone projects, laboratories' products, lectures and other research ventures
11. To increase the student's role in school governance



12. To foster a good relationship with School's alumni and maintain records of their career achievements
13. To increase the dissemination of faculty and student's projects

#### 5.2.5 Ongoing outside input from others, including practitioners.

##### **Program Response:**

In Fall 2021 we started by reconnecting with our alumni through a family outing with new students. In addition, alumni have been invited to participate in studio juries, join our part-faculty and participate as speakers.

The Architecture Program is located within the building of the School of Architecture, where it shares resources and services with the Landscape Architecture, Interior Design as well as the Master's in Architectural Conservation and Rehabilitation. Within the school, the program has a permanent exhibition space and signages that highlights each program.

The program must also demonstrate that it regularly uses the results of self-assessments to advise and encourage changes and adjustments that promote student and faculty success.

##### **Program Response:**

Each academic program has a set of program goals defined and stated in terms of student learning outcomes (or realms, which include performance criteria for the Architecture program), aligned with the institutional learning goals, and the PUPR mission. We establish relationship between institutional goals and program learning outcomes all areas must have documented evidence that the program outcomes are aligned with the institutional learning goals.

Design courses, programs, and experiences that provide learning opportunities to achieve learning outcomes. All academic areas have a documented assessment plan and process in place in a Program Student Learning Assessment Plan Template consistent with the general guidelines provided in the document. It includes the assessment opportunities for the learning outcomes, and a mapping between courses offered and learning outcomes of the unit. Also, it incorporates the assessment tools/instruments, and the performance targets/goals used to demonstrate outcomes compliance.

School of Architecture: Recently enriched their assessment processes, with a strong introspection in the evaluation of the assessment methods and practices; this resulted in an integrated plan to assess each performance criteria at both levels of accomplishment, as defined in the NAAB criteria for accreditation.

A major review of institution-wide assessment processes has been conducted during the last years resulting in enhanced assessment practices.

The assessment of student learning is mostly based on direct assessment measures performed at program level and component or specialty area levels. The most common method is the use of summarized reports for the learning outcomes based on rubric analysis collected at course level. The Architectural Design Jury Evaluations are used by the School of Architecture uses a peer evaluation rubric. Indirect sources of assessment data are likewise utilized, depending on the program, such as the senior exit survey, faculty evaluation, transcript analysis, syllabi analysis, employer feedback survey, among others. At the Office of Planning and Development and Institutional Research, further reports are generated, including processing of student satisfaction surveys, alumni surveys, and the analysis of retention data, among others.

At course level, the areas have reported the student learning assessment instruments used to evaluate attainment of course objectives and program-level learning outcomes. The direct instruments include: exams, projects, laboratory reports, special assignments, oral presentations, capstone evaluations, technical paper reviews, poster presentations, field trips, case studies, written essays, among others. Then the coordinator prepares the program-level summarized student learning assessment report for the specific academic area. Each department is responsible for implementing and documenting actions for the enhancement of programs based on the student learning assessment results obtained.



As a decentralized assessment structure, individual area plans might incorporate additional elements in their respective documents to ensure compliance for their program-specific accrediting agencies (NAAB). For Bachelor programs, the department in charge of the program is responsible for the student learning assessment process, and have a student learning assessment coordinator or team, designated by the Department Head, in charge of the day to day activities performed to comply with this criterion, including assigning and gathering the assessment information from the faculty members, processing this information and disseminating the results. The dean of the school is the owner of this process at a higher level.

### 5.3 Curricular Development

The program must demonstrate a well-reasoned process for assessing its curriculum and making adjustments based on the outcome of the assessment.

*Programs must also identify the frequency for assessing all or part of its curriculum.*

#### Program Response:

With a decentralized student learning assessment process, UPPR institutional efforts are channeled through the Institutional Student Learning Assessment Committee since 2013. This committee is 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 is meeting 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 the 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:

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.

**5.3.1** The relationship between course assessment and curricular development, including NAAB program and student criteria.

#### Program Response:

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 1 of the 2022-2027 strategic plan: "Develop a student-centered culture that promotes student success," and the strategic goal 3 of the 2016-2021 strategic plan: "Foster institutional alignment with educational trends". This process also considers the program objectives, constituencies' needs, and compliance with high standards to meet society, licensing, and accreditation requirements.

The school have a documented assessment plan and process in place, consistent with the general guidelines provided in the Institutional Student Learning Assessment Plan considering the NAAB accreditation requirements. It includes the assessment opportunities for the learning outcomes and a mapping between the courses (based on the course learning objectives) and learning outcomes, and



between the program outcomes and the institutional learning goals. It also incorporates the assessment tools/instruments and the performance threshold (target or goal) used to demonstrate the attainment of the student outcomes.

The Institutional Student Learning Assessment Committee has focused efforts on refining and standardizing the process to evaluate the attainment of the institutional learning goals 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. 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. 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 assessment is performed at the course and program levels. The various course and program assessment tools and instruments are documented on each area's student learning assessment plan. 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.

The results of the assessment of student learning have been used in the continuous improvement of the 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 result of these actions, whether successful or not.

Completion of all assessment tasks is ruled by a three-year calendar, as follows:

#### First Academic Year

Courses representing core curricular components of the School of Architecture are targeted to jumpstart the plan.

Courses from three (3) different curricular components, taught by different professors, are identified to first develop individual rubrics. Regarding the Design sequence, three (3) of the chosen courses constitute benchmarks in the curriculum, as they address the largest number of Program Student Learning Outcomes (PEO's). Professors listed below participated in the process. For sampling, each professor is free to choose twelve (12) students who completed the course. The dozen students selected had to appear in continuous alphabetical order in the class roster, a measure to ensure neutrality.

#### Second Academic Year

Evaluation of courses originally targeted for the Second Academic Year is being repeated this year to determine the long-range effectiveness of measuring tools and record any improvements resulting from changes implemented. Six (6) additional courses from three (3) additional curricular components are identified to develop additional individual rubrics.

#### Third Academic Year

Analysis of results will extend to the Third Academic Year, when we plan to repeat assessment cycles and add courses to the evaluation process. Completion of the three-year assessment cycle, we trust, will grant:

1. A reliable overview of achievements and areas for improvement, if not growth,



regarding assessment policies.

2. An expanded perspective regarding fulfillment of the university's and the program's missions.
3. A dynamic understanding of the multi-year objectives delineated in the school's Long-Range Plan, helping us to properly ascertain the possibilities and limitations of our aspirations.

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). The cycle of activity for each institutional learning goal (ILO) is designed over a 6-year period. (See Appendix 5.3.1)

**5.3.2** The roles and responsibilities of the personnel and committees involved in setting curricular agendas and initiatives, including the curriculum committee, program coordinators, and department chairs or directors.

**Program Response:**

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. The academic team is the assessment committee.

The provost created the Institutional Student Learning Assessment Committee and, in 2013, 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. This is an effective way to integrate institution-wide efforts, provide general guidelines and minimum assessment requirements, define institutional learning goals aligned with program/area learning outcomes, align assessment processes, share assessment findings, and disseminate assessment results.

At PUPR, the evaluation of 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. The review of academic programs is initiated at the academic department level with active participation of relevant standing committees. The process is described in the Academic Program Review Policy (See Appendix 5.3.2)

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

**New and Renewal of Academic Programs Process**

<b>Steps</b>	<b>Responsibility</b>	<b>Actions</b>
<b>1</b>	Academic Department	Proposes new ideas or revisions of academic curriculum to the Dean.
<b>2</b>	Department Curriculum Committee	Reviews and approves the proposal.
<b>3</b>	VP for Academic Affairs	Reviews; makes recommendations as deemed necessary; endorses for submission to the Academic Council.



<b>4</b>	UPPR Academic Affairs Committee of the Academic Council	Reviews; makes recommendations as deemed necessary; endorses for submission to the Academic Council.
<b>5</b>	Academic Council	Reviews and approves the proposal.
<b>6</b>	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.

### 5.4 Human Resources and Human Resource Development

The program must demonstrate that it has appropriate and adequately funded human resources to support student learning and achievement. Human resources include full- and part-time instructional faculty, administrative leadership, and technical, administrative, and other support staff. The program must:

**5.4.1** Demonstrate that it balances the workloads of all faculty in a way that promotes student and faculty achievement.

**Program Response:**

Currently the student/faculty ratios are an average of 5:1 as we slowly increase our enrollment numbers. Studio courses accept a maximum of 15 students per class, although historically the norm has been a maximum of 12. Seminar or lecture classes have normally a ratio of 25-30 per professor, at the institutional level, but this numbers are mostly seen at undergraduate programs. For graduate programs the ratios are closer to 8 students per Studio courses and 12 students per seminar or lecture classes.

Part-time faculty members are involved and invested in the program’s development and are always available to help the Program Director with all endeavors, academic and extracurricular, in order to achieve program goals and objectives. Professors are always proposing new projects and course topics that are aligned with the program’s intent. Our faculty is always available for mentoring and advising students.

The number of faculty members is adequate to achieve the program’s mission, goals and objectives, but we strive to increase the number in order to keep the program growing and developing. Faculty members of the School of Architecture teaching in the B. ARCH program since WI 2021 have different backgrounds and represent a wide range of experience and expertise. The faculty includes 3 licensed engineers. Our faculty roster includes professors with related educational backgrounds in Education, Humanities, Social Sciences, Visual Arts, Interior Design and Industrial Design. The licensed architects include long-term prominent practices and a younger generation of practitioners initiating their ventures.

PUPR B.Arch. faculty resume are presented in the appendix 5.4.1. Full time faculty member - María Mercè Martínez to Juan Carlos Velázquez - appear first, with part-time faculty resumes following.

**5.4.2** Demonstrate that it has an Architect Licensing Advisor who is actively performing the duties defined in the NCARB position description. These duties include attending the biannual NCARB Licensing Advisor Summit and/or other training opportunities to stay up-to-date on the requirements for licensure and ensure that students have resources to make informed decisions on their path to licensure.

**Program Response:**

Professor Raúl Rivera-Ortiz is part of our faculty in the professional practice component (Practice Experience and Ethics). As a Licensing Advisor, he focuses on communicating the importance of



NCARB, ARE and AXP experience through lectures and talks each academic term. He has attended NCARB 2021 Licensing Advisor Summit, a training opportunity within NCARB 2021 Licensing Advisor Summit and 2023 Licensing Advisor Summit to ensure that students have resources to make informed decisions on their path to licensure. (see Appendix 5.4.2)

- August 3 - 5, 2023:  
2023 Licensing Advisors Summit - Kansas City.

- August 5-7, 2021:  
2021 Licensing Advisors Summit – Miami.

- August 5-7, 2021:  
Structured Educational Activity facilitated by NCARB 2021 Architect Licensing Advisors Summit. He completed the following courses:

- Course Number: 2021LAS-100 – 1.25 LUs
- Course Number: 2021LAS-ProgUp – 1.25 LUs
- Course Number: 2021LAS-IPAL – 1 LU
- Course Number: 2021LASEmp– 1.25 LUs
- Course Number: LAS2021-Game– 1.25 LUs
- Course Number: LAS21-Intl– 1.5 LUs
- Course Number: 2021LAS-Raise – 1.25 LUs

As students approach graduation they are encouraged to participate in the registration exam preparatory seminars offered by the Colegio. This is reflected by the record of attendance to this successful seminar series. Though NCARB Certificate is not a requirement for licensure in Puerto Rico, it still is a highly regarded credential and a desirable convenience in terms of registration in other NCARB jurisdictions. Confident of the opportunities globalization will grant its students in the near future, the School endorses NCARB registration, and to that effect, each term we schedule orientations regarding related licensing and registration information.

**5.4.3 Demonstrate that faculty and staff have opportunities to pursue professional development that contributes to program improvement**

**Program Response:**

The faculty has always been an instrumental part of the programs development and their input is always sought out and considered. Faculty members have the autonomy to develop or implement new projects and research topics within their courses, as well as recommend changes in curriculum and program development.

At the School of Architecture, the Dean and Administrative Coordinator provide support with budget handling, supplies, student mentoring, classroom assignment, faculty support and other operational tasks. The Dean and the Program Director have a day-to-day communication that allows to better integrate the program within the school and improve its outreach within the undergraduate students (who are potential graduate candidates) and the rest of the Institution.

Part-time faculty members are involved and invested in the programs development and are always available to help the Program Director on all endeavors, academic and extracurricular, in order to achieve program goals and objectives. Professors are always proposing new projects and course topics that are aligned with the program’s intent. Our faculty is always available for mentoring and advising students.

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.

The Sponsored Research Office (SRO) is in charge of supporting the University Goal of fostering an applied research environment. It supports researchers in all disciplines by providing information about appropriate sources of external grant and fellowship support for their research and by working with them to prepare grant proposals and budgets. The office is in charge of ensuring that all the proposals submitted on behalf of the institution are in compliance with external and internal regulations. The office personnel also review the proposals before submission for accuracy, completeness, and reasonableness of the budget. The SRO is also responsible for submitting all proposals on behalf of Polytechnic University of Puerto Rico.

The Sponsored Research Office is available at the following institutional web page links:

<https://www.pupr.edu/research>

**5.4.4** Describe the support services available to students in the program, including but not limited to academic and personal advising, mental well-being, career guidance, internship, and job placement.

**Program Response:**

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.

The academic support services is available at the following institutional web page link:

<https://www.pupr.edu/es/services/>

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.

The Center for University Progress is available at the following institutional web page link:

<https://www.pupr.edu/services/cpu/>



### 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.

The Career and Internships Service Program is available at the following institutional web page link:

<https://www.pupr.edu/ideacenter/>

### 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).

The Honor Program is available at the following institutional web page link:

<https://www.pupr.edu/es/academics/honor-program/>

### 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 the 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 Undergraduate Research Programs and Opportunities for Students is available at the following institutional web page links:

<https://www.pupr.edu/es/research/>

<https://www.pupr.edu/es/urphs/>

### 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 academic mobility of students and faculty 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.

The International Affairs and Student exchange information is available at the following institutional web page links:

<https://www.pupr.edu/es/international-affairs/>

#### 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.

The Counseling Office information is available at the following institutional web page links:

<https://www.pupr.edu/es/consejeria/>

#### 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.

The Student Chapters of Professional Organizations information is available at the following institutional web page links:

<https://www.pupr.edu/student-chapters/>

IDEA Center 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 provides the opportunity to 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).

The IDEA information is available at the following institutional web page links:

<https://www.pupr.edu/es/ideacenter/>

## **5.5 Social Equity, Diversity, and Inclusion**

The program must demonstrate its commitment to diversity and inclusion among current and prospective faculty, staff, and students. The program must:



**5.5.1** Describe how this commitment is reflected in the distribution of its human, physical, and financial resources.

**Program Response:**

Our program, following the institutions mission, provides opportunities for students of diverse backgrounds. The admissions process is open and available to anyone that wishes to pursue studies in Landscape Architecture. Requirements for admissions are easily attainable for most population and the program usually admit 98% of the applicants. This provides an ample opportunity for many to learn about the profession even if they don't all remain in the program. Program promotion strategies are targeting different population locally at private and public institutions, through orientations, campus tours, online orientations, social media, and Facebook live events allowing for a wider outreach.

It is important to mention that Puerto Rico is an ethnic group of mixed races and sometimes the collected data regarding ethnicity might not be quite accurate. Local population usually identifies itself as white for lack of a better ethnic description like mestizos or mulattos, which is what best represents us.

Program Student characteristics

Demographic (race/ethnicity & gender)

Student enrolled in the accredited degree program (race/ethnicity & gender)

Academic Year	Race/ethnicity				Male		Female	
	Hispanic/Latino	%	Race ethnicity unknow	%	Total	%	Total	%
Last NAAB Visit (2015)	523	100%	0	0%	315	60%	208	40%
2022	395	99%	2	1%	165	42%	232	58%

Demographic compared to those of the student population for the institution overall (race/ethnicity & gender)

Academic Year	Race/ethnicity				Male		Female	
	Hispanic/Latino	%	Race ethnicity unknow	%	Total	%	Total	%
Last NAAB Visit (2015)	4743	100%	0	0%	3687	61%	1056	39%
2022	4226	99%	18	1%	2995	71%	1249	29%

Our program is composed of a diverse group of professionals, all belonging to the group classified as minority (Hispanic/Latino) Puerto Ricans. The diversity or inclusiveness can best be explained from the point of view of gender, which is one of the most relevant local conditions: the inequality between men and women. Since its inception, our program, has been mostly led by women maintaining a balance between male and female faculty. The female faculty has always had an instrumental role in the development of the program, and this is quite atypical in a Latin society and culture which historically has always been male-oriented. Just recently, our current dean female Dean was



appointed to the School of Architecture, making her the first woman to lead the school since it was inaugurated in 1995. Currently, the School of Architecture is led by a majority of women team that comprises the dean, the Director of Academic Affairs and Director of Landscape Architecture, the Interior Design Program Coordinator and the Conservation and Architectural Rehabilitation Master's Program Coordinator.

Program Faculty characteristics

Demographic (race/ethnicity & gender) and faculty rank

Academic Year	Last NAAB Visit (2015)				2022			
	Race/ethnicity		Male	Female	Race/ethnicity		Male	Female
	Hispanic / Latino	Race ethnicity unknow	Total	Total	Hispanic / Latino	Race ethnicity unknow	Total	Total
Professor	3	0	3	0	3	0	1	2
Associate Professor	0	0	0	0	2	0	0	2
Assistant (Auxiliary) Prof.	9	0	7	2	4	0	4	0
Instructor	0	0	0	0	0	0	0	0
Total Faculty	12	0	10	2	9	0	5	4

The PUPR, 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. 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.

Intellectual freedom is granted in the Intellectual Property Policy. The 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

*“The PUPR 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.”*

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.

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.



The PUPR is devoted to encouraging the highest values in all interactions among students, faculty, staff, administration, and 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.

**5.5.2** Describe its plan for maintaining or increasing the diversity of its faculty and staff since the last accreditation cycle, how it has implemented the plan, and what it intends to do during the next accreditation cycle. Also, compare the program’s faculty and staff demographics with that of the program’s students and other benchmarks the program deems relevant.

**Program Response:**

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. 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. The 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.” 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.”

Faculty and Staff

There is a consensus among students that the school benefits from the inclusion of foreign professors as part of the visiting faculty: teaching for 4 to 7 days or complete trimester courses. This practice has been documented as a petition in student’s focus groups and represent an increasing interest for complementing the Caribbean references with foreign, alternative experiences. The amount of study abroad programs that have been created and the effect of returning students sharing their experiences and new acquired references is transforming the school’s cultural scope. If diversity is usually understood as the inclusion of minority groups that have been misrepresented or simply absent from academia, in this particular cultural context what tends to be somehow missing is the integration of faculty from other countries and cultural backgrounds other than Puerto Rico. The school organizes workshops with a foreign professor, Pedro Urzaiz, every Winter particularly in the studio courses where it is most effective.

Another concern regarding social diversity comes from the relatively low number of women that are represented in the profession. Architectural practice remains a male dominated field with a patriarchal mental infrastructure rarely acknowledged or talked about. In this sense, the school has many women in the faculty with diverse backgrounds and career choices, and juries tend to have equal gender representation.

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. (see Appendix 5.5.2)



**5.5.3** Describe its plan for maintaining or increasing the diversity of its students since the last accreditation cycle, how it has implemented the plan, and what it intends to do during the next accreditation cycle. Also, compare the program’s student demographics with that of the institution and other benchmarks the program deems relevant.

**Program Response:**

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 the 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.” Within the rights and responsibilities of this document, the bases for a climate of respect and inclusion in the community of the UPPR also are encouraged.

The UPPR is committed to answering any grievances or complaints of all their constituents. The main objective of the 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 Vice-Presidency of Academic Affairs supervises investigating and resolving the complaint in collaboration with Human Resources Office.

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: the Student Handbook, Faculty Handbook, Administrative Handbook, and HR Policies.

The 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.

Diversity, Equity, and Inclusion Survey

<b>Age</b>	73% of students are between 18 to 22 years old		
<b>Sex</b>	Feminine	Masculine	Other
	29%	70%	1%
<b>Gender Identity</b>	Feminine	Masculine	Non-Binary
	28%	67%	2%
	Transgender	Prefer not to answer	Other
	0.4%	1.1%	1.5%
<b>Sexual Orientation</b>	Heterosexual	Lesbian	Gay
	83%	1.5%	1.1%
	Bisexual person	Asexual	Other
	12%	0.4%	3%



Knowledge of terms	Diversity	Equity	Inclusion
		92%	87%
<b>General Satisfaction</b>			
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 - FA 2023 and WI 2023)

For Gender Discrimination Policy and Procedures, Federal Department of Education see Appendix 5.5.2.

**5.5.4** Document what institutional, college, or program policies are in place to further Equal Employment Opportunity/Affirmative Action (EEO/AA), as well as any other social equity, diversity, and inclusion initiatives at the program, college, or institutional level.

**Program Response:**

In the Recruitment, Selection and Appointment Policy and Procedure, the 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.

The 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.

The recruitment information is available at the following institutional web page links:

<https://www.pupr.edu/es/rh/>

See Appendix 5.5.4 for Recruitment, Selection and Appointment Policy and Procedure document.

**5.5.5** Describe the resources and procedures in place to provide adaptive environments and effective strategies to support faculty, staff, and students with different physical and/or mental abilities

**Program Response:**

Institutional Policies and procedures



As stated in the PUPR Undergraduate Catalog, available online, Polytechnic University of Puerto Rico adopts the following principle as part of its philosophy and institutional mission, Section XIV, Declarations and Certifications: Non-discrimination clause:

*“Polytechnic University of Puerto Rico does not discriminate against any individuals for reasons of gender, political or religious affiliation, economic or social status, ethnic origin, or for any other reason considered unlawful. This policy applies both in the recruitment of personnel and in the acceptance of students.”*

Other reasons considered unlawful include: national origin, age, physical ability, or sexual orientation. Affirmative action in Puerto Rico is both required by law and tradition, guaranteeing equitable access to a caring and supportive educational environment in which everyone can learn, teach and work. Ours being a multi-cultural society by definition, class, race and gender issues require an optic which takes into account the region’s originally mixed ethnic composition.

Polytechnic University of Puerto Rico is in compliance with federal and public laws. The Institutional Statement includes the official policies on sexual harassment in the workplace and the academic context, drug and alcohol abuse, and disabilities. The grievance procedures are also contained in the Statement. The following institutional policies can also be found on the PUPR website: the Security Policy (based on the “Student Right To Know and Campus Security Act” of 1990),

Sexual Abuse Prevention and Response Policy (following the “Crime Awareness and Campus Security Act III” -Title II of Public Law 101-542, known as the Jeanne Clery Act); the Student Handbook (on institutional policies and services); Policies on Drug Abuse, Alcohol and Tobacco (submitting the “Drug-Free and Campuses Act Regulations-EDGAR Part 86”); Revision Procedures (in compliance with “The Family Educational Rights & Privacy Act, FERPA”); and the General Student Regulations.

(See: <https://www.pupr.edu/services/student-services/>)

In addition, each syllabus must include the following institutional policies:

*“Institutional Policies*

*1. Reasonable accommodation:*

*If you are a student with disabilities who requires reasonable accommodation to their courses, you must apply at the beginning of each quarter or as early as the need arises. To apply, follow the established institutional procedure with the guidance and counseling office. Reasonable accommodations will be provided to the student from the date the notification is submitted to the teacher and not retroactively, as provided by law.*

*For more information, go to: [www.pupr.edu/spi](http://www.pupr.edu/spi)*

*2. Copyright UPPR*

*3. Honesty, fraud and plagiarism*

*Dishonesty, fraud, plagiarism and other inappropriate behavior in relation to academic work and major infractions are sanctioned by the General Student Regulations. Major violations, as provided in the General Student Regulations, may result in suspension or expulsion from the university.*

*4. The use of electronic devices*

*Cell phones and other electronic devices that could disrupt teaching and learning or alter the environment conducive to academic excellence, will be deactivated. Urgent and compelling situations will be addressed, as appropriate. The operation of electronic devices that provide Access, store or send data will be banned or prohibited during assessments or examinations.”*



### Reasonable accommodation

The PUPR provide equal opportunities to people with physical, mental, neuropsychological, sensory and emotional disabilities that may limit their daily activities in an academic environment.

In order to achieve this, we do the following:

- Offer coordination services for reasonable accommodation whenever a student requests it.
- Train faculty and personnel about the American with Disabilities Act (ADA) and other topics related to people with disabilities.
- Provide academic, personal and occupational counseling.
- Coordinate student services with the Vocational Rehabilitation Administration.

The reasonable accommodation information and how to request the reasonable accommodation is available at the following institutional web page links:

<https://www.pupr.edu/reasonable-accomodation/>

## **5.6 Physical Resources**

The program must describe its physical resources and demonstrate how they safely and equitably support the program's pedagogical approach and student and faculty achievement. Physical resources include but are not limited to the following:

### **5.6.1 Space to support and encourage studio-based learning.**

#### **Program Response:**

Polytechnic University of Puerto Rico is located at the heart of the financial district, in the metropolitan area of San Juan. The physical facilities consist of a building complex facing Ponce de León Avenue, one of Puerto Rico's most important thoroughfares. The complex of six buildings was developed from additions to an original early 20th Century structure facing the avenue. A three-story library building rises independently next to the old structure now used for the administrative offices. A freestanding four-story Multi-use Building is located next to the library and extends further back in order to face a rectangular courtyard. The Engineering Department Building, opposite to the multi-use structure, completes said courtyard. The remaining side is closed off by buildings dedicated to classrooms and recently expanded with two additional floors.

Surrounded by the five structures, the rectangular courtyard becomes the center of student life at peak class hours. The last structure is a six-story parking that does not face the courtyard. A large green area mediates between the university's front facade and the somewhat tight urban context on which it stands. A 370-seat auditorium on the multi-use building is used continuously for meetings, lectures and other events. Probably one of the largest facilities of its kind in the San Juan Metropolitan Area, this hall's capacity and accessibility significantly stimulates attendance from the general public.

The School of Architecture is located in the third and fourth floors of the Multi-use Building, which also houses, the cafeteria, the gym, auditorium, an indoor basketball court and the faculty offices for the Arts and Sciences Department. Design studios occupy most of the building's third floor, in two main areas: the west side accommodates architecture students from 1st through 4th year and pupils in the Bachelor of Interior Design degree, while the east side incorporates those students in their 5th year and the Master of Landscape Architecture population. Each student is assigned a workplace in studio, to which extended access is provided during the quarters. Access schedule runs between 7:00 am – 1:00 am, everyday, and is extended to 24-hours during Mid-Term and Final Term periods. Capstone and Master's students have 24-hour access to their area during the trimester. An ample review and pin up area comprises the center of the space serving as the fulcrum for discussion,



stopping and viewing juries or pin ups. Administration and faculty offices, a conference room, a kitchenette and restrooms form the remainder of the third floor.

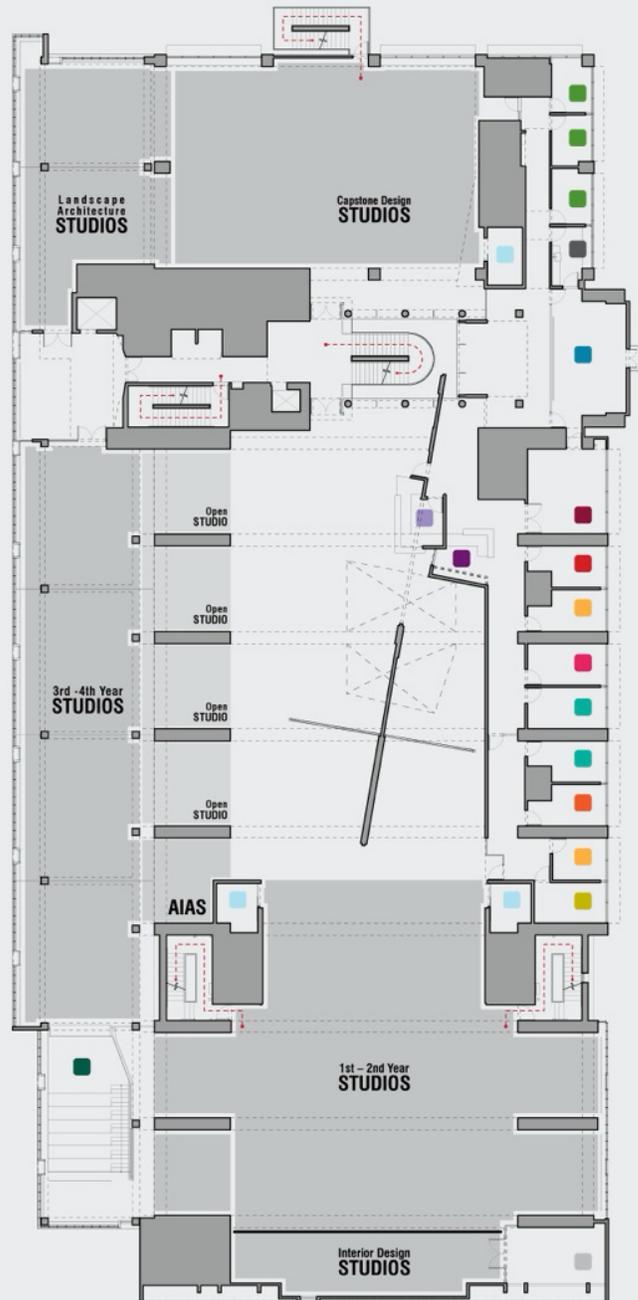
All facilities are in compliance with the Americans with Disabilities Act and with local building, fire and life-safety codes. At ARQPOLI, the interior space feels very dynamic where spaces flow into one another, something that is facilitated by an open floor plan. The lobby exhibit-area enables the School to sponsor public events and in-house and traveling exhibitions.

In close proximity to San Juan's banking area, Polytechnic University sits in a compact urban lot, which, as described earlier, is limited by two streets and a congested avenue. The institution profits from its proximity to an important train station of the capital's light rail system.

## 3rd Level ARQPOLI AFTER RENOVATION

- Reception
- Assistant to the Dean
- Dean
- Associate Dean
- Assistant Dean
- Interior Design Coordinator
- Programs Coordinator Office
- Landscape Architecture Director
- Full-time faculty offices
- Part-time faculty offices
- Amphitheater
- Conference
- Paint Booth
- Kitchenette
- Terrace

- 16,600 sq. ft.**  
EXISTING CONDITION
- 27,240 sq. ft.**  
NEW RESTRUCTURING  
AND ADDITION



**EXISTING CONDITION & NEW ADDITION**  
Scale: 1/32" = 1'00"

Jorge Rigau, FAIA, Arquitects



**5.6.2** Space to support and encourage didactic and interactive learning, including lecture halls, seminar spaces, small group study rooms, labs, shops, and equipment.

**Program Response:**

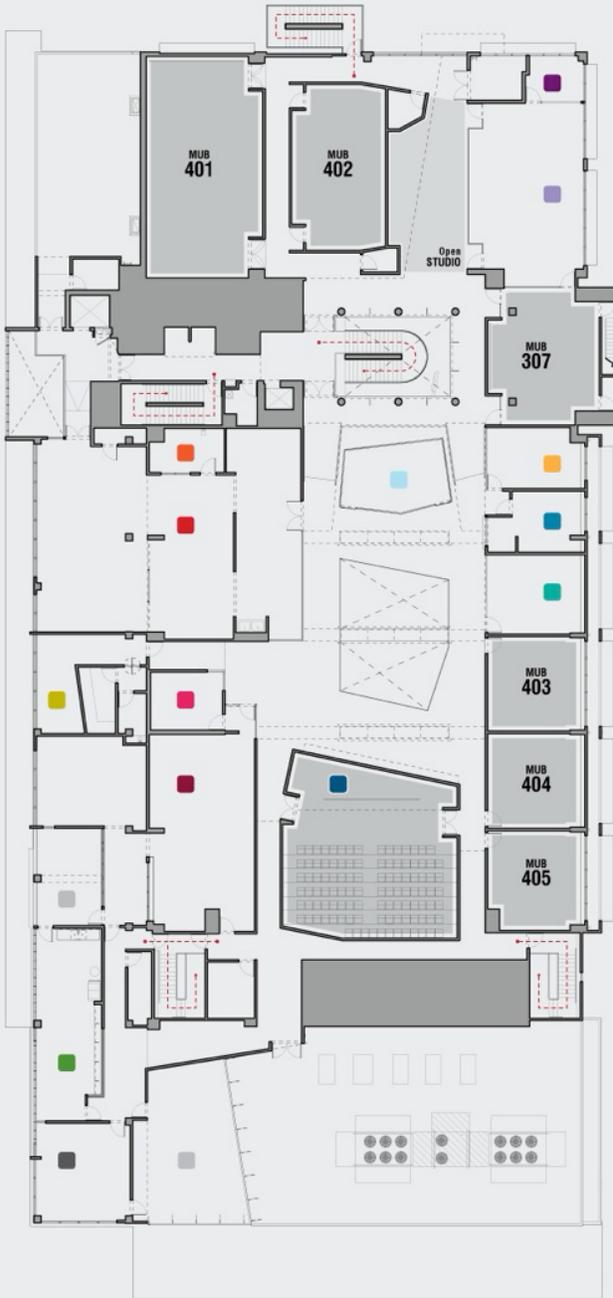
The fourth floor includes formal classroom space, exhibit and jury space, a series of laboratories such as: Computer, Architectural Conservation, Materials and the Digital Fabrication, Ceramics laboratories. Additional space is dedicated to topic specific explorations, including Urbanism Planning and Housing, Sustainability, Collaborative Design, and publications. The School also houses the seat of the local DO.CO.MO.MO chapter. The Digital Media Archive serves to garner student work, as well as recordings of most lectures held at the school. The Photography Laboratory is still under renovation. A Faculty Lounge, bathrooms, mechanical and storage spaces, and a 125-seat auditorium serve users of the School.

## 4th Level ARQPOLI AFTER RENOVATION

- Computers LAB
- Computers LAB Director
- Conservation LAB
- Conservation LAB Director
- Materials & Digital Fabrication LAB
- Materials LAB Director
- Urbanism, Planning and  
Housing Workshop, Publications,  
Sustainable Explorations Workshop &  
Community Participation Workshop
- Do.Co.Mo.Mo.
- Photography LAB [still under renovation]
- Ceramics LAB
- Digital Media Archive
- Auditorium
- Shop
- Exhibition Space
- Faculty Lounge
- Terrace

**13,170 sq. ft.**  
EXISTING CONDITION

**18,700 sq. ft.**  
NEW RESTRUCTURING  
AND ADDITION



**EXISTING CONDITION & NEW ADDITION**  
Scale: 1/32" - 1'00"

Jorge Rigau, FAIA, Arquitects



Architectural Conservation Laboratory

The Architectural Conservation Laboratory is a main feature of ARQPOLI's identity being the only facility of its kind inserted at a school in the Caribbean region. The Laboratory enthusiastically promotes the interest in restoration of students that, after taking the course Intermediate Design I (ARCH 3010), are committed to undertake advanced topics in historic preservation. Courses such as Preservation Technology (ARTE 0410) and Architectural Conservation Laboratory (ARTE 0451) stimulate the study of traditional materials through historical research, field visits, and basic laboratory exercises expanding investigative skills, knowledge of local historical precedents, and understanding of traditional construction materials, among others. In addition, the laboratory works as a support mechanism for students of Mid-Career Research (ARCH 3030) and Capstone Design I (ARCH 5010) where students use previous analysis by students in laboratory courses to develop arguments for their research efforts.

Furthermore, by promoting extracurricular workshops on architectural documentation and architectural conservation, students of architecture from second to fifth year can expand their drawing, observation, and field documentation skills and become familiar with historic preservation methodologies.

Safety Equipment				
Quantity	Description	Quantity	Quantity	
1	First Aid Cabinet (complete)	4	Fire Extinguisher ABC	
1	Delta Air Cleaner	1	Exhaust Fan (guard-mounted)	
6	Makita Protective Glasses	6	Safety Goggles	
2	Face Shield Mask	4	Protective Gloves	
1	Delta Unifence Cover	2	Respiratory Mask	
1	Welding Goggles	1	Bell Exhaust Fan (paint area)	
General Equipment				
	Equipment	Proper Num.	Serial Num.	Date Acquired
2	Station Shower Eye/Face Hose	----	----	2000
3	Oven Isotemp Std 2.5 cuft 120v	11845	010N0179	2000
4	Refrigerator	12651	04	2000
5	Solvent Cabinet	15354	----	2005
6	Island Cabinet	17201	----	2000
57	Microscope Lens Smz645	17223	1017701	2000
58	Microscope Nikon C-Ps Stand	17223	1003187	2000
59	Microscope Nikon C-Ps Stand	17224	1011281	2000
60	Microscope Lens Smz645	17224	1014357	2000
61	Microscope Nikon C-Ps Stand	17225	1010714	2000
62	Microscope Lens Smz800	17225	1002741	2000
63	Microscope Camara Nikon Coolpix 5400	19593	3788953	2006
64	Led Lamp Microscope	74756	20520	6/9/99
65	Lab Balance Meter Toledo	----	1125450485	2006
1	Lab Balance Meter Toledo	----	1125400485	2005
2	Stir/ Hot Plt Pc420 5x7 120v/60	----	370500213848	2000
3	Accumet Ph Meter	----	AR81206579	2000
4	Rx-86 Sieve Shaker	----	20076	2000



Materials and Digital Fabrication Laboratory

The Materials and Digital Fabrication Laboratory includes a broad variety of industrial machinery and equipment. It consists of a 2,750 sq. ft. area of machinery, in addition to the digital production area, which contains a reference library, and an assembly area. We follow and comply with the norms established by the Occupational Safety and Health Administration.

The mission of the Laboratory is to make available equipment and machinery necessary to complete the courses offered by the PUPR while proving technical guidance in a controlled and secure environment in order for the students to achieve the best possible representation of their projects. We also make available reference catalogs and samples of various materials, enriching the student's selection of materials for their design projects. We stress the usage of recycled materials; no chemicals or contaminants are used.

Expected conduct and performance from students while at the laboratory are stipulated in the document titled "Relevo de responsabilidad por el uso del Laboratorio de Materiales" Students are required to carefully read the document and sign it, thus accepting the norms and formalizing the right to use the lab.

Shop Tools			
Quantity	Description	Quantity	Description
1	Epilog Laser Cutter 60W 24"x36"	2	Industrial Dust Collector
1	10" Deluxe Radial Arm Saw	1	Hallow Chisel Mortise
1	208v. Backup Battery	1	Dell Core i5v Pro computer
1	3D Printer Maker Bot Replicator	1	Wood Shaper
2	Compound Miter Saw 10"	1	Vertical Panel Saw
1	15" Wood Planner	1	Long Bed 6" Jointer
1	Variable Speed Scroll Saw	1	12" Variable Speed Wood Lathe
1	Belt Sander Disc Grinder	2	Air Compressor 125 lbs.
1	Woodworking Sharper	1	Delta Grinder with lamp
2	16" Drill Press	1	Wet/Dry Vac 16 gal.
1	10" Drill Press	1	Bench Oscillating Sander
2	Dove Tail Machine 16"	2	Hot wire foam cutter
1	10"Unisaw Tilting Harbor	1	Cut Off Machine 14"
1	150 Amp. Mig Welder	1	Jet Air Filter System
2	Band Saw 93 1/2"	1	Contour gauge- General
1	Delta Industrial Dust Collector		
1	Apollo Spray Air Turbine 3 stages		
Electrical Hand Tools			
Quantity	Description	Quantity	Description
1	Circular Saw 7 1/4"	1	Plate Joiner
2	Industrial Jig Saw	1	Reciprocal Saw
1	Hammer Drill	2	Brad Nail air gun
1	Metal Shear	2	Belt Sander 3x21"
1	Power Planner	1	Dremell Multipro 5
1	Angle Grinder 4-1/2"	2	Bosh 19v wireless drills
1	Profile Sander	1	Tiger Saw Variable Speed
2	Thermocouple Gun	1	Soldering Gun Kit
3	Half sheet Sander	2	Drill 1/2"
2	Router 690 1 1/2H.P,	3	1/4 Sheet Sander
2	Sander / Polisher	1	Air Die grinder
1	Cut out Tool	1	Orbital Sander 5"



1	Dewalt Miter Saw 10"	2	Dewalt 1/4 Sheet Sander
1	Brad Nail air gun Makita	1	Makita 1/2" Professional Power Drill
2	Drill Bosh 19v 1/2"	1	Jet Belt & Disc Grinder 6"x 48"- 12" disc
1	Thermocouple Heat Gun- Makita	1	Ridgid Bench Drill 16" DP 1500
1	Campbell & Hausfeld Compressor 125lbs.	1	Jet Wood Working Band Saw 93 1/2"
1	Prof. Heavy Duty Soldering Gun 230w-150w	1	Craftsman Contractor Series Arm Saw 10"
<b>Safety Equipment</b>			
Quantity	Description	Quantity	Description
6	Face Shield Mask	12	Protective Gloves
1	Delta Harbor Saw Cover	3	Respiratory Mask
2	Welding Gloves	3	Bell Exhaust Fan (paint area)
2	Ultra shade Welding Masks, Lincoln	1	Safety storage Steel Cabinet
12	Makita Protective Glasses	6	Safety Goggles
2	Industrial Air Cleaner	1	Exhaust Fan (guard-mounted)
1	Safety Eye Wash Station		Fire Protection Sprinklers system
1	First Aid Cabinet	2	Fire Extinguisher ABC
<b>Hand Tools</b>			
Quantity	Description	Quantity	Description
1	Dial Caliper 6"	1	File set
2	Hacksaw	1	Wood Turning tools set
3	Screwdriver Set	2	Wood Chisel set
1	Drill press vise	3	Metal squares 24'
2	Handle Hammer 16 oz.	3	Levels 48"
2	Adjustable wrench 12"	2	Contour gage
2	Adjustable wrench 10"	4	Metal squares 12"
3	Rubber hammer	3	Hand Saw 12"
2	Push blocks	2	Push Sticks
1	Air blow gun	1	Router edge guide
3	Rubber Sanding Blocks	1	Spray Gun
4	Tape rulers 16'/25'	4	Cords Extensions 25'
1	Metal Shears	1	Hand Saw 24"
2	2" Wide 14"Long Jack Plane	2	Steel Bar Clamps 72"
2	Steel Bar Clamps 60"	2	Steel Bar Clamps 48"
2	Steel Bar Clamps 24"	8	C Adjustable Clamps
6"- 5"- 4"- 3"			
<b>Blades and Bits</b>			
Quantity	Description	Quantity	Description
1	Dado Professional Tipped Blade kit	4	Abrasive Cut-off wheel
1	40 Teeth Carbide finishing blade	2	Grinding wheel Stainless/Metal
1	10" 60T Combination Blade	1	10" 80T Blade
1	Makita router bits set 9 pcs.	1	Porter Cable Blades
1	Wood Bits Set 1/2"-1 1/2"	10	Jig Saw Blades 10 TPI
1	Nonferrous metal/Plastics	2	7 1/4" Finishing Blades
1	10"Crosscut/Rip Blade	2	10"Corian/Plastics Blade
10	Ridgid hacksaw blades 18T	2	Steel Chisel Set
3	Drill bits set 29 pcs. each	1	10" Chisel tooth Blade
2	Flat boring bit kit	1	Industrial hole saw kit
5	All Purpose saw blades 3T	5	Bi-Metal Wood Blade 6T
2	Grinding 7" wheel for aluminum		Concrete/Masonry Cutting wheel



5	Hss Metal Blades 14T	8	Band Saw Blade 93-1/2"
2	Non Ferrous metal /plastics Blade	1	CNC Router Bits set- wood/plastics
2	Multipurpose 60tpi 10' blade	1	Stainless Steel Industrial Sink
1	Screw Diver Set 20 pcs.	1	Stainless Steel /lighting work station
6	Flexible Ruler 25 feet	1	Stainless Steel Working Table 96" x 30"
1	Pro Doweling Kit	1	Storage/ 80 containers cabinet

ARQPOLI designates as “laboratory” a space with specialized equipment, which serve to: properly represent design ideas, to initiate or conclude research processes, or to fabricate design objects and tridimensional prototypes or models. On the other hand, the term “workshop” denotes alternative initiatives that are either under development or are not in need of specialized equipment due to the nature of the activities and tasks carried out. As noted above, the Photography Laboratory is under renovation, and will be refurbished for theoretical and practical support for the entire program.

5.6.3 Space to support and encourage the full range of faculty roles and responsibilities, including preparation for teaching, research, mentoring, and student advising.

**Program Response:**

Digital Media Archive

The Digital Media Archive, formerly known as the Media Lab, is a controlled facility that serves primarily as the School’s institutional digital memory and database. It stores academic works such as: Mid-career research papers, Capstone projects, think-tank products and other research ventures. Among other things: a slide image collection, lectures’ videos, photographs, ARQPOLI’s publications and a small digital collection of architectural books and magazines. It also serves as home to the program’s webpage headquarter and the graphic design studio responsible for the schools’ graphic identity and the diffusion of news and promotional information on the program.

This facility houses workstations with access to five main computers (three Mac Pro, two iMac and a Wi-Fi base station), which are used both by students and professors for research in the fields of architecture, graphic arts and digital technologies as support for the academic and studio work. The archive serves also as a digital reading room. Computers are connected via Airport Wi-Fi station and main information database, each one designated for different purposes: Capstone/Research Database, Archive Main Database, Web and Catalogue Design, Print and Scanning Access and Student Index and Library Access.

The Archive’s main goal is to develop a more efficient system for documenting, storing and safekeeping students’ work for future study and analysis. Assessment processes have the opportunity to compare current projects and research papers with previous ones, allowing for a more empirical-based analysis.

As a long-term plan, we envision the archive to become an integrated information hub (comprising the library, the engineering departments and other external resources), to become a more comprehensive center for research and information sharing within the student body, the faculty and the general public. In terms of current limitations, insufficient staff makes full-time service limited to students and faculty, as only its director runs the archive. Also, do to funds restrictions, installing new computer software, as well as the main equipment, maintenance and backup systems updates are limited. The archive is part of the institutional computer main system.

Equipment	Quantity	Serial Num.	Function
Monitors			
23" DVI (1920x1200) Apple Display	2	Not coded	
30" DVI (2560x1600) Apple Display	1	Not coded	
Computer CPU			



Mac Pro 2x2.8GHz. Quad Core Intel Xeon	3	# 22817	Capstone and Research Database
		# 22818	Digital Media Archive's Main Database
		# 22820	Web and Catalogue Design
iMac 20" Intel Core 2 Duo 2.66 GHz.	2	# 22809	Graphic, Print and Scanning Access
		# 22811	Student Index and Library Access
<b>Media</b>			
Xerox DocuMate 700 Scanner	1	Not coded	
Nikon Slide Scanner SF-210	1	Not coded	
Canon Video Lens 20x Zoom XL 5.4-108mm	1	# 21786	
Panasonic SDR-S7 SD Video Camera	1	# 22884	
Olympus Digital Voice Recorder WS-700M	1	Not coded	
Dynex Compact Memory Cards Reader [USB]	1	Not coded	
Nikon Slide Scanner SF-210	1	Not coded	
<b>Network</b>			
Airport Extreme 8.02 11n Wi-Fi	1	Not coded	
<b>Utilities</b>			
APC Back-Ups RS/XS 1200	3	# 22895	
RS/XS 1500		# 22893	
		# 22892	
BX5a M- Audio = Speakers	4	# 22886	
<b>Software</b>			
MAC OS X Version 10.7.5	3		
MAC OS X Version 10.6.8	2		
Windows 7 Basic	1		
Adobe Creative Suite CS5.5	4		
Final Cut Studio	2		
iWork '09 [Pages, Numbers & Keynote]	1		
Adobe Acrobat Pro	1		
DEVONthink Pro Office	1		

#### 5.6.4 Resources to support all learning formats and pedagogies in use by the program.

##### **Program Response:**

##### Additional physical resources and computer resources

The Computer laboratory purpose is to give access to the basic architectural software used for specific courses and during the different design studios. The Computer Laboratory has two main areas. The main laboratory is used as a classroom, where all computer-related courses (Basic CAD, Advanced CAD, Basic Digital Presentations, etc.) are taught. The second laboratory is open to students with a limited schedule, serving as a support facility for all other courses; Internet access and plotters are available in this room.

The space is comfortable and the location of an open studio adjacent to it has had the effect of mixing students from different years in a less structured way than on the regular studios on the third floor.



The Computer Laboratory equipment is part of the campus main IT department and, as such, all the computers are on a three-year replacement cycle with full upgrades coming every 4th or 5th year. Classrooms have individual projectors and the laboratory has laptops that are available for the faculty.

Administrative Area	Computer Equipment	Software
Offices, Reception and Materials and Digital Fabrication Laboratory		
Reception	Dell Optiplex 745	MS Office 2013 Antivirus
Luz Noemí Trujillo	Dell Optiplex 745	Win 7, OS X MS Office 2013 Antivirus
Amy Pérez	Dell Optiplex 380	Win 7, OS X MS Office 2013 Antivirus
Diana Rivera	Dell Optiplex 380	Win 7, OS X MS Office 2013 Antivirus
Minette Morales	Dell Optiplex 380	Win 7, OS X MS Office 2013 Antivirus
Cecile Molina	Dell Optiplex 380	Win 7, OS X MS Office 2013 Antivirus
	HP Scanjet 64050 Scanner	
Roberto Pérez	Dell Optiplex 745	Win 7, OS X MS Office 2013 Antivirus
	Dell Optiplex 9020	Win 7, OS X AutoCad 2013 Rihno 5.0 MS Office 2013 Antivirus
Emil Méndez	Dell Optiplex 380	Win 8, OS X MS Office 2010 Antivirus
Computers Laboratory 26	Dell Precision T1700	Win 7, OS X MS Office 2013 Antivirus Autocad 2014 Sketchup 2014 Adobe Desing Standard CS5 Artlantis 5 Revit 2014 Rhino 5.0
Computers classroom 20	Dell Precision T1700	Win 7, OS X MS Office 2013 Antivirus Autocad 2014



		Sketchup 2014
		Adobe Design Master Collection CS5
		Artlantis 5
		Revit 2014
		Rhino 5.0
Audiovisual Resources		
4	Led TV 42" 1080 Insignia	
8	Digital Frame 8" Insignia	
4	Samsung DVD Video	
5	Digital Frame 5" View Sonic	
2	Plasma Samsung 42'	
1	Plasma Sony 42'	
3	Lcd Tv + DVD Video 19	
4	Projectors	Classrooms 403, 404, 405 and Computers Classroom
1	Projectors	Classroom 402
2	TV LCD 70"	Classroom 401
1	TV LCD 70" Sharp	Open auditorium
3	Projectors	Portable and manual (for professors)
Students Printer		
1	Xerox Work Centre 7545 Color	
5	Plotters Hp-500-42	
1	Plotters Hp-800-42	

If the program's pedagogy does not require some or all of the above physical resources, the program must describe the effect (if any) that online, off-site, or hybrid formats have on digital and physical resources.

**Program Response:**

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.

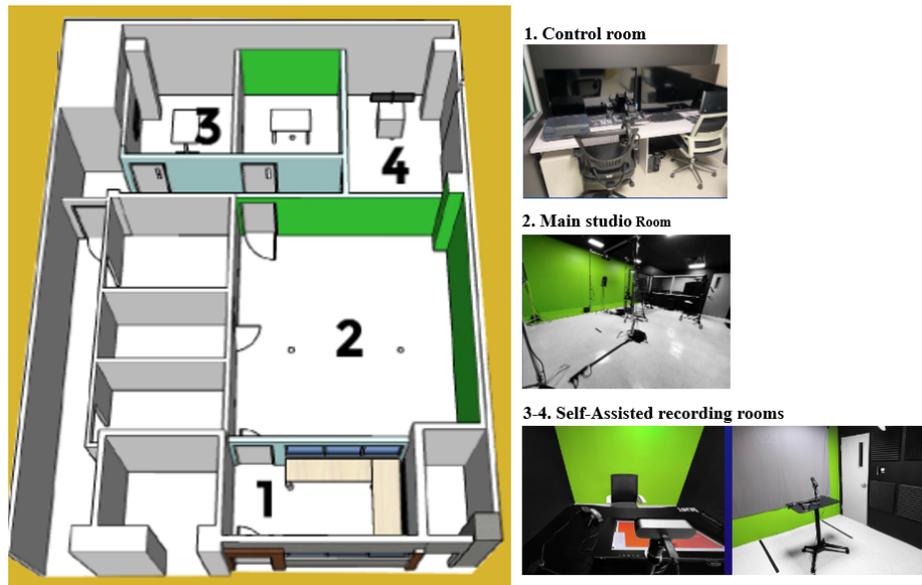
During 2021 VEIL Center designed an Intermediate Level Certification Program. This certification program is focused on training faculty in tools that promote academic integrity in courses within the Blackboard platform. Safe Assign tools, Creating Test Question Pools, and using the Respondus Lockdown 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.

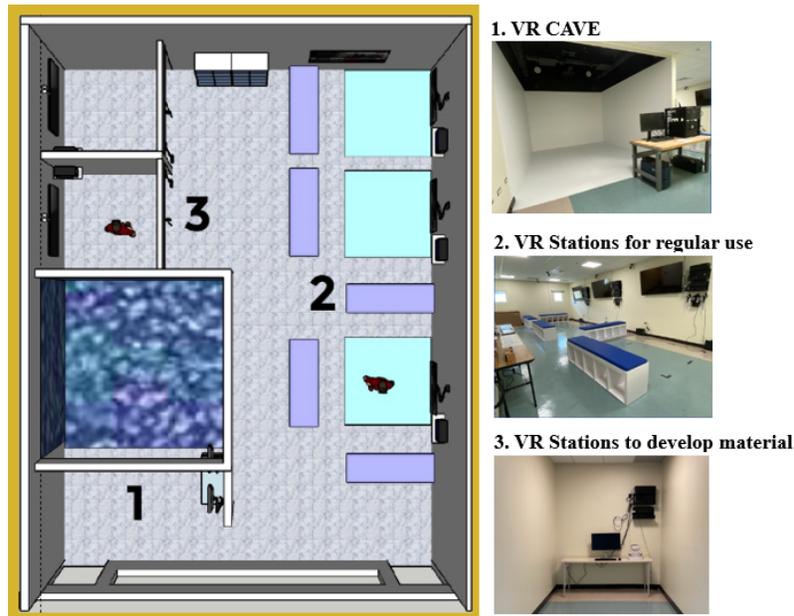
Through academic year 2021-2022 faculty has participated in a five-module focused on Learner-Centered Education/Active Learning strategies supported by technology as part of the advanced certification level-1 certificate program. Participation in this certification program was required for faculty members 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. Our 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”*.

Educational Technology Center

The 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.



## 5.7 Financial Resources

The program must demonstrate that it has the appropriate institutional support and financial resources to support student learning and achievement during the next term of accreditation.

### Program Response:

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 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.

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's degrees, five (5) bachelor's degrees, and three (3) master's degrees level programs, as well as a graduate certificate program.

UPPR total revenue was \$35.2M for fiscal year 2015, \$43.7M for FY 2019, and \$43.8M for FY 2022. UPPR's Total Revenues vs Total Expenses for FY 2014 through 2022 is shown Appendix 5.7-1.

It is worth mentioning 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 #5 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.

The institution has provided documentation of the program's budget and financial reports in Appendix 5.7-2 and Appendix 5.7-3. The academic programs at the Polytechnic University operate with two types of budgets: the operational and discretionary. The operational budget oversees the administrative and faculty salaries as well as operational expenses and overhead costs. The discretionary budget is prepared every year with the Office of the Vice President for Administration and Finance and the Budget Office together with the Program Directors. This assigned budget allows the program to allocate and distribute as needed for specific activities of each program. See Appendix 5.7-2 for budget items and budget distribution from 2014 to 2023 for the school of architecture. See Appendix 0-C-3 and Appendix 0-C-4 for details and diagram of Budget Preparation Process.



The overhead expenses are calculated with a formula that assigns a cost per faculty head count of each department. This cost is added to the payroll and operational expenses to provide the total expenses per program. A deficit shows when there is a decrease in enrollment vs an increase in faculty head count shown over the years. However, with a decrease in enrollment and a continuous increase in part-time faculty, the net change of revenues and expenses does show a deficit. Regarding the revenue and expenses, to avoid the program's deficit, our goal is to reach enrollment of 400 students. Our school has already reached that goal since Fall 2021. Appendix 5.7-3 shows data on enrollment from 2009 to 2023.

### 5.8 Information Resources

The program must demonstrate that all students, faculty, and staff have convenient and equitable access to architecture literature and information, as well as appropriate visual and digital resources that support professional education in architecture.

#### Program Response:

##### Library Context and Institutional Relationships

The Library at the Polytechnic University of Puerto Rico (PUPR) provides services and resources to support all academic programs offered by the institution, including architecture. The Library is an academic unit created to offer the university community the information services needed to achieve academic excellence. The mission is to offer a physical and virtual space where, through the access to information resources and services and with the guidance and support of information professionals, the academic community can interact, develop skills, exchange ideas, discover new sources, and create new knowledge resulting in an empowering lifelong learning experience. The mission of the Architecture school also seeks to empower students through information. These statements are consonant with the university's mission and all library services are directed towards achieving it.

The Library as an academic unit is under the Vice President of Academic Affairs. It is committed to enhancing the mission of the University and is a presence in the University's academic activities and procedures. Librarians are members of institutional committees and participate in meetings and decision-making processes.

The PUPR Library follows Standards and Guidelines established by the Association of Research and College Libraries (ACRL) of the American Library Association (ALA).

##### Collection

One of the library's objectives is to develop and provide access to collections aligned with areas of research and academic offerings of PUPR. These resources are found in diverse formats accessible physically or virtually and organized for effective discovery and use.

The collection includes more than 180,00 books, serial volumes, and audiovisual materials, which are cataloged and searchable through our online catalog. The print resources are organized in open stacks according to the Library of Congress Classification System. The Library is subscribed to thousands of online resources including full-text electronic books and periodicals.

The Head of the Collection Development and Technical Services Department uses several methods to develop a well-balanced and up-to-date architecture collection, among these are: reviews of bibliographies and topics included in course syllabi, evaluation of online specialized architecture catalogs and bibliographies. Requests for books, periodicals, electronic resources, and non-print selections are made by faculty, library staff and students, as well as input by the interlibrary loan requests. Considerations for adding new titles are based in the Collection Development Plan as well as collection analysis, usage statistics and infrastructure requirements, maintenance and cost. Its purpose is to ensure a specialized collection that



will meet students and faculty’s needs identifying core collections and giving priority to faculty recommendations. The plan includes different policies such as: what to discard, what to accept as donations, and how to evaluate electronic resources.

Through the described acquisitions and, also by donations, the Library strives to maintain a collection containing up-to-date books, textbooks, reference works, audiovisuals, periodicals of professional and research organizations, of both, print and online resources.

The Library’s collection satisfies the requirements and expectations of students and faculty for the academic programs under evaluation and places emphasis on online resources, so students can have access to them at any place with Internet connection. The Library is committed to provide students at campus and those enrolled in online courses access to relevant and up-to-date information. Previous satisfaction surveys show that students are satisfied with library resources and services. The Library’s Collection Development Plan follows the ACRL RLG Conspectus to reach a “Instructional Support Level” Collection.

The Collection’s strengths are rooted in its bilingual, diverse, and interdisciplinary resources. It includes engineering, land surveying, business administration, education, computer sciences, plus other related subjects. The bilingual condition of students at PUPR enables them to benefit from an expanded bibliography, including English language architecture publications from the United States, Canada, and England, as well as Spanish publications issued in Mexico, Central and South America, the Caribbean, and Spain. Furthermore, the Library’s collection offers independent access to other catalogs, collections, and databases through the interlibrary loans service.

The Library of Congress Cataloging Classification System is used to organize the holdings of the Library. Items are ordered, received, processed, and made accessible to the different areas within a reasonable time since receipt. The acquisitions procedures are agile, due to the quarterly academic calendar. All items are duly cataloged, classified and made available in the online catalog for easy and effective access. The collections are housed in open-stacks and integrate all resources and formats, except the Rare and Specials Books Collection which is housed in a separate access-controlled area.

Up to this date, the Library’s collection includes 294,616 volumes of online and print resources (see Table I).

**Table I**

<b>Library Architecture Related Resources Per Titles (Books = Print + Online)</b>				
<b>Subject</b>	<b>Classification</b>	<b>References</b>	<b>Circulation and Online</b>	<b>Total</b>
History of the Americas	F1-F3799	217	1,426	1,643
History of Europe	D1-DR2285	121	956	1,077
Recreation, Leisure	GV182	0	3	3
Recreation Facilities	GV401-GV433	3	23	26
Landscape assessment and Human Settlements	GF90 – GF127	0	29	29
Labor housing	HD7285-7289.62	0	49	49
Transportation	HE305 – HE5784	29	394	423



City planning	HT51 – HT485	0	647	647
Schools Design	LB3201– LB3325	4	35	39
Arts, History of Arts	N1 – N9165	392	732	1,124
Architecture	NA1 – NA9428	1,159	7,153	8,312
Sculpture	NB1 – NB1952	8	60	68
Drawing, Design, Drawing Techniques	NC1 – NC1940	10	433	443
Painting	ND1 – ND3416	88	348	436
Print Media	NE1 – NE3002	12	25	37
Decorative Arts, Applied Arts, Decoration, Ornaments	NK1 – NK9990	94	571	665
Arts in General	NX1 – NX820	5	101	106
Plant Culture	SB1 – SB1110	101	1,102	1,203
Forestry	SD1 – SD669.5	28	316	344
Construction materials	TA401 – TA495	116	2,605	2,721
Building construction	TH1 – TH9745	289	1,978	2,267
Structural Engineering	TA630 – TA695	115	2,150	2,265
Handicrafts, Arts and crafts	TT1-TT927	47	194	241
House Arrangement	TX309--TX323	0	4	4
Architectural Libraries	Z675.A83	0	3	3
<b>TOTAL</b>		<b>2,838</b>	<b>21,337</b>	<b>24,175</b>

a. Books: The general book collection has 66,610 printed volumes and 124,714 electronic books. The Library maintains current and retrospective collections of resources in areas such as: architecture, design, theory, architectural history, urban design, landscape architecture, building technology, architectural conservation, product design and preservation to support the instructional and research needs of the School of Architecture. The architecture NA collection has 8,312 books.

The Rare and Special Books Collection includes treatises and books ranging from the sixteenth to the twentieth century; providing a historical background to students' proposals and research projects. A unique collection of Latin-American journals and the URBE collection can be also found. The value of this collection is unmatched by any other library in the Caribbean, and it is essential for the education of future architects. Architects Jorge Rigau Pérez and Ramón Gutiérrez were key contributors to the development of this Rare Books Collection and have lectured on campus to the academic community about its fundamental value.

b. Serials: The general serials collection consists of 26,981 titles, mainly journals, newspapers, and online serials covering all disciplines of the Institution's academic programs. The Library takes into consideration *The Core List of the Association of Architecture School Librarians* for the acquisition of magazines and periodicals specialized in architecture (see Table II and III). In addition, it must be acknowledged that the architecture programs benefit from the support of collections pertaining to related disciplines like structural, environmental, and other engineering fields.



**Table II**

Core List of the Association of Architecture School Librarians			
Periodical Type	Total of Periodicals	Currently Subscribing	Total Holdings
Fundamental Periodicals	46	24	35
Recommended Periodicals	42	13	24
<b>TOTAL</b>	<b>88</b>	<b>37</b>	<b>59</b>

**Table III**

List of titles of Architecture Periodicals in PUPR Collection			
1	2G	48	GA Architect
2	A+T	49	GA Document
3	AA Files	50	GA Houses
4	AAA	51	Garden Design
5	Abitare	52	Grey Room
6	America Economía	53	Harvard Design Review
7	Architect and Builder	54	Houses
8	Architect	55	Informes de la Construcción
9	Architect's Journal	56	Interior: Design, Architecture, Culture
10	Architect's Newspaper	57	International Journal of Architectural Computing
11	Architecture d'Aujourd'Hui	58	International Development Planning Review
12	Architectural Design	59	Japan Architect
13	Architectural Digest	60	American Institute of Architecture Students
14	Architectural Histories	61	Journal of the American Planning Association (JAPA)
15	Architectural History	62	Journal of Architectural and Planning Research
16	Architectural Lightning	63	Journal of Architectural Education (JAE)
17	Architectural Record	64	Journal of the Society of Architectural Historians
18	Architectural Review	65	Journal of Urban Design
19	Architecture and Urbanism (A+U)	66	International Design Magazine
20	Architecture Minnesota	67	International Development Planning Review
21	Architecture Today	68	Landscape Architecture
22	Archivos de Arquitectura Antillana	69	Lightning Design and Application
23	ARQ (Chile)	70	Log
24	ARQ Architectural Research Quarterly	71	Lotus International
25	Arquitectura Viva	72	MAS Context
26	Arquitextos	73	Metro
27	Arquine	74	Metropolis
28	Arquitectura Viva (AV)	75	Old House Journal
29	AV: Monografías	76	On diseño
30	AV: Proyectos	77	Paisea
31	Building In corps/building interior	78	Paisea Dos
32	Building Design & Construction	79	PLAN Journal, The
33	Canadian Architect	80	Perspecta
34	Caribbean Updated	81	Poder Hispanic
35	Casabella	82	Quaderns d'Arquitectura I Urbanisme
36	Casas Internacional	83	RIBA Journal
37	Cornell Journal of Architecture	84	Strategic Planning for Energy and the Environment
38	Croquis, El	85	Summa+
39	Custom Home	86	Technology   Architecture + Design (TAD)



40	Detail English & Detail Green	87	Tectónica
41	Domus	88	Texas Architect
42	Dwell	89	Topos
43	Escala Arquitectura Latinoamericana	90	Thresholds
44	Florida Architect	91	Urban Land
45	Footprint	92	Wallpaper
46	Future Anterior	93	World Heritage
47	Future Arquitecturas		

In the development of the architecture serials collection, an effort has been made to acquire resources relevant to the Architecture of the Hispanic Antilles. As a result, current, retrospective, and difficult to locate out-of-print materials, have been acquired. Some materials have been received as donation, including the complete collection of *URBE*, the only architecture magazine ever published in Puerto Rico with some continuity, covering from 1962 to 1973. An index for *URBE* was completed by librarians and is available in print and electronic format. Other titles worth mentioning in the collection are *Arquitectura Cuba* (1928-1998), *Arquitectura Uruguay* (1914-1996), Archivos de Arquitectura Antillana, PROA and Escala. The Library is also subscribed to *El Croquis*, a major Spanish publication on Architecture. At present the Library has been able to acquire back issues dating as far back as 1986. The Subscription to *Architectural Record* dates to 1986. In 1990 the Library received a donation of back issues from the *Architectural Records* and Received issues as far back as 1930. *Architectural Design*, from the United Kingdom, is in the library since 1983, but we also have donated issues from 1965. Of the periodicals, eight are online individual periodicals available in our databases page: Architectural Design; Architectural History; El Croquis; Interiors: Design, Architecture, Culture; International Development Planning Review; Journal of Landscape Architecture, and Journal of the Society of Architectural Historians.

Some of the titles mentioned, as well as others in our architectural serials collection, are included in the *Core List of Periodical Titles for a First-Degree Program in Architecture*, compiled by the Association of Architecture School Librarians (AASL). *The Core List* identifies essential titles that an architecture library should incorporate: 46 “must have” titles and 42 recommended, but not required, supplementary list. At present, PUPR’s Library includes 35 titles from the “must have” list, 24 are active subscriptions and 24 from the supplementary list, 13 are current subscriptions. (see Tables II and III).

c. The visual and electronic collection: Consists of 676 video (VHS and DVD) titles of these, 40 are categorized by theme for Architecture. This format is integrated into the Circulation collection. All audiovisual resources are catalogued, classified, and included in the Library’s online catalog.

The Library has excellent electronic resources and databases available for the academic community. The students and faculty benefit from 40 online databases including: Arts & Architecture Complete, Avery Index to Architectural Periodicals, Building Green, Digitalia, Material Connexion, and Tectonica.Archi, among other interdisciplinary databases like Films on Demand with an Architecture subject collection of 1814 results.

d. Digital Institutional Repository: The Library has recently integrated an Institutional Repository in collaboration with “Puerto Rico Cloud Repository” from COBIMET, a consortium of libraries for the metropolitan area of Puerto Rico. The repository is



including digital copies of printed institutional publications of “Politechne” and the architecture themed “Polimorfo”.

Further, the program must demonstrate that all students, faculty, and staff have access to architecture librarians and visual resource professionals who provide discipline-relevant information services that support teaching and research.

### **Program Response:**

Services: The Library offers a broad variety of services to serve on site and online students.

- Services to faculty, students, and employees:
- Search of combined catalog, databases and open access resources with PUPR Library Search EBSCO Discovery System
- Search for information resources directly with the library catalog and individual databases
- Use and consultation of available resources
- Orientation and reference services by librarians at the Library
- “Ask the Librarian” e-mail inquire service at [referencistas@pupr.edu](mailto:referencistas@pupr.edu)
- Phone inquiries to the Reference desk at (787)622-8000 ext. 444 and 387.
- Personal videoconference with a librarian by appointment
- Library Blog
- Course and thematic Library Guides, four are under “Architecture” subject
- Library Instagram account
- Request and loan of external information resources using interlibrary loan services
- Open stacks browsing
- Circulation resources and iPads borrowing
- Reference area resources like dictionaries, encyclopedias, index, standards, codes, guides, professional exams reviews and printed periodicals
- Computers in the Reference Area on the 2nd floor.
- Specialized software like AutoCad
- Printing, photocopying, and scanning
- Individual and group study areas including group study rooms with technology
- 24-hour study space during regular trimesters
- Projection, meeting, and conference rooms

Additional services for faculty:

- Assistance in the identification of academic and didactical resources for the courses.
- Creation of Library Guides for subjects or specific courses
- Coordination of Information literacy activities and workshops

Additional services for students:

- Textbooks loans
- Computers and printing services at the Computer Center on the 1st floor lobby.
- Respondus browser test rooms

The Research Area comprises a valuable collection of resources in electronic format. Students can print, download, or send the retrieved information to their e-mail addresses. There is a scanner for images that can be send by email. The bibliographical material supports the academic offerings of the School of Architecture. This includes information related to architecture periods and history, bibliographies of famous architects, theory, design manuals, reviews for the professional final architecture examination, and government documents, among others.

Librarians in the Research Area create reference tools like Library Guides and thematic volumes of architecture topics; and collect information regarding local and international outstanding



architects. They also index important journals Ciudad and Arquitectura hoy. These indexes represent an added value to students and faculty's research projects.

Information Literacy:

The Information Literacy Program at Polytechnic University of Puerto Rico is designed to develop the information skills needed by students. The Program promotes self-education and critical thinking, enabling students to recognize when the information is needed and to improve the ability to locate, evaluate, and effectively use the needed information.

The Information Literacy librarian collaborates with faculty to integrate information literacy and information skills in the curricula. Conferences and workshops are given to familiarize the students with the facilities and organization of the Library and to integrate the use of electronic indexes and databases, serials publications, standards, and the use of the Library's resources.

A workshop on library instruction is offered to incoming undergraduate students enrolled in the course ATUL 0100, Adjustment to University Life. In these sessions the students are introduced to the importance of evaluating information sources and the services and resources available at the Library. They also receive computer-based instruction on the usage of the online catalog the library databases and the library blog. Independent class sessions are also coordinated with faculty to develop further the use of the catalog, online databases and blog and other topics like plagiarism, copyright, style manuals and presentations in Microsoft's Power Point.

Architecture students receive specialized orientations and workshops in the use of electronic resources like Avery Index to Architecture Periodicals and EBSCO Art and Architecture. The course ARCH 3030 includes a research project, for which students receive guidance regarding the usage of the online catalog and databases at the beginning of each quarter.

Staff

The six professional librarians on the staff have the academic credentials and the expertise to offer quality information services to faculty and students from the School of Architecture. The team is completed with nine auxiliary librarians. All of them offer customer service and specialized information assistance to users, such as: interlibrary loans, information literacy, bibliographical research, and on-line services. The Library has sufficient professional and auxiliary librarians, clerical and work-student staff to successfully manage collections and services. Professional Librarians hold master's degrees from an American Library Association (ALA) accredited program. The minimum requirement for Auxiliary Librarians and other employees is a bachelor's degree; nevertheless, some employees have or are pursuing masters' and doctoral degrees. There were 3 Assistant librarians with Associate degrees that were promoted to Auxiliary because of their more than 10 years of experience and their performance. All staff have different educational background and work history, thus providing a diverse subject expertise to the academic community (see Table IV).

**Table IV**

Personnel Profile			
	Name	College Degree	Position
1	Abreu Arbelo, Norma	Master's Degree Information Sciences and Technology; BA Art History	Collection Development and Technical Services Professional Librarian
2	Camacho Fontan, Migdalia	BA Public Communications	Auxiliary Librarian I
3	Colón Cruz, Sandra	AD Business Administration	Auxiliary Librarian I



4	Delgado López, Digna	Master's Degree Library and Information Sciences; BS Mathematics	Library Director
5	Diaz Vega, Charisse	BA Communications	Auxiliary Librarian I
6	Felix Ortiz, Aurelis	Master's Degree Information Sciences and Technology; BA Labor Relations	Acquisitions, Serials, and Interlibrary Loans Professional Librarian
7	Garriga Vidal, Gisselle	Doctoral Degree in Education; Master's Degree, Information Sciences and Technology; BA Audiovisual Communications	Research and Reference Professional Librarian
8	Larregui Lopez, Cristina	Master's Degree Information Sciences and Technology; BA Psychology	Information Literacy Professional Librarian
9	Morell Rivera, Juan	BA History of the Americas	Auxiliary Librarian I
10	Nieves Acevedo, María I.	BA Secretarial Science	Secretary
11	Ocasio Pérez, Marco A.	AD Auto Mechanics	Auxiliary Librarian I
12	Pineda Cárdenas, Gloria	AD Secretarial Sciences	Auxiliary Librarian I
13	Tardí Galarza, Antonio	12 credits in ED. D; Master's Degree, Information Sciences and Technology; MEM Master Engineering Management; CAD Archive Certification; BSCE Civil Engineering	Specials Collections and Archive Professional Librarian
14	Torres Colón, Cynthia	24 credits in MIS; BA, Business Administration	Circulation Coordinator
15	Torres Del Valle, Gabriela	BA, Education	Auxiliary Librarian I
16	Vázquez Valiente, Mario	Master's Degree, Economics	Auxiliary Librarian II



## 6—Public Information

The NAAB expects accredited degree programs to provide information to the public about accreditation activities and the relationship between the program and the NAAB, admissions and advising, and career information, as well as accurate public information about accredited and non-accredited architecture programs. The NAAB expects programs to be transparent and accountable in the information provided to students, faculty, and the public. As a result, all NAAB-accredited programs are required to ensure that the following information is posted online and is easily available to the public.

### 6.1 Statement on NAAB-Accredited Degrees

All institutions offering a NAAB-accredited degree program or any candidacy program must include the exact language found in the NAAB Conditions for Accreditation, 2020 Edition, Appendix 2, in catalogs and promotional media, including the program's website.

#### Program Response:

The institutional Undergraduate Catalog and the Bachelor of Architecture program website on the Public Information, includes the "Statement on NAAB-Accredited Degrees" as required by the NAAB Conditions for Accreditation. Public information is made available to students, faculty, staff, parents, and the public on display board located at public areas of our School.

Undergraduate Catalog: <https://www.pupr.edu>

Bachelor of Architecture program website:

<https://www.pupr.edu/architecture-undergraduate/naabaccreditation/>

### 6.2 Access to NAAB Conditions and Procedures

The program must make the following documents available to all students, faculty, and the public, via the program's website:

- a) Conditions for Accreditation, 2020 Edition
- b) Conditions for Accreditation in effect at the time of the last visit (2009 or 2014, depending on the date of the last visit)
- c) Procedures for Accreditation, 2020 Edition
- d) Procedures for Accreditation in effect at the time of the last visit (2012 or 2015, depending on the date of the last visit)

#### Program Response:

These documents are available via link on the Public Information section on the Bachelor of Architecture program website.

Bachelor of Architecture program website:

<https://www.pupr.edu/architecture-undergraduate/naabaccreditation/>



### 6.3 Access to Career Development Information

The program must demonstrate that students and graduates have access to career development and placement services that help them develop, evaluate, and implement career, education, and employment plans.

#### Program Response:

Link to these resources is available to students, faculty, staff, parents, and the general public on the PUPR webpage under Idea center.

Link: <https://www.pupr.edu/es/ideacenter/>

### 6.4 Public Access to Accreditation Reports and Related Documents

To promote transparency in the process of accreditation in architecture education, the program must make the following documents available to all students, faculty, and the public, via the program's website:

- a) All Interim Progress Reports and narratives of Program Annual Reports submitted since the last team visit
- b) All NAAB responses to any Plan to Correct and any NAAB responses to the Program Annual Reports since the last team visit
- c) The most recent decision letter from the NAAB
- d) The Architecture Program Report submitted for the last visit
  
- e) The final edition of the most recent Visiting Team Report, including attachments and addenda
- f) The program's optional response to the Visiting Team Report
- g) Plan to Correct (if applicable)
- h) NCARB ARE pass rates
- i) Statements and/or policies on learning and teaching culture
- j) Statements and/or policies on diversity, equity, and inclusion

#### Program Response:

These documents are available via link on the Public Information section on the Bachelor of Architecture program website.

Bachelor of Architecture program website:

<https://www.pupr.edu/architecture-undergraduate/naabaccreditation/>

### 6.5 Admissions and Advising

The program must publicly document all policies and procedures that govern the evaluation of applicants for admission to the accredited program. These procedures must include first-time, first-year students as well as transfers from within and outside the institution. This documentation must include the following:

- a) Application forms and instructions
- b) Admissions requirements; admissions-decisions procedures, including policies and processes for evaluation of transcripts and portfolios (when required); and decisions regarding remediation and advanced standing
- c) Forms and a description of the process for evaluating the content of a non-accredited degrees
- d) Requirements and forms for applying for financial aid and scholarships

e) Explanation of how student diversity goals affect admission procedures

**Program Response:**

Application form and instructions are available here:

[https://mypoly.pupr.edu/ICS/Admissions/Admissions\\_and\\_Recruitment.jnz?portlet=Apply\\_to\\_PUPR](https://mypoly.pupr.edu/ICS/Admissions/Admissions_and_Recruitment.jnz?portlet=Apply_to_PUPR)

Admission requirements: admission-decision procedures are available here:

<https://www.pupr.edu/es/admissions/prospective-students/>

Financial Aid and Scholarship information are available here:

<https://www.pupr.edu/es/services/financial-aid/>

**Student Diversity Goals:**

The Student Rules and Regulation Handbook is the institutional document where the rights, duties, and responsibilities of the students from UPPR are set. 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-presidency 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.

The UPPR has an admission policy applicable to the San Juan, Orlando, and Miami campuses. It is clearly stated and provides reasonable expectations for students' success and is compatible with its institutional mission. It provides all interested and eligible people the opportunity to enter and complete a university study program. It also promotes a flexible admission policy to assure access to higher education to students who apply for admission. UPPR also promotes a holistic admission policy to assure access and equal educational opportunities to higher education to students from diverse social, cultural, geographic, and economic backgrounds. It promotes non-discrimination of race, sex, religion, ethnical origin, age, political ideas, or handicap, in reflection on diversity, equity, and inclusion as required by federal laws.

The holistic evaluation of entire students' admission file 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.

The Admissions and Promotions Office at UPPR makes the first contact with prospect or future students. After the student is admitted, an initial orientation is provided by the Enrollment Coordinator. 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 Information Manual, Student Regulation, 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 proper completion of all admission



requirements the applicant is admitted and registered. Counselors from the Counseling and Guidance Office are available to help admitted students with academic advising and class scheduling during the registration period.

The Vice-presidency of Enrollment Management and Students Services keep 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. This Vice Presidency coordinates the inter-office processes and schedules activities during the registration process. As a means to support online service during COVID-19 pandemic and enhance communication with students the Vice presidency implemented the Virtual Ticket Service System.

UPPR administrates federally funded TRIO programs: Student Support Services (PSE), Student Support Services-ESL, and Student Support Services-STEM. The Student Support Services programs have a persistence rate of 86%, good academic standing of 84%. Their purpose is to increase the number of low-income college students, first-generation college students, and college students with disabilities to successfully 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 assists 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 service are also provided to students who require them or to those referred by faculty or counselors.

The office of Counseling and Psychological Services offers personal, occupational, and academic counseling services aimed at helping students achieve their goals, especially as student mental health needs have increased. In addition to this, the office works on cases of reasonable modification for students with functional diversity. The counselor services are academic counseling, personal counseling, occupational and career counseling, follow up on students in academic probation, psychological services, reasonable modification coordination for students with functional diversity, alcohol, drug, and violence prevention program (Programa de Calidad de Vida, in Spanish), workshops and personal growth activities.

## 6.6 Student Financial Information

**6.6.1** The program must demonstrate that students have access to current resources and advice for making decisions about financial aid.

### Program Response:

Student counseling and orientation related to financial aid are carry out by the Financial Aid Official through the following activities:

- Freshmen orientation – new student receives information about financial aid program, the aids available and, the academic progress requirements.
- Workshops about educational cost and the FAFSA application process. Students are also advised about due dates and how the institution determines financial need.



- Freshmen and regular students also receive advice about Work Study Program and Student Loans.

The information is available here:

<https://www.pupr.edu/es/services/financial-aid/>

**6.6.2** The program must demonstrate that students have access to an initial estimate for all tuition, fees, books, general supplies, and specialized materials that may be required during the full course of study for completing the NAAB-accredited degree program.

**Program Response:**

PUPR have College Financing Plan (CFP), is a consumer tool that participating institutions use to notify students about their financial aid package and initial estimate, helping the student to make decision about financial aid.

College Financing Plan (CFP) are available here:

<https://www.pupr.edu/es/admission-new/college-financing-plan/>

Mypoly link: [https://mypoly.pupr.edu/ICS/Finances/Costos\\_de\\_Matricula.jnz](https://mypoly.pupr.edu/ICS/Finances/Costos_de_Matricula.jnz)

Also, PUPR have a Net Price Calculator tool that provide estimated net price information (defined as estimated cost of attendance – including tuition and requires fees, books and supplies, room and board (meals), and other related expenses – minus estimated grant and scholarship aid) to current and prospective students and their families based on what similar students paid in a previous year.

Net Price Calculator are available here: <https://www.pupr.edu/es/price-calculator/>

See Appendix 6.6.2 for the estimated architecture tuition cost per academic term.



## 7—APPENDICES

National Architectural Accrediting Board, Inc.

July 30, 2015 Appendix 0.A-1

Ernesto Vazquez-Barquet, President  
Polytechnic Universidad de Puerto Rico  
PO Box 192017  
San Juan, PR 00919-2017



Dear President Vazquez-Barquet:

At the July 2015 meeting of the National Architectural Accrediting Board (NAAB), the directors reviewed the Visiting Team Report (VTR) for Polytechnic Universidad de Puerto Rico, School of Architecture.

As a result, the professional architecture program **Bachelor of Architecture** was formally granted an eight-year term of continuing accreditation.

The term is effective January 1, 2015. The program is scheduled for its next visit for continuing accreditation in 2023.

Continuing accreditation is subject to two reporting requirements.

First, all programs must submit an Annual Statistical Report (see Section 10 of the NAAB *Procedures for Accreditation, 2012 Edition, Amended*). This report captures statistical information on the institution and the program.

Second, a program that receives an eight-year term of accreditation is required to submit an *Interim Progress Report* two years after a visit and again five years after the visit. This requirement is described in Section 11 of the 2012 NAAB *Procedures*. The next statistical report is due November 30, 2015; the first interim progress report is due November 2017.

Finally, under the terms of the 2012 *Procedures for Accreditation*, programs are required to make the Architecture Program Report, the VTR, and related documents available to the public. Please see Section 5 for additional information.

The visiting team has asked me to express its appreciation for your gracious hospitality.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Shannon B. Kraus', is written over a circular stamp or watermark.

Shannon B. Kraus, FAIA, NCARB, MBA, FACHA  
President

cc: Carlos Betancourt-Llambias, Dean  
Micheale Pride, AIA, NOMA, Visiting Team Chair

enc.

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**Polytechnic University of Puerto Rico  
School of Architecture**

## **Visiting Team Report**

**Bachelor of Architecture (213 trimester credit hours)**

**The National Architectural Accrediting Board  
April 1, 2015**

*The National Architectural Accrediting Board (NAAB), established in 1940, is the sole agency authorized to accredit U.S. professional degree programs in architecture. Because most state registration boards in the United States require any applicant for licensure to have graduated from an NAAB-accredited program, obtaining such a degree is an essential aspect of preparing for the professional practice of architecture.*

## Table of Contents

<b><u>Section</u></b>		<b><u>Page</u></b>
I.	Summary of Team Findings	
1.	Team Comments and Visit Summary	1
2.	Conditions Not Met	1
3.	Causes of Concern	2
4.	Progress Since the Previous Site Visit	2
II.	Compliance with the 2009 Conditions for Accreditation	
	Part One (I): Institutional Support and Commitment to Continuous Improvement	3
	Part Two (II): Educational Outcomes and Curriculum	17
III.	Appendices:	
1.	Program Information	33
2.	Conditions Met with Distinction	34
3.	The Visiting Team	35
IV.	Report Signatures	36

## I. Summary of Team Findings

### 1. Team Comments and Visit Summary

#### Preparation for the Visit

- Thanks to all for your wonderful hospitality—Carlos, Lourdes, Diana, faculty, students, and everyone!
- Team room and APR were/are very well organized, including excellent communication graphics, and staff were very responsive to questions.

#### Sense of Place and Culture of the School

- Sense of place, community...and even family...among faculty, students, and staff—open door, very accessible, collegial, cooperative, and collaborative.
- Students and faculty very engaged in a high level of learning, and dedicated to service in the communities of Puerto Rico...with enthusiasm and passion.
- New facilities, programs, and leadership—transition of culture, composition, and access is both a challenge and an opportunity.
- Dean's endeavor to foster collaboration across levels and disciplines, to represent expanded range of opportunities for students and graduates—adding new disciplines to the school.

#### Curriculum/Learning

- Consistent and deep commitment to the cultural heritage and legacies of the place, culture, and people.
- Curriculum: commitment to core curriculum, which incorporates traditional skills, professionalism, and social and environmental values.

#### Special Features

- The design of the newly renovated and expanded school facilities includes democratizing transparency of the interior environment—encouraging collaboration, integration, and communication.
- Open admissions policy creates opportunity for a broad, diverse student body to study and practice architecture.
- Conservation Laboratory—unique, impressive, and appropriate resource, considering the age and heritage of the constructed environment in Puerto Rico.

### 2. Conditions Not Met

- I.2.1 Human Resources and Human Resource Development: Faculty and staff. Lack of clear policies related to advancement and access to support for professional development. Significant reduction in staff support in recent years, including receptionist and work-study support for research labs (Conservation Laboratory, FabLab, Urban Laboratory, Outreach Laboratory).
- I.2.2 Administrative Structure and Governance: As the school expands in order to include new programs, the dean's attention to the accredited architecture program may be diminished (see below).
- I.2.4 Financial Resources: Lack of transparency and lack of information from upper university administration to the school make this area difficult to evaluate. That said, loss of faculty positions, staff positions, and work-study assistants seems related to diminished financial support/resources.
- II.2.2 Professional Degrees and Curriculum: 213 trimester credit hours vs. 225 minimum required by the NAAB (equal to 150 semester credit hours). The credit hours are the same as they were during the last accreditation visit of 2009 (although the visiting team determined at that time that the school had met this requirement, generally).

- A.9. Historical Traditions and Global Culture: Missing regions and cultures from within Africa and Asia.
- B.7. Financial Considerations: Evidence covering life-cycle costs in buildings not found.

**3. Causes of Concern**

- A. *Long-Range Planning and Support by the Administration*. In some part due to the current economic environment, there is concern regarding the unknowns at the institutional level with respect to the financial planning and funding for the School of Architecture (ARQPOLI), as well as the administrative support provided for the school's leadership as the university develops additional programs related to architecture (Interior Design, Product Design, and Landscape Architecture). This is a private institution, and there are drivers beyond legacy (i.e., financially driven) that are of some concern to the visiting team.
- B. *Administrative Support*. There is an absence of a formal evaluation process and related policies regarding administrative positions (e.g., dean, upper administration).
- C. *Commitment to Faculty*. Faculty are working without updated contracts and salaries. Tenure was eliminated several years ago, but multi-year contracts for full-time architecture faculty need to be resolved.
- D. *Facility Access and Security*. Students expressed concerns related to access to studios and resources in the facilities. Items have been stolen or vandalized in the new studio space. Students felt that these crimes were directly related to the open-door policy of their studios with regard to students from other colleges. The faculty also expressed concern over the lack of locks on their office doors. Faculty members do not leave nice books in their offices for fear of theft. The visiting team believes that the program administration is aware of these issues and will continue working to find solutions.

**4. Progress Since the Previous Site Visit (2009)**

This program had no unmet conditions or criteria from the last team visit.

## II. Compliance with the 2009 Conditions for Accreditation

### PART ONE (I): INSTITUTIONAL SUPPORT AND COMMITMENT TO CONTINUOUS IMPROVEMENT

#### PART ONE (I): SECTION 1 – IDENTITY AND SELF-ASSESSMENT

##### I.1.1 History and Mission:

**[X] The program has fulfilled this requirement for narrative and evidence.**

**2015 Team Assessment:** The history, mission and culture of the ARQpoli program, and how it fits within the overall institution, and contemporary context was well described in the program APR provided to the team. The team observed a sense of pride in all members of the ARQpoli community regarding the institution's history and its trajectory.

Both the program administration and the University administration provided a clear understanding of their relationship. The University President was able to explain to the team the benefits of the Architecture program at PUPR versus the competing architecture programs in Puerto Rico.

##### I.1.2 Learning Culture and Social Equity:

- *Learning Culture: The program must demonstrate that it provides a positive and respectful learning environment that encourages the fundamental values of optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff in all learning environments, both traditional and nontraditional.*

*Further, the program must demonstrate that it encourages students and faculty to appreciate these values as guiding principles of professional conduct throughout their careers, and it addresses health-related issues, such as time management.*

*Finally, the program must document, through narrative and artifacts, its efforts to ensure that all members of the learning community: faculty, staff, and students are aware of these objectives and are advised as to the expectations for ensuring they are met in all elements of the learning culture.*

- *Social Equity: The accredited degree program must provide faculty, students, and staff—irrespective of race, ethnicity, creed, national origin, gender, age, physical ability, or sexual orientation—with a culturally rich educational environment in which each person is equitably able to learn, teach, and work. This includes provisions for students with mobility or learning disabilities. The program must have a clear policy on diversity that is communicated to current and prospective faculty, students, and staff and that is reflected in the distribution of the program's human, physical, and financial resources. Finally, the program must demonstrate that it has a plan in place to maintain or increase the diversity of its faculty, staff, and students when compared with diversity of the institution during the term of the next two accreditation cycles.*

**[X] The program has demonstrated that it provides a positive and respectful learning environment.**

**[X] The program has demonstrated that it provides a culturally rich environment in which each person is equitably able to learn, teach, and work.**

**2015 Team Assessment:** The culture at ARQPOLI is one of mutual respect between the students and the faculty. The diversity of backgrounds among the student body is acknowledged positively by both the

students and the faculty, and there were no concerns expressed when the team asked about any lack of equity regarding opportunities within the program.

When asked by the team, the students were nearly unanimous in their desire to work in their studio spaces rather than at home because of their appreciation for the facility resources. Students expressed concern about changes in the hours that studios and lab resources were open, and about students from the Engineering School using their studio desks and damaging or stealing personal property. However, it appears to the visiting team that the school administration is aware of these issues and is looking for solutions.

The Polytechnic University of Puerto Rico (PUPR) has a written non-discrimination policy. The mission statement of the university—which was discussed by the administration, faculty, staff, and students, and is permanently posted around campus—focuses on providing "opportunities to individuals from diverse backgrounds."

**I.1.3 Response to the Five Perspectives:** *Programs must demonstrate, through narrative and artifacts, how they respond to the following perspectives on architecture education. Each program is expected to address these perspectives consistently within the context of its history, mission, and culture and to further identify as part of its long-range planning activities how these perspectives will continue to be addressed in the future.*

- A. Architectural Education and the Academic Community.** *That the faculty, staff, and students in the accredited degree program make unique contributions to the institution in the areas of scholarship, community engagement, service, and teaching.<sup>1</sup> In addition, the program must describe its commitment to the holistic, practical, and liberal arts-based education of architects and to providing opportunities for all members of the learning community to engage in the development of new knowledge.*

**[X] The program is responsive to this perspective.**

**2015 Team Assessment:** Faculty and students participate in school-wide and university-wide discussions. Interdisciplinary activities are increasing through the opening of the new building addition and through initiatives promoted by the dean, including a current collaboration with the Engineering School for projects in Capstone.

Scholarship and research are neither emphasized nor supported. Faculty are able to submit proposals for support and release time, which then must be carried by the dean to the upper administration. As PUPR emphasizes teaching over research, this is an ongoing issue.

- B. Architectural Education and Students.** *That students enrolled in the accredited degree program are prepared: to live and work in a global world where diversity, distinctiveness, self-worth, and dignity are nurtured and respected; to emerge as leaders in the academic setting and the profession; to understand the breadth of professional opportunities; to make thoughtful, deliberate, informed choices; and to develop the habit of lifelong learning.*

**[X] The program is responsive to this perspective.**

**2015 Team Assessment:** The university is dedicated to accepting students from diverse backgrounds, and the faculty of the architecture program clearly see this mandate as an opportunity to broaden the number of people in Puerto Rico who have access to architecture.

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<sup>1</sup> See Boyer, Ernest L. *Scholarship Reconsidered: Priorities of the Professoriate*. Carnegie Foundation for the Advancement of Teaching. 1990.

There was a general feeling among the faculty and students that the ARQPOLI student body is diverse and that everyone is supported equitably in all facets of their education.

Students at the meeting with the team expressed passion about their education. They want the opportunity to take classes toward minors in other programs at the university, such as Business, but they are currently not able to do so.

The majority of the students in the program plan to pursue architectural licensure after graduation. They value the opportunity to learn from a faculty that is made up of many actively practicing architects.

The American Institute of Architecture Students (AIAS) is the primary student organization, and is relied upon by the dean for student communication. The ARQPOLI membership in the AIAS is around 23 students. The students have laid the groundwork to start a Coordinadora Latino Americana de Estudiantes de Arquitectura (CLEA) chapter in the fall trimester, which would partner with the AIAS. ARQPOLI supports its AIAS chapter by providing a dedicated AIAS space near the studios, and by providing a small stipend to the AIAS chapter for travel to conferences. The students expressed a desire for more formally organized methods of communication with, and feedback from, the school administration.

- C. Architectural Education and the Regulatory Environment.** *That students enrolled in the accredited degree program are provided with: a sound preparation for the transition to internship and licensure within the context of international, national, and state regulatory environments; an understanding of the role of the registration board for the jurisdiction in which it is located; and, prior to the earliest point of eligibility, the information needed to enroll in the Intern Development Program (IDP).*

**[X] The program is responsive to this perspective.**

**2015 Team Assessment:** Students are being provided with sound preparation to transition into the profession by learning about internships, the IDP, licensure, and the registration boards of both the country of Puerto Rico and the NCARB reciprocal licensure of other states. Questions posed to students, faculty, and one local registration board member verified this understanding and revealed a good commitment to ensuring that students know about the two different boards specific to Puerto Rico. The team's understanding was further evidenced by the following:

- Students acknowledged in large numbers their personal awareness of IDP and the requirements for licensure.
- The faculty member responsible for teaching professional practice and ethics outlined some of his instructional approaches with the students. Additionally, this individual indicated that he had been recently appointed to the board of architecture dealing with NCARB issues.
- Students indicated that they know whom to talk to regarding the IDP program.
- There is a design competition for students that is sponsored by the Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR), which requires local/state registration.
- The lecture series demonstrates that the school invites professionals and creates discourse regarding the regulatory environment in everyday practice.
- There are links on the school website related to licensure.
- There are some questions on student tests regarding licensure issues in ARPP 3010.
- Evidence is provided regarding the preparation for transitioning into internship and licensure in specific coursework in ARPP 5010 and ARPP 5030.
- NCARB staff visit the school to provide students with information regarding the IDP program.
- There is an annual presentation provided by the registration board and the CAAPPR that was acknowledged by a member of the licensing board.

- D. Architectural Education and the Profession.** *That students enrolled in the accredited degree program are prepared: to practice in a global economy; to recognize the impact of design on the environment; to understand the diverse and collaborative roles assumed by architects in practice; to understand the diverse and collaborative roles and responsibilities of related disciplines; to respect client expectations; to advocate for design-based solutions that respond to the multiple needs of a diversity of clients and diverse populations, as well as the needs of communities; and to contribute to the growth and development of the profession.*

**[X] The program is responsive to this perspective.**

**2015 Team Assessment:** The student population is very well prepared to practice in the profession upon graduation. The students are exposed to a diverse segment of the profession and, based on today's economic climate, are well rounded for engaging the profession in different formats—as interns, architects, interior designers, administration, faculty, etc. The collaboration and instigation of additional programs correlated to the School of Architecture really differentiate it from the other programs on the island. Recent alumni are involved in the school and often participate (sometimes at the student's request) in the fifth-year Capstone juries.

The majority of the students have knowledge of the IDP process (as per survey). Evidence of exposure to it was also found in the third year and the fifth year of the curriculum, and in the practice management course, in particular.

The visiting team notes that the economy is not doing well in Puerto Rico, and the opportunities for students to work in architectural offices are few and far between.

- E. Architectural Education and the Public Good.** *That students enrolled in the accredited degree program are prepared: to be active, engaged citizens; to be responsive to the needs of a changing world; to acquire the knowledge needed to address pressing environmental, social, and economic challenges through design, conservation, and responsible professional practice; to understand the ethical implications of their decisions; to reconcile differences between the architect's obligation to his/her client and the public; and to nurture a climate of civic engagement, including a commitment to professional and public service and leadership.*

**[X] The program is responsive to this perspective.**

**2015 Team Assessment:** The curriculum incorporates many elements of civic engagement that challenge students to look at architecture as a social art. Students are exposed to community, social, and environmental issues in design studios throughout their careers, culminating with the fifth-year Capstone project. ARCH 5010: Advanced Design asks the students to question and research a wide variety of contextual issues that are relevant in the production of architecture. Methodologies of research and investigation are expanded in the advanced design studios in order to provide the students with the necessary tools for architectural design research as the basis of future physical interventions.

The school has recently entered into a number of formal collaborations that bring the students into direct contact with communities engaged with change that depends on the design professions. These include a collaboration with a non-profit organization concerned about the protection of the threatened leatherback turtle and educating the public about the issue, a collaborative agreement with the Special Commissioner of Vieques and Culebra, and a collaborative agreement between the National Park Service and the Conservation Laboratory for workshops. These agreements allow direct student engagement in the ARCH 5010 course with the communities related to the agreements, such as projects in ecotourism that leverage the local economy while resolving conflicts between residents and tourism. The Community Participation Laboratory and vertical studios allow for additional engagement between students and discrete communities and their open spaces or community facilities.

The school has a close relationship with the CAAPPR, which creates opportunities for students to get involved with their surrounding area. Other opportunities for students to get involved include DoCoMoMo, which gives them a chance to interact with the community and the local Modern Movement, Sustainability Laboratory, Urbanism Laboratory, and Conservation Workshop.

The ARQPOLI program has evolved from Dean Rigau's inaugural emphasis on art and history, through Dean Rodríguez's theory and diversity perspective, to the emphasis of Dean Betancourt, the current dean, on collaboration and alternative practices that are attuned to Puerto Rico's current economic and social conditions.

**1.1.4 Long-Range Planning:** *An accredited degree program must demonstrate that it has identified multi-year objectives for continuous improvement within the context of its mission and culture, the mission and culture of the institution, and, where appropriate, the five perspectives. In addition, the program must demonstrate that data is collected routinely and from multiple sources to inform its future planning and strategic decision making.*

**[X] The program's processes meet the standards as set by the NAAB.**

**2015 Team Assessment:** The university is analyzing the next direction of the school as a whole, given the current economic environment and its impact on the student population. There appears to be some vagueness regarding how the board is planning strategically for the future and where the School of Architecture fits into the future plan. The university does exhibit exuberant pride over the School of Architecture and its connection to the Engineering School, but there is no evidence of long-range strategic planning related to the School of Architecture. During discussions with the university president and vice president, it became clear that the long-term planning and organization of the School of Architecture is still up for discussion. That said, the changes in the school since the last visit and the initiatives underway seem to be consistent with the initiatives and goals at the university level. As stated in the APR (pp. 27-28), the goals for the school include:

- Strengthening ties between the different programs of the institution – collaboration/dual degrees.
- Creating an exchange program and study trips to create diversity.

Significant progress is being made toward these goals.

**1.1.5 Self-Assessment Procedures:** *The program must demonstrate that it regularly assesses the following:*

- *How the program is progressing towards its mission.*
- *Progress against its defined multi-year objectives (see above) since the objectives were identified and since the last visit.*
- *Strengths, challenges, and opportunities faced by the program while developing learning opportunities in support of its mission and culture, the mission and culture of the institution, and the five perspectives.*
- *Self-assessment procedures shall include, but are not limited to:*
  - o *Solicitation of faculty's, students', and graduates' views on the teaching, learning, and achievement opportunities provided by the curriculum.*
  - o *Individual course evaluations.*
  - o *Review and assessment of the focus and pedagogy of the program.*
  - o *Institutional self-assessment, as determined by the institution.*

*The program must also demonstrate that results of self-assessments are regularly used to advise and encourage changes and adjustments to promote student success as well as the continued maturation and development of the program.*

**[X] The program's processes meet the standards as set by the NAAB.**

**2015 Team Assessment:** The School of Architecture does have an evaluation process in place to review and evaluate the courses and the faculty, including written reviews and committee review and revision.

There is continuous evolution of the architecture curriculum and program as it incorporates the adjacent programs (Interior Design, Landscape Architecture, Product Design), and the school's efforts to invite further collaboration among the students and faculty is steadily increasing.

The committees within the School of Architecture have been formed since the last accreditation visit, but not many faculty members are part of the committees, nor is it clear how faculty are appointed to the committees or what the outcome is.

The school's former dean stepped down from his position in 2010. The new dean assumed responsibility for the school and instituted policies to reinforce collaborative activities and broaden the range of professional activities that graduates might pursue. He also presided over the significant doubling of the school's physical plant. The school has simultaneously expanded its list of assessment mechanisms.

Ample evidence of students' assessment of faculty by course was found in Binder #8: "Student Evaluations of Specific Courses." These evaluations included numerical metrics as well as comments. In Binder #1: "Self-Assessment Policies and Objectives," there was similar information on rubrics for evaluating student performance, which have become much more extensive since 2013.

ARQPOLI has continued its commitment to using a SWOT analysis, thereby looking at the program's Strengths, Weaknesses, Threats, and Opportunities.

## PART ONE (I): SECTION 2 – RESOURCES

### I.2.1 Human Resources and Human Resource Development:

- *Faculty and Staff:*
  - *An accredited degree program must have appropriate human resources to support student learning and achievement. This includes full and part-time instructional faculty, administrative leadership, and technical, administrative, and other support staff. Programs are required to document personnel policies, which may include, but are not limited to, faculty and staff position descriptions.<sup>2</sup>*
  - *Accredited programs must document the policies they have in place to further Equal Employment Opportunity/Affirmative Action (EEO/AA) and other diversity initiatives.*
  - *An accredited degree program must demonstrate that it balances the workloads of all faculty and staff to support a tutorial exchange between the student and teacher that promotes student achievement.*
  - *An accredited degree program must demonstrate that an IDP Education Coordinator has been appointed within each accredited degree program, trained in the issues of IDP, and has regular communication with students and is fulfilling the requirements as outlined in the IDP Education Coordinator position description and regularly attends IDP Coordinator training and development programs.*
  - *An accredited degree program must demonstrate it is able to provide opportunities for all faculty and staff to pursue professional development that contributes to program improvement.*
  - *Accredited programs must document the criteria used for determining rank, reappointment, tenure and promotion as well as eligibility requirements for professional development resources.*

**[X] Human resources (faculty and staff) are inadequate for the program.**

**2015 Team Assessment:** Faculty and staff numbers have decreased in recent years, which leaves no support (other than directors) in the various research and support labs. A receptionist position was lost as well. Those functions are now being covered by remaining staff (Lourdes and Maribel) and work-study students (10-20 hours/week). These cuts are attributed to a dramatic drop in student enrollment, but resources seem stretched to the maximum, without backup. The team is concerned that positions are being cut while program needs and responsibilities are expanding. There are also concerns regarding access to new resources, such as the Materials Laboratory and Conservation Laboratory.

- *Students:*
  - *An accredited program must document its student admissions policies and procedures. This documentation may include, but is not limited to, application forms and instructions, admissions requirements, admissions decisions procedures, financial aid and scholarships procedures, and student diversity initiatives. These procedures should include first-time freshmen, as well as transfers within and outside of the university.*
  - *An accredited degree program must demonstrate its commitment to student achievement both inside and outside the classroom through individual and collective learning opportunities.*

**[X] Human resources (students) are adequate for the program.**

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<sup>2</sup> A list of the policies and other documents to be made available in the team room during an accreditation visit is in Appendix 3.

**2015 Team Assessment:** Students entering PUPR are all given guidance from the admissions office regarding which classes to sign up for and how to sign up for the FAFSA and other resources. After the initial trimester, guidance is provided by ARQPOLI from one member of the staff and by two faculty members appointed by the dean as mentors. Most of the courses taken by students are in a specific sequence, and knowledge is passed down by word-of-mouth from older students.

The majority of the students require more than 5 years to graduate from the program. The time of graduation is impacted by a variety of factors, including the program's open admissions policy, previous preparation, and financial pressures. It is little surprise that ARQPOLI loses a number of students between the first and second year, given the open enrollment policy and the general trends in architectural education. Students (and the team) are concerned about the extended time to graduation.

#### **I.2.2 Administrative Structure and Governance:**

- **Administrative Structure:** *An accredited degree program must demonstrate it has a measure of administrative autonomy that is sufficient to affirm the program's ability to conform to the conditions for accreditation. Accredited programs are required to maintain an organizational chart describing the administrative structure of the program and position descriptions describing the responsibilities of the administrative staff.*

**[X] Administrative structure is inadequate for the program.**

**2015 Team Assessment:** The number of programs at the school is growing (two have been newly implemented, and another is on the way), which has implications for the direction of the architecture program. The program is currently the direct responsibility of the dean, with significant help from an associate dean and administrative staff. Both the dean and associate dean have teaching responsibilities; the dean also maintains a professional practice.

The size of the administrative staff might be inadequate for future growth of the program to full capacity. There is strain on the current administrative staff as they support faculty, carry out administrative duties, and fulfill their need/desire to respond to students in a timely manner.

- **Governance:** *The program must demonstrate that all faculty, staff, and students have equitable opportunities to participate in program and institutional governance.*

**[X] Governance opportunities are inadequate for the program.**

**2015 Team Assessment:** Some faculty are involved in policy and curriculum development through committees within the School of Architecture, including committees for curriculum and personnel. School faculty members participate in the University Academic Council. In all cases, faculty representatives are appointed by the dean (not equitable opportunity).

Student representatives from each program (one from the architecture program) participate in the University Student Council and are also appointed by the dean (not equitable opportunity).

There is no formal venue for students to participate in school/program governance, though the dean maintains a widely appreciated "open door" policy.

**I.2.3 Physical Resources:** *The program must demonstrate that it provides physical resources that promote student learning and achievement in a professional degree program in architecture. This includes, but is not limited, to the following:*

- *Space to support and encourage studio-based learning.*
- *Space to support and encourage didactic and interactive learning.*

- *Space to support and encourage the full range of faculty roles and responsibilities including preparation for teaching, research, mentoring, and student advising.*

**[X] Physical resources are adequate for the program.**

**2015 Team Assessment:** The university has delivered a completely renovated “school of architecture facility” housed within the multi-purpose building on campus. The building, itself, designed by the founder of the school and the first architecture dean (Jorge Rigau), provides a very transparent and open environment for learning and teaching. The facilities have plenty of space for students (at the current student population of 450 within the School of Architecture program) as well as space for the newly constructed Landscape Architecture and Interior Design program studios. The expanded and updated facilities should be a positive draw in the future recruitment of students, faculty, and staff. The team was impressed that the university made such a significant investment for the school in the midst of hard economic times.

The facilities are the newest on campus, and have the most open environment and the most daylight. As a result, there have been some growing pains with respect to allowing access to the entire student population (including those from the Engineering School). Engineering students are openly invited to use part of the studio space to study and work while the building is open (every day until 1 a.m.). There could be some additional effort by the School of Architecture and the Engineering School to devise a way to designate an area in the facilities for the university population outside of the School of Architecture to use. During the team’s meeting with students, they noted that they pay additional fees for the studio space and that engineering students do not.

In addition, the architecture facility, itself, has been designed with an access control system, but the system is not yet in place. There seems to be some discussion between the university administration and the school about whether this system is best suited for the desired collaborative environment that they are trying to build on campus and between the rest of the university and the school.

This condition is **Met with Distinction**.

**1.2.4 Financial Resources:** *An accredited degree program must demonstrate that it has access to appropriate institutional and financial resources to support student learning and achievement.*

**[X] Financial resources are inadequate for the program.**

**2015 Team Assessment:** The visiting team has determined the financial resources condition to be “inadequate.” In making this determination, the team recognized that the new/reconfigured architecture space was a significant financial commitment to the architecture program’s future by the administration. However, as important as this single step is to the program, the lack of reported information, required by the NAAB below, causes the team concern. The team was told that the overall budget for the architecture program is based on history, the enrollment count, and negotiations with the dean.

Additionally, while the team notes that the economy in Puerto Rico has suffered in recent years, it is the lack of transparency by, and information from, the university to the school that makes this item difficult to evaluate. That said, the loss of faculty positions, staff positions, and work-study assistants seems related to diminished financial support/resources.

The team reviewed a number of documents and held meetings to gain an understanding of the current financial resources and the underlying support for future student learning and achievement as required by the NAAB.

1. Information from the 2015 APR submitted by ARQPOLI:
  - The university is tuition-dependent, with over 87% of its income coming from tuition and fees.

- Total enrollment for 2013-2014 was down 21% university wide. However, this comparison is based on the highest enrollment in 2007-2008.
  - To increase enrollment, a number of new undergraduate- and graduate-level offerings have been put in place.
  - The resulting reduction in revenue required a university-wide HR restructuring, including a reduction in administrative and academic departments.
  - This restructuring has allowed the total revenue to remain stable, even with a decline in enrollment. The primary reason cited for this revenue stability is that there was a request for increased federal and external funds, and this reduced the dependency on student tuition and fees from 91% to 87.5%.
  -
2. Items Missing from the 2015 APR submitted by ARQPOLI:
- Current fiscal year reports showing revenue and expenses from all sources.
  - Forecasts for revenue for at least 2 years beyond the current year.
  - Comparative reports for each year since the last accreditation visit.
  - Information related to endowments, scholarships, and development activities.
  - Data on annual expenditures, and the total capital investment per student, compared to expenditures for other professional degrees.
  - A narrative containing specifics on the architecture program. Items of concern that the visiting team cannot discern are:
    - Pending reductions and/or increases in budget.
    - Pending reductions and/or increases in enrollment.
    - Changes in funding models for faculty instruction, overhead, or facilities since the last visit and plans for addressing these changes.
    - Other financial issues that the program and/or institution might be facing.

Financial Resources Conclusions:

Overall, the team understands the poor economic conditions in the entire country; however, the team feels that the dean and the program need more financial information in order to better assist the university in the management of the resources.

Whether this is an attempt to raise revenue or to create an inclusive "design" program at the university, the program needs to be able to financially measure how it is doing and develop ways to increase its departmental budget while increasing total revenue for the university.

Further, the team is concerned, as noted, about the ability to sustain quality faculty at the current salary levels. This will have an effect on the overall program if and when the economy gains some ground in Puerto Rico.

The lack of information and other cited concerns are the reasons for the team's decision to rate this item as "inadequate."

**I.2.5 Information Resources:** *The accredited program must demonstrate that all students, faculty, and staff have convenient access to literature, information, visual, and digital resources that support professional education in the field of architecture.*

*Further, the accredited program must demonstrate that all students, faculty, and staff have access to architecture librarians and visual resources professionals who provide information services that teach and develop research and evaluative skills, and critical thinking skills necessary for professional practice and lifelong learning.*

**[X] Information resources are adequate for the program.**

**2015 Team Assessment:** Team members met with the university librarian and toured the facilities to confirm the information provided in the APR. Both students and faculty report using the centralized library (conveniently located adjacent to the architecture building) and finding the services and collection to be more than adequate.

**PART I: SECTION 3 –REPORTS**

**I.3.1 Statistical Reports<sup>3</sup>:** *Programs are required to provide statistical data in support of activities and policies that support social equity in the professional degree and program as well as other data points that demonstrate student success and faculty development.*

- *Program student characteristics*
  - *Demographics (race/ethnicity and gender) of all students enrolled in the accredited degree program(s).*
    - *Demographics compared to those recorded at the time of the previous visit.*
    - *Demographics compared to those of the student population for the institution overall.*
  - *Qualifications of students admitted in the fiscal year prior to the visit.*
    - *Qualifications of students admitted in the fiscal year prior to the upcoming visit compared to those admitted in the fiscal year prior to the last visit.*
  - *Time to graduation.*
    - *Percentage of matriculating students who complete the accredited degree program within the "normal time to completion" for each academic year since the previous visit.*
    - *Percentage that complete the accredited degree program within 150% of the normal time to completion for each academic year since the previous visit.*
- *Program faculty characteristics*
  - *Demographics (race/ethnicity and gender) for all full-time instructional faculty.*
    - *Demographics compared to those recorded at the time of the previous visit.*
    - *Demographics compared to those of the full-time instructional faculty at the institution overall.*
  - *Number of faculty promoted each year since last visit.*
    - *Compare to number of faculty promoted each year across the institution during the same period.*
  - *Number of faculty receiving tenure each year since last visit.*
    - *Compare to number of faculty receiving tenure at the institution during the same period.*
  - *Number of faculty maintaining licenses from U.S. jurisdictions each year since the last visit, and where they are licensed.*

**[X] Statistical Reports were provided and provide the appropriate information.**

**2015 Team Assessment:** The reports in the APR were missing faculty demographics compared to those of the full-time instructional faculty at the institution overall and information on the faculty promoted each year across the institution. However, the missing information was provided by the program during the team visit after the team requested it.

**I.3.2. Annual Reports:** *The program is required to submit annual reports in the format required by Section 10 of the 2009 NAAB Procedures. Beginning in 2008, these reports are submitted electronically to the NAAB. Beginning in the fall of 2010, the NAAB will provide to the visiting team all annual reports submitted since 2008. The NAAB will also provide the NAAB Responses to the annual reports.*

*The program must certify that all statistical data it submits to NAAB has been verified by the institution and is consistent with institutional reports to national and regional agencies, including the Integrated Postsecondary Education Data System of the National Center for Education Statistics.*

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<sup>3</sup> In all cases, these statistics should be reported in the same format as they are reported in the Annual Report Submission system.

*The program is required to provide all annual reports, including statistics and narratives that were submitted prior to 2008. The program is also required to provide all NAAB Responses to annual reports transmitted prior to 2008. In the event a program underwent a Focused Evaluation, the Focused Evaluation Program Report and Focused Evaluation Team Report, including appendices and addenda should also be included.*

**[X] Annual Reports and NAAB Responses were provided and provide the appropriate information.**

**2015 Team Assessment:** A signed statement was included in the APR indicating ARQPOLI's compliance with this condition.

**I.3.3 Faculty Credentials:** *The program must demonstrate that the instructional faculty are adequately prepared to provide an architecture education within the mission, history, and context of the institution.*

*In addition, the program must provide evidence through a faculty exhibit<sup>4</sup> that the faculty, taken as a whole, reflects the range of knowledge and experience necessary to promote student achievement as described in Part Two. This exhibit should include highlights of faculty professional development and achievement since the last accreditation visit.*

**[X] Faculty credentials were provided and demonstrate the range of knowledge and experience necessary to promote student achievement.**

**2015 Team Assessment:** Faculty credentials fulfilling this criterion were provided as evidence in the APR. There is evidence in the resumes of international faculty (from Spain) as well as licensed architectural faculty. The faculty appear to be well connected to the local practices and embedded within the local community (at least four founding faculty members (including Jorge Rigau) continue to be part of the full-time faculty).

Full-time staff have been reduced to 11 since the last visit, but additional faculty associated with the School of Architecture (faculty for the Interior Design program and the Landscape Architecture program) add breadth to student resources and the knowledge base for development and collaboration across disciplines.

Students raised concerns over the lack of faculty variety in certain teaching areas (e.g., the same professor for all third-year studios), which does not provide the variety of perspectives and approaches that the students desire. However, the teaching assignment practices seem consistent with many NAAB-accredited programs in the U.S.

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<sup>4</sup> The faculty exhibit should be set up near or in the team room. To the extent the exhibit is incorporated into the team room, it should not be presented in a manner that interferes with the team's ability to view and evaluate student work.

**PART ONE (I): SECTION 4 – POLICY REVIEW**

*The information required in the three sections described above is to be addressed in the APR. In addition, the program shall provide a number of documents for review by the visiting team. Rather than be appended to the APR, they are to be provided in the team room during the visit. The list is available in Appendix 3.*

**[X] The policy documents in the team room met the requirements of Appendix 3.**

**2015 Team Assessment:** Most of the reports were provided in the APR and team room. The missing faculty demographics and promotion reports were provided later upon request by the visiting team.

## **PART TWO (II): EDUCATIONAL OUTCOMES AND CURRICULUM**

### **PART TWO (II): SECTION 1 -- STUDENT PERFORMANCE -- EDUCATIONAL REALMS AND STUDENT PERFORMANCE CRITERIA**

**II.1.1 Student Performance Criteria:** The SPC are organized into realms to more easily understand the relationships between individual criteria.

#### **Realm A: Critical Thinking and Representation:**

*Architects must have the ability to build abstract relationships and understand the impact of ideas based on research and analysis of multiple theoretical, social, political, economic, cultural, and environmental contexts. This ability includes facility with the wider range of media used to think about architecture, including writing, investigative skills, speaking, drawing, and model making. Students' learning aspirations include:*

- *Being broadly educated.*
- *Valuing lifelong inquisitiveness.*
- *Communicating graphically in a range of media.*
- *Recognizing the assessment of evidence.*
- *Comprehending people, place, and context.*
- *Recognizing the disparate needs of client, community, and society.*

#### **A. 1. Communication Skills: *Ability to read, write, speak, and listen effectively.***

**[X] Met**

**2015 Team Assessment:** Evidence of student ability to read and write was found in academic papers, research presentations, and other projects in the team room. The team observed student ability to speak and listen effectively during desk critiques. The student comments at the well-attended meeting with the team also demonstrated the ability to speak effectively and think critically.

#### **A. 2. Design Thinking Skills: *Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.***

**[X] Met**

**2015 Team Assessment:** Evidence is clearly demonstrated by student work and materials provided. Written and graphic evidence represents the ability to raise and investigate abstract ideas, and consider diverse points of view. The design work represents well-researched conclusions and outcomes.

- Evidence is found in presentations of drawings and PowerPoints in ARCH 5010: Capstone Design I and ARCH 5020: Capstone Design II.
- The course syllabi for both ARCH 5010 and ARCH 5020 indicate that the requirements for A.2. are well covered, noting, however, that much of the information reviewed was provided in Spanish only.
- References also indicate that this material is covered.

#### **A. 3. Visual Communication Skills: *Ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.***

**[X] Met**

**2015 Team Assessment:** The team found ample evidence of this criterion in a broad and sophisticated array of representation media available in the team room. The progression from hand drawing in ARCH 1010 to video production and exemplary digital media in ARCH 3010 makes a strong case for an ever-increasing understanding and ability in visual communications skills.

The 11"x17" documents that accompany and illustrate the architecture design program are impressive, as they offer a wide sampling of student work and capabilities. These documents, complemented by the presentation of scale work and models located in the team room—both high and low pass—again underscore both ability and understanding levels. The three-course sequence of ARCH 5010, ARCH 5020, and ARCH 5030 presents an exemplary set of projects in sequence from inception through completion.

Additional verification of the high level of graphic skills attained in the required courses is provided by the program's exhibitions, such as the 2009-2015 timeline of the school and the current exhibitions on La Plata, Argentina, and the Italia Francia EXPO, which were both presented in the third-floor galleries.

- A. 4. Technical Documentation: *Ability to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.***

**[X] Met**

**2015 Team Assessment:** The team found evidence of this criterion in a number of examples as follows:

- ARCH 4030 shows examples of clear technical drawings illustrating the assembly of materials, systems, and building components.
- There are examples of physical models supporting the design work for ARCH 4030.
- The course syllabus for ARPP 5020 indicates that the requirements for A.4. are well covered; however, much of the student information available for review was in Spanish only.
- Specific examples/evidence of outline specifications were not found; however, this topic is referenced in the ARPP 5020 "topical outline," and test questions provided some evidence of work related to this topic.

- A. 5. Investigative Skills: *Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.***

**[X] Met**

**2015 Team Assessment:** Evidence of student ability in this criterion was found in student project work for ARCH 3030: Intermediate Design III Mid-Career Research and in student presentations for ARCH 5010: Capstone Design I.

- A. 6. Fundamental Design Skills: *Ability to effectively use basic architectural and environmental principles in design.***

**[X] Met**

**2015 Team Assessment:** Good evidence of fundamental design skills in student work in the team room indicates a well-developed emphasis on design. A progression of these skills is well

demonstrated, beginning in first-year courses, where only "B" level grades progress to the next level of design work. In the fourth- and fifth-year work, there were good examples of the culmination of design skills. Specifically, evidence was found in the following:

- Examples of the ability to use basic architectural design and environmental design principles are found through a review of ARCH 3020 and ARCH 5020 work on team room walls.
- The course syllabus for ARCH 5020 indicates that the requirements for A.6. are well covered, noting, however, that much of the student information reviewed is in Spanish.

**A. 7. Use of Precedents: Ability to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.**

**[X] Met**

**2015 Team Assessment:** Evidence of this criterion was found at various points of the curriculum, and particularly in the ARCH 4010 and ARCH 4020 studios.

**A. 8. Ordering Systems Skills: Understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.**

**[X] Met**

**2015 Team Assessment:** An understanding of ordering systems is evident within ARCH 2020: Design Fundamentals II. The course explores the relationship between architecture and context, and the articulation of abstract conditions and their translation into compositional and spatial terminology. The studios look at precedent and use that for comprehending the ordering systems, spatial configuration, and programming for their project work. Student projects appear to be focused on mapping order, street development, and planning organization in this particular class—both studying and understanding. The student work (models in particular) provides evidence of vertical and organizational development (in both maximum and minimum passing projects). As an additional resource, one of the references for the ARCH 2020 course is Ching, *Form, Space & Order*. The text for projects was provided in Spanish only.

**A. 9. Historical Traditions and Global Culture: Understanding of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socio economic, public health, and cultural factors.**

**[X] Not Met**

**2015 Team Assessment:** Evidence of most requirements was found in ARCH 1010: History of Architecture, as well as ARHH 1010. As noted in the syllabus for ARHH 1010, Intro to Theory, "exposure of architectural thinking throughout time" brings about an understanding of global architectural theory through lectures and assigned readings. Evidence includes studies of ancient architecture—Roman, Greek, and Renaissance.

Latin American, North American, and European cultures are discussed in HIST 2010 as they relate to the development of Puerto Rico, specifically. However, no evidence was found of content or outcomes related to historic traditions and cultures from the Asian and African continents. Exposure to other cultures was provided in optional/elective courses and study abroad. The students were lacking

exposure to, and an understanding of, traditions in the Eastern cultures (especially Asia). The course projects and exams are in Spanish only.

- A. 10. Cultural Diversity: *Understanding* of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects.**

**[X] Met**

**2015 Team Assessment:** Evidence was found in HIST 2010: History of Puerto Rico in the Caribbean Context.

The following syllabus notes: "...historical and critical analysis of (Caribbean Society) and its role in the 'invention' of the Caribbean as a geographical region and socio-cultural 'condition'" seem to indicate a focus only on students' own cultural diversity, but raise an awareness of cultural diversity and an understanding of Caribbean and particularly Puerto Rican culture. References and exams are in Spanish only.

The ARCH 3010 course syllabus mentions "issues of contemporary and traditional vocabularies," as well as "preservation theory, legislation and programming," and, during the class, the students work to "acknowledge the value of historical structures and sites."

Throughout the ARCH 3010 course, students study a historic project and site, and draw the sections/plans of the building as a reference document. They study the history of the site—whether it is a monument or structure—and, by the third exercise, they present a plan to transform the site with selective demolition and proposed new infrastructure (mechanical or accessibility). The project is almost like a partial rehabilitation study.

ARCH 3010 materials also include an optional study abroad semester in Guatemala, which is a team-based project.

- A. 11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.**

**[X] Met**

**2015 Team Assessment:** The coursework in both the ARCH 4030 and ARCH 5000 Series courses demonstrates an understanding of applied research and its impact on human conditions. Evidence from ARCH 4030 indicates an emphasis on research, including the integration of other systems via guest lectures by professionals that cover structural, mechanical, electrical, and building materials and systems. Coursework and documentation of student work in the binders show proof of research into accessibility codes, building codes, setbacks, life safety, and ergonomics, which then shows up in the final project design work. Complicated project designs showcase parking layouts, as well as building core and structure analysis, and how they inform overall design and project flow.

The ARCH 5010 research papers show evidence of research efforts that are applied to the design work in the ARCH 5020 and ARCH 5030 continuation of the Capstone courses.

**Realm A. General Team Commentary:** Students from ARQPOLI show a clear ability to perform critical analysis concerning design and related research. The team room was full of design projects demonstrating the ability to represent visual information in a variety of media. In meetings with the team, the student body revealed an enthusiasm and inquisitiveness, which was then evident in the work posted around the team room.

**Realm B: Integrated Building Practices, Technical Skills and Knowledge:**

*Architects are called upon to comprehend the technical aspects of design, systems, and materials, and be able to apply that comprehension to their services. Additionally, they must appreciate their role in the implementation of design decisions, and their impact of such decisions on the environment. Students learning aspirations include:*

- *Creating building designs with well-integrated systems.*
- *Comprehending constructability.*
- *Incorporating life safety systems.*
- *Integrating accessibility.*
- *Applying principles of sustainable design.*

- B. 1. Pre-Design: Ability to prepare a comprehensive program for an architectural project, such as preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.**

**[X] Met**

**2015 Team Assessment:** Evidence was found in the Comprehensive Design sequence, including ARCH 4020 and ARCH 4030—in programs, consideration of users, site analysis, etc.—along with the ARCH 5020 Capstone project.

- B. 2. Accessibility: Ability to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.**

**[X] Met**

**2015 Team Assessment:** Evidence of this ability was noted in drawings and papers, including accessibility diagrams. Drawings indicated parking, ramps, escalators, and elevators for persons with disabilities. Specifically, the following areas were noted:

- The ability to design for accessibility is demonstrated by project examples from ARCH 4030 and ARCH 5030.
- The course syllabus for ARCH 4030 indicates a specific focus on accessibility requirements.
- The team saw evidence that students are demonstrating and utilizing their understanding of physical accessibility issues in site and facility designs.
- Specific evidence of design abilities utilizing approaches to "sensory and cognitive disabilities" was not observed.

- B. 3. Sustainability: Ability to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.**

**[X] Met**

**2015 Team Assessment:** This criterion is **Met with Distinction**. In ARCH 3010: Intermediate Design I, student work demonstrates a clear ability to practice the conservation and reuse of existing,

especially historic, resources. Student projects throughout the team room also show ability related to various green building strategies, including solar, water, air, and vegetation.

**B. 4. Site Design: *Ability to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.***

**[X] Met**

**2015 Team Assessment:** An ability to understand and respond to site characteristics is clearly evident in both the ARCH 2030 and ARCH 3010 courses.

Arch 2030: Design Fundamentals III indicates this ability:

- The course addresses "site orientation," and the focus is on understanding "how architectural projects address the relationship between building and nature."
- The class does a site analysis for a project.
- An understanding of zoning, site boundaries, slope, and terrain is gained.
- There is clear proof of studies leading to an understanding of how to get to a site in order to develop it.
- Project #2 studied watershed in looking at dam sites in Puerto Rico.

In ARCH 3010, students study a site and understand the location (looking at mapping, access, and the neighboring buildings/environment). By the third project, they are proposing modifications to the structure within the existing environment.

This criterion is **Met with Distinction**.

**B. 5. Life Safety: *Ability to apply the basic principles of life-safety systems with an emphasis on egress.***

**[X] Met**

**2015 Team Assessment:** Evidence of the ability to apply these basic principles is shown beginning in the third year. Specifically:

- The ability to design for egress using the basic principles of life safety is demonstrated in project examples on the team wall for ARCH 4030 and ARCH 5030.
- The course syllabus for ARCH 4030 indicates a specific focus on the requirements for B.5.
- Student work shows that the students are demonstrating this ability and utilizing their understanding of life safety and egress.

**B. 6. Comprehensive Design: *Ability to produce a comprehensive architectural project that demonstrates each student's capacity to make design decisions across scales while integrating the following SPC:***

- |  |                                   |
|--|-----------------------------------|
| <b>A.2. Design Thinking Skills</b>                   | <b>B.2. Accessibility</b>         |
| <b>A.4. Technical Documentation</b>                  | <b>B.3. Sustainability</b>        |
| <b>A.5. Investigative Skills</b>                     | <b>B.4. Site Design</b>           |
| <b>A.8. Ordering Systems</b>                         | <b>B.7. Environmental Systems</b> |
| <b>A.9. Historical Traditions and Global Culture</b> | <b>B.9. Structural Systems</b>    |

### B.5. Life Safety

**[X] Met**

**2015 Team Assessment:** In ARCH 4030, the team found evidence of integrated design solutions addressing all (or the majority of) elements listed above that are part of comprehensive design (AARP Competition project).

The three-course sequence from ARCH 5010 through ARCH 5030 provides detailed evidence of the role of comprehensive design in project development. Full evidence of this criterion requires examining the fourth-year studio and coursework as well. The well-organized 11"x17" bound volumes for ARCH 4010: Advanced Design I, ARCH 4020: Advanced Design II, ARCH 4030: Advanced Design III, ARCH 5020, and ARCH 5030 Advanced Design III include projects of high and low pass that provide evidence for meeting this multi-faceted criterion.

- B. 7. Financial Considerations: *Understanding of the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting.***

**[X] Not Met**

**2015 Team Assessment:** This criterion is **Not Met**. While evidence was found through student tests in ARPP 3010 that showed practice/experience demonstrating student understanding of architect fees, project budgets, change orders, payment schedules, and market value and feasibility, no evidence was found related to life-cycle costs.

- B. 8. Environmental Systems: *Understanding the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.***

**[X] Met**

**2015 Team Assessment:** The team found evidence that this understanding was applied in the Comprehensive Design studio, ARCH 4030, along with more detailed evidence in ARTE 4010 and ARTE 4020.

- B. 9. Structural Systems: *Understanding of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.***

**[X] Met**

**2015 Team Assessment:** Evidence was shown in ARTE 3020: Structural Concepts II, especially in exams and investigations of a range of structural systems. There was good coverage of basic statics in ARST 3010; ARST 3020 was missing the application of contemporary structural systems (in some examples). Some final presentations of structural systems included examples of the application of contemporary structures (ARST 3020). Student design projects in ARCH 4030 and ARCH 5030 also included the application of contemporary structures.

- B. 10. Building Envelope Systems: *Understanding* of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.**

**[X] Met**

**2015 Team Assessment:** Evidence was shown in ARTE 2010 (Materials and Methods) as well as in ARCH 4030 Studio project work. Wall section studies are showcased in the projects in the team room (on the boards and in the project reports). Even the minimally passing project work showed an understanding of, and investigation into, the construction systems and wall studies, which analyzed structural integration, mechanical systems, and solar and passive daylighting issues (although not all in the same project, but across various projects). The report was in Spanish, but it referenced Ching, *Building Construction Illustrated*, 2008.

- B. 11. Building Service Systems Integration: *Understanding* of the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems**

**[X] Met**

**2015 Team Assessment:** There is evidence in the team room clearly showing a good understanding of the characteristics, assemblies, and components for basic building service systems. This understanding is demonstrated as follows:

- In project examples and documents for ARCH 4030 contained in the team room.
- In the course syllabi for ARCH 4030 and ARPP 5020, which indicate a specific focus on the requirements for B.11.
- In ARCH 5030 Capstone projects, which illustrate a culmination of student understanding of the B.11. criterion.

- B. 12. Building Materials and Assemblies Integration: *Understanding* of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.**

**[X] Met**

**2015 Team Assessment:** Evidence was found in ARCH 4030 student work. The projects displayed were developed using a variety of systems (concrete or steel), and the wall sections showed an investigation into wall system assembly. An initial understanding of building materials is explored in ARTE 2010: Materials and Methods. According to the syllabus, this course "promotes the knowledge of different materials, its origin, characteristics of behavior (of materials), way of manufacture and assembly in application." The group projects included an investigation into different materials and a report. Exams included investigations into how materials are made, and the equipment (backhoe) used. Presentation reports showed investigations into materials: the history of material usage (traditional materials and new materials such as acoustic ceiling systems and options). Reports were in Spanish only, and no minimum passing reports were found. References included Ching, *Building Construction Illustrated*, 2008.

**Realm B. General Team Commentary:** Student work is representative of a general understanding of technical skills and knowledge, as well as integrated building practices. ARQPOLI students are able to apply elements such as systems, codes, and sustainable design to their own projects in an integrated way while maintaining creativity in their design work.

**Realm C: Leadership and Practice:**

*Architects need to manage, advocate, and act legally, ethically, and critically for the good of the client, society, and the public. This includes collaboration, business, and leadership skills. Student learning aspirations include:*

- *Knowing societal and professional responsibilities.*
- *Comprehending the business of building.*
- *Collaborating and negotiating with clients and consultants in the design process.*
- *Discerning the diverse roles of architects and those in related disciplines.*
- *Integrating community service into the practice of architecture.*

**C. 1. Collaboration: Ability to work in collaboration with others and in multi-disciplinary teams to successfully complete design projects.**

**[X] Met**

**2015 Team Assessment:** This criterion is **Met**. Evidence of this ability was found in ARCH 3010: Intermediate Design in student research and design work that was completed in groups. Group projects are found throughout the curriculum.

**C. 2. Human Behavior: Understanding of the relationship between human behavior, the natural environment, and the design of the built environment.**

**[X] Met**

**2015 Team Assessment:** This criterion is **Met**. Evidence of this understanding was found in student projects located in the team room for ARCH 3020: Intermediate Design II.

**C. 3. Client Role in Architecture: Understanding of the responsibility of the architect to elicit, understand, and reconcile the needs of the client, owner, user groups, and the public and community domains.**

**[X] Met**

**2015 Team Assessment:** Evidence of the ability to understand these basic principles in dealing with clients is shown to a greater extent in the work beginning with the Practice courses in the third year. Specifically, this ability is shown in the following:

- Evidence of understanding and reconciling the needs of the client and user groups is found in ARCH 4030: Comprehensive Design.
- Evidence of understanding the architect's responsibility to the public and community domains is found in projects in the ARCH 4000 and ARCH 5000 Series courses comprehensively.
- The course syllabus for APRR 5010: Ethics indicates that the role of the architect is demonstrated in terms of the C.3 criterion. However, the information reviewed is in Spanish. This material is also covered in the references.
- Documentation contained in the review of materials in ARPP 3010 primarily leans toward practice/experience and contractual issues.

- C. 4. Project Management: *Understanding* of the methods for competing for commissions, selecting consultants and assembling teams, and recommending project delivery methods**

**[X] Met**

**2015 Team Assessment:** This criterion is **Met**. Evidence of this understanding is found in student tests for ARPP 3010 Practice/Experience.

- C. 5. Practice Management: *Understanding* of the basic principles of architectural practice management such as financial management and business planning, time management, risk management, mediation and arbitration, and recognizing trends that affect practice.**

**[X] Met**

**2015 Team Assessment:** This criterion is **Met**. Evidence of this understanding is found in ARPP 3010 and ARPP 5010: Practice/Experience in the student tests.

- C. 6. Leadership: *Understanding* of the techniques and skills architects use to work collaboratively in the building design and construction process and on environmental, social, and aesthetic issues in their communities.**

**[X] Met**

**2015 Team Assessment:** Evidence was found in ARPP 5010 exam questions and ARCH 4020 student housing projects. Evidence was also found across a spectrum of courses, especially ARCH 3010: Community Studio and ARCH 4010: Multifamily Housing, which consistently address social, environmental, and aesthetic issues within the communities of Puerto Rico and other communities.

- C. 7. Legal Responsibilities: *Understanding* of the architect's responsibility to the public and the client as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, and historic preservation and accessibility laws.**

**[X] Met**

**2015 Team Assessment:** Evidence of an understanding related to registration law, building codes and regulations, professional service contracts, and zoning and subdivision ordinances is found in student exams in ARPP 3010. ARCH 4030 deals with accessibility laws, and ARCH 3010 covers historic preservation.

- C. 8. Ethics and Professional Judgment: *Understanding* of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues, and responsibility in architectural design and practice.**

**[X] Met**

**2015 Team Assessment:** Evidence of a student understanding of the ethical issues involved in dealing with clients is shown to a greater extent in the work beginning with history and design coursework, and it continues for all 5 years. Understanding the specifics of professional judgment

becomes focused in the third year and continues up to the fifth-year courses. Specifically, evidence of this understanding is shown as follows:

- The course syllabus and student tests from ARPP 5010: Ethics indicate that this area is well covered. This material is also covered in references.
- Case studies and field trip descriptions are provided in the information for ARPP 3010; however, they are in Spanish.
- The course syllabus for ARPP 3010 indicates a focus on understanding the ethics and professional judgement issues of C.8.
- The four tests shown in the binder for ARPP 3010 indicate a focus on understanding the ethics and professional judgement issues of C.8.

**C. 9. Community and Social Responsibility: *Understanding of the architect's responsibility to work in the public interest, to respect historic resources, and to improve the quality of life for local and global neighbors.***

**[X] Met**

**2015 Team Assessment:** Evidence of community-based and urban design is found in ARCH 3010: Conservation Studio and ARCH 4020: Urban Design Studio. ARCH 3010 takes on a project in a historic context, and ARCH 4020 takes on projects in dense urban contexts, both in Puerto Rico and (recently) in La Plata, Buenos Aires, Argentina. Both courses emphasize extensive site/district research, documentation, and analysis. Interventions demonstrate sensitivity for existing context.

**Realm C. General Team Commentary:** Students at ARQPOLI are learning about practice and leadership in a variety of places throughout the program curriculum. Specific courses related to professional practice, including legality, ethics, and social responsibility, are taught to students in the third and fifth years. Students demonstrated a clear passion for practice-related issues during interactions with the visiting team.

**PART TWO (II): SECTION 2 – CURRICULAR FRAMEWORK**

**II.2.1 Regional Accreditation:** *The institution offering the accredited degree program must be, or be part of, an institution accredited by one of the following regional institutional accrediting agencies for higher education: the Southern Association of Colleges and Schools (SACS); the Middle States Association of Colleges and Schools (MSACS); the New England Association of Schools and Colleges (NEASC); the North Central Association of Colleges and Schools (NCACS); the Northwest Commission on Colleges and Universities (NWCCU); and the Western Association of Schools and Colleges (WASC).*

**[X] Met**

**2015 Team Assessment:** Evidence was provided in the APR and in the Middle State Association Review for the university occurring in April 2015.

**II.2.2 Professional Degrees and Curriculum:** *The NAAB accredits the following professional degree programs: the Bachelor of Architecture (B. Arch.), the Master of Architecture (M. Arch.), and the Doctor of Architecture (D. Arch.). The curricular requirements for awarding these degrees must include professional studies, general studies, and electives. Schools offering the degrees B. Arch., M. Arch., and/or D. Arch. are strongly encouraged to use these degree titles exclusively with NAAB-accredited professional degree programs.*

**[X] Not Met**

**2015 Team Assessment:** As shown in the VTR for this section, 87 elective and general (non-architectural) studies courses, at 41% of the 213 total (trimester) credit hours, are required for the degree, which exceeds the minimum of 68 trimester hours required by the NAAB. However, the 213 trimester credit hours translate to the equivalent of 142 semester credit hours, falling short of the required 150 minimum required by the NAAB (225 trimester credit hours). This continues from the last accreditation visit of 2009, though the visiting team determined that the school had met this requirement, generally.

**II.2.3 Curriculum Review and Development:** *The program must describe the process by which the curriculum for the NAAB-accredited degree program is evaluated and how modifications (e.g., changes or additions) are identified, developed, approved, and implemented. Further, the NAAB expects that programs are evaluating curricula with a view toward the advancement of the discipline and toward ensuring that students are exposed to current issues in practice. Therefore, the program must demonstrate that licensed architects are included in the curriculum review and development process.*

**[X] Met**

**2015 Team Assessment:** The process for curriculum development and review is clearly described in the APR and in materials provided in the team room. ARQPOLI has faculty committees, both for curriculum and for outcome assessment. Both committees include licensed architects.

**PART TWO (II): SECTION 3 – EVALUATION OF PREPARATORY/PRE-PROFESSIONAL EDUCATION**

*Because of the expectation that all graduates meet the SPC (see Section 1 above), the program must demonstrate that it is thorough in the evaluation of the preparatory or pre-professional education of individuals admitted to the NAAB-accredited degree program.*

*In the event a program relies on the preparatory/pre-professional educational experience to ensure that students have met certain SPC, the program must demonstrate it has established standards for ensuring these SPC are met and for determining whether any gaps exist. Likewise, the program must demonstrate it has determined how any gaps will be addressed during each student's progress through the accredited degree program. This assessment should be documented in a student's admission and advising files.*

**[X] Met**

**2015 Team Assessment:** The process for admitting transfer students from other institutions was clearly outlined in the APR and in the team room, and was in line with the process described to the visiting team by the program staff and by the admissions and promotions office. The process for admitting students transferring from other departments within PUPR is clearly documented online, and a link is provided in the APR.

**PART TWO (II): SECTION 4 – PUBLIC INFORMATION**

**II.4.1 Statement on NAAB-Accredited Degrees:** *In order to promote an understanding of the accredited professional degree by prospective students, parents, and the public, all schools offering an accredited degree program or any candidacy program must include in catalogs and promotional media the exact language found in the 2009 NAAB Conditions for Accreditation, Appendix 5.*

**[X] Met**

**2015 Team Assessment:** NAAB language is evident on the school website at: <http://arqpoli.pupr.edu/Pages/Academics/Accreditation.html>.

**II.4.2 Access to NAAB Conditions and Procedures:** *In order to assist parents, students, and others as they seek to develop an understanding of the body of knowledge and skills that constitute a professional education in architecture, the school must make the following documents available to all students, parents, and faculty:*

*The 2009 NAAB Conditions for Accreditation*

*The NAAB Procedures for Accreditation (edition currently in effect)*

**[X] Met**

**2015 Team Assessment:** Links to the NAAB Conditions and Procedures for Accreditation are provided on the ARQPOLI website.

**II.4.3 Access to Career Development Information:** *In order to assist students, parents, and others as they seek to develop an understanding of the larger context for architecture education and the career pathways available to graduates of accredited degree programs, the program must make the following resources available to all students, parents, staff, and faculty:*

[www.ARCHCareers.org](http://www.ARCHCareers.org)

*The NCARB Handbook for Interns and Architects*

*Toward an Evolution of Studio Culture*

*The Emerging Professional's Companion*

[www.NCARB.org](http://www.NCARB.org)

[www.aia.org](http://www.aia.org)

[www.aias.org](http://www.aias.org)

[www.acsa-arch.org](http://www.acsa-arch.org)

**[X] Met**

**2015 Team Assessment:** Career Development Information is online, with active links to the organizations through the following website: <http://arqpoli.pupr.edu/Pages/Resources/career-development-information.html>

**II.4.4 Public Access to APRs and VTRs:** *In order to promote transparency in the process of accreditation in architecture education, the program is required to make the following documents available to the public:*

*All Annual Reports, including the narrative*

*All NAAB responses to the Annual Report*

*The final decision letter from the NAAB*

*The most recent APR*

*The final edition of the most recent Visiting Team Report, including attachments and addenda*

*These documents must be housed together and accessible to all. Programs are encouraged to make these documents available electronically from their websites.*

**[X] Met**

**2015 Team Assessment:** The program APRs and VTRs are provided for public access in the university library.

**II.4.5 ARE Pass Rates:** *Annually, the National Council of Architectural Registration Boards publishes pass rates for each section of the Architect Registration Examination by institution. This information is considered to be useful to parents and prospective students as part of their planning for higher/post-secondary education. Therefore, programs are required to make this information available to current and prospective students and their parents either by publishing the annual results or by linking their website to the results.*

**[X] Met**

**2015 Team Assessment:** A link to the ARE Pass Rates is available online, with an active link through the following website: <http://arqpoli.pupr.edu/Pages/Resources/career-development-information.html>.

III. **Appendices:**

1. **Program Information**

[Taken from the *Architecture Program Report*, responses to Part One: Section 1 Identity and Self-Assessment]

A. **History and Mission of the Institution (I.1.1)**

Reference Polytechnic Universidad de Puerto Rico, APR, pp. 1-3

B. **History and Mission of the Program (I.1.1)**

Reference Polytechnic Universidad de Puerto Rico, APR, pp. 3-9

C. **Long-Range Planning (I.1.4)**

Reference Polytechnic Universidad de Puerto Rico, APR, pp. 26-33

D. **Self-Assessment (I.1.5)**

Reference Polytechnic Universidad de Puerto Rico, APR, pp. 33-42

2. **Conditions Met with Distinction**

**I.1.2 Learning Culture and Social Equity:** There is clear mutual respect and appreciation between the faculty, students, and staff.

This University's mission revolves around equal opportunity through open enrollment, and the architecture program embodies this mission.

**I.2.3 Physical Resources:** An impressive addition expands the school to almost double the size at the last accreditation visit in 2009. This is a particularly impressive feat in the context of shrinking enrollment and other stresses related to tough economic times.

**B.3. Sustainability:** Sustainability is seen in ARCH 3010: Conservation Studio. It is also seen in the Conservation Laboratory and related electives, though not required. Visibility and promotion of the Conservation Laboratory (listed in the APR as a main feature of ARQPOLI's identity) are seen. The laboratory is one of only three facilities like it in the United States.

**B.4. Site Design:** This is consistently addressed in most studios, through every level, including an emphasis on sloped sites in the second year, dense urban sites in the fourth year (ARCH 4010), and historic areas in the third year (ARCH 3020).

**3. The Visiting Team**

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**IV. Report Signatures**

**Respectfully Submitted,**



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Michael Pride, AIA, NOMA  
Team Chair

Representing the ACSA



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Katherine Slate, AIA, PMP  
Team member

Representing the AIA



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Michelle A. Stotz, Associate AIA  
Team member

Representing the AIAS



---

Richard H. McNeel, AIA, LEED@AP  
Team member

Representing the NCARB



---

Lance Jay Brown, FAIA, DPACSA

Non-voting member

# Program Response to the Final Draft Visiting Team Report

June 24, 2015

Cassandra Pair  
Director, Accreditation  
National Architectural Accrediting Board, Inc.  
1101 Connecticut Ave. NW suite 104  
Washington, DC 20036

REF: FINAL DRAFT OF THE 2015 POLYTECHNIC UNIVERSITY OF PUERTO RICO  
VISITING TEAM REPORT, Bachelor of Architecture (213 semester credit hours)

Dear Cassandra :

In response to the final draft of the Visiting Team Report (VTR) received June 15, 2015 Polytechnic University of Puerto Rico (PUPR) would like to point out that in Part Two (II): Section 2- Curricular Framework, 11.2.2 Professional Degrees and Curriculum still remains a factual error. That factual error was also mentioned in our June 12, 2015 response letter to the draft report received on June 8, 2015. Apparently the Team used the established formula for translating quarters to trimesters to calculate the equivalence (213 divided by 1.5 which comes to the 142 mentioned) and used the same to establish the 225 requirement ( $213 \times 1.5 = 225$ ).

The 213 credit hours of our architecture program are neither quarter nor trimester credit hours. They are semester credit hours offered in academic terms of twelve weeks (12) (three (3) regular academic terms). This academic format seems to have been confused as quarter terms by the Visiting Team.

In order to validate this fact, PUPR would like to bring to your attention the Undergraduate Catalogue 2011-12 to 2016-17 (Revised Fall 2014) in page 26 section titled PUPR's Adopted Definition of Credit-Hour. This definition establishes that "one credit-hour corresponds to 15 contact hours per term for a lecture course..." Therefore, a 3 credit-hour lecture course corresponds to 45 contact hours per term that is equivalent to a traditional semester 3 credit-hour course.

Furthermore, in page 4 of the Undergraduate Catalogue under section titled Activities of the Academic Calendar, section 4 establishes that "classes begin on Monday or Tuesday after the week of registration. Three (3) credit-hour courses meet twice a week (2 hours per session) for twelve-week period, equivalent to three (3) semester credit-hours". Both pages of the Undergraduate Catalogue are attached for your reference.

We expect this evidence clarifies the misconception that PUPR operates in quarter-hours and proves that PUPR operates in semester-hours. Therefore the 213 credits-hours required for graduation in our program are semester equivalent credits-hours and exceeds the 150 requirement. If you need further information do not hesitate to contact me.

Sincerely,

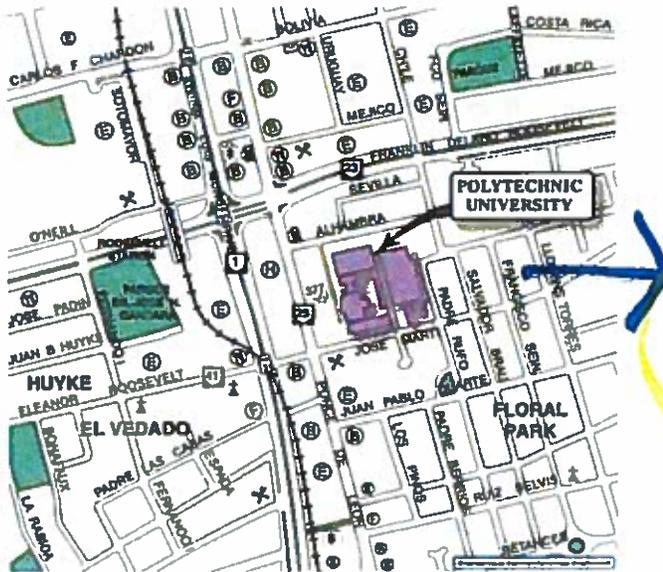


Carlos E. Betancourt - L.: ambias, AIA  
Dean  
School of Architecture  
Polytechnic University of Puerto Rico

C: Mr. Ernesto Vazquez Barquet, President, PUPR  
Dr. Miguel A. Riestra, Vice President Academic Affairs  
Mrs. Olga Cancel, Associate Vice President of Administration

Enc. Undergraduate Catalogue, pages 4 and 26

## II. LOCATION MAP



## III. ACADEMIC CALENDAR

Academic Years 2012 - 2019

FA/12	August 6, 2012	October 27, 2012
WI/12	November 12, 2012	February 16, 2013
SP/13	March 4, 2013	May 25, 2013
SU/13	June 10, 2013	July 20, 2013
FA/13	AUGUST 5, 2013	October 26, 2013
WI/13	November 18, 2013	February 22, 2014
SP/14	March 10, 2014	May 31, 2104
SU/13	June 9, 2014	July 19, 2014
WI/14	November, 2014	February, 2015
SP/15	March, 2015	May, 2015
SU/15	June, 2015	July, 2015
FA/15	August, 2015	October, 2015
WI/15	November, 2015	February, 2016
SP/16	March, 2016	May, 2016
SU/16	June, 2016	July, 2016
FA/16	AUGUST, 2016	October, 2016
WI/16	November, 2016	February, 2017
SP/17	March, 2017	May, 2017
SU/17	June, 2017	July, 2017
FA/17	August, 2017	October, 2017
WI/17	November, 2017	February, 2018
SP/18	March, 2018	May, 2018
SU/18	June, 2018	July, 2018
FA/18	AUGUST, 2018	October, 2018
WI/18	November, 2018	February, 2019
SP/19	March, 2019	May, 2019
SU/19	June, 2019	July, 2019

## ACTIVITIES ON THE ACADEMIC CALENDAR

- 1) Admissions Deadline:  
Third Saturday prior to the beginning of the term.
- 2) New and Transfer Students Orientation:  
One week prior to the beginning of the term.
- 3) Registration Period:  
New and Transfer Students - Monday before the beginning of classes. Regular Students- One week prior to the beginning of classes.
- 4) Beginning of the Term (Monday or Tuesday):  
Classes begin on Monday or Tuesday a year the week of registration. Three credit-hour courses meet twice a week (2 hours per session) for twelve-week period, equivalent to three semester credit-hours.
- 5) Deadline for Late Registrar and Course Changes:  
Friday of the first week of each term.
- 6) Deadline for Completing Pending Projects and to Remove Incomplete Grades:  
Eleven (11) weeks after the end of the preceding term are allowed for this purpose (tenth week of the current term).
- 7) Deadline for the First Partial Examination:  
The fourth week of each term (first third of the term).
- 8) Deadline for the Second Partial Examination:  
The eighth week of each term (second third of the term).
- 9) Deadline for Partial or Total Withdrawal:  
Students may withdraw totally or partially until the tenth week of the current term, and receive a grade of "W".
- 10) Period of Early Registration:  
Eleventh week of the current term.
- 11) Deadlines for Final Examinations:  
The last week of each term will be devoted to the total review of course content. Final examinations will comprise all material covered during a given term.
- 12) Regular Registration Period:  
The registration period will be held in the recess period between terms. Active students will be notified in advance of their registration day.

## IV. BOARD OF TRUSTEES

Ricardo Jaen Presno, MD, Chairman  
 Luis Fullana, BS in Agronomy, Vice Chairman  
 Francisco Martinez, BS in Civil Engineering, Treasurer  
 Vanessa M. Mullet Sanchez, JD, Secretary  
 Irving A. Jimenez Juarbe, JD, Trustee  
 Luis E. Gonzalez Cognet, MD, Trustee  
 Maria M. Melendez Ramos, DEd, Trustee  
 Ricardo Leranc Morales, Arq, Trustee  
 Ernesto Vazquez Barquet, MBA, Ex Officio

## DEFINITIONS

### Credit-Hour

A credit hour for Federal programs, including the Federal student financial assistance programs, is defined as follows: (34CFR 600.2 of final regulations)

An amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:

1. One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of time; or
2. At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution, including laboratory work, internships, practice, studio work, and other academic work leading to the award of credit hours.

### PUPR's Adopted Definition of Credit-Hour

One credit-hour corresponds to 15 contact hours per term for a lecture course, and thirty (30) to forty five (45) contact hours per term for a laboratory or practicum course. Additionally, includes a minimum of 2.5 hours of out-of-class student work each week for the twelve week term. The exception is each one of the Architecture (ARCH) courses which requires twelve (12) contact hours per week.

### Attempted Credit-Hours

Credit-hours the student has registered at PUPR, and in which he/she has obtained I (With a grade), A, B, C, D, F, WF or W, including all repetitions.

### Transferred Credit-Hours

Credit-hours taken at other accredited institutions, which the student has passed with A, B, or C grades, and that are accepted by the Department Director or the corresponding Dean, in accordance with PUPR policy.

### Passed Credit-hours

Attempted credit-hours taken at PUPR in which A, B, C, or D grades are obtained, except in those specific cases defined by the departments.

### Grade Point Average

The measure of academic merit achieved by the student; it is calculated by dividing the total accumulated honor points

by the number of credit-hours in which the student has received final grades, including outstanding F's.

### Dismissal for Academic Deficiency

A student who systematically fails to satisfy the achievement index may be permanently dismissed from PUPR for academic deficiency.

### Academic Progress

The measure that shows whether the student passes 66% of the attempted credit-hours with a grade point average equal to, or higher than, the retention index. See Table A or Table B, whichever applies.

### Repeated Courses

Undergraduate courses in which a student has been enrolled two or more times because he/she has obtained a grade of D, F, WF or W. For the purpose of determining the Grade Point Average only the highest grade obtained will be used.

### Academic Year and Term

Academic year consists of three consecutive academic periods called terms from August 1 to July 31 of the following year. The Summer academic period is optional and the grades will be added to the previous academic period of study. Academic Term refers to the 12 week period running from the first day at classes to the last day of final tests as defined in Page 4. During the summer session the period is reduced to six weeks doubling the daily contact hours per week.

### Doted Courses

All courses will become extinct, expired or doted seven (7) years after being passed. This rule applies equally to courses passed at PUPR or to transfer courses. The respective Department Head and Dean may validate some after judging each one of them. The student must repeat all those confirmed doted by the Dean, or in its place may be authorized by the Department Head and the Dean to take advanced equivalent courses instead.

### Retention Index

PUPR adopts the required retention index as seen in Table A, in accordance with the number of completed credit-hours and transferred credit-hours. (Students are required to obtain a minimum grade point average of 2.00/4.00 in concentration courses for graduation purposes.) This constitutes the Institutional Policy, administered by the Registrar's office.

### Retention Index (Qualitative Element)

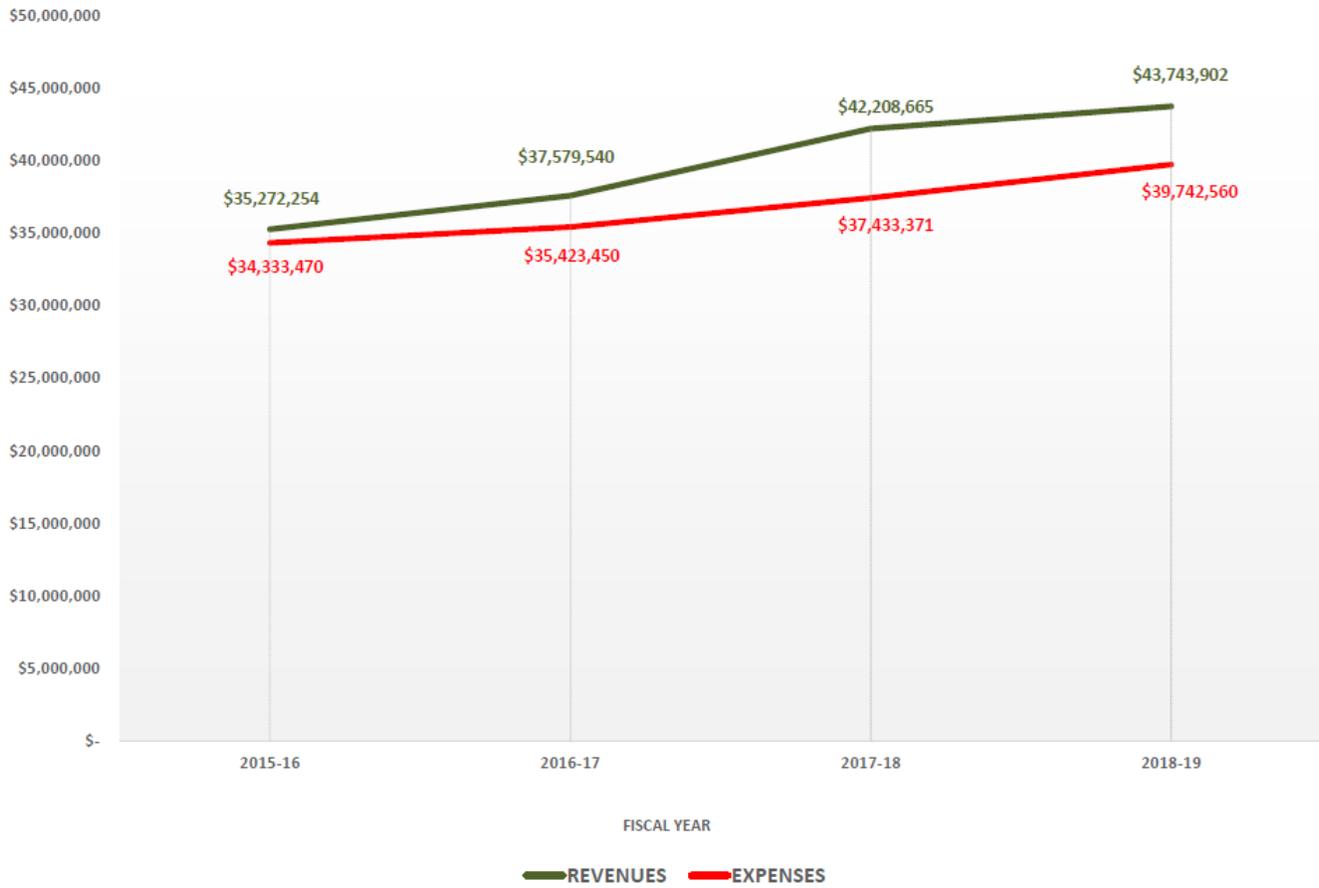
The institutional policy applicable to students without



# Appendix 0.C-1

Appendix I

## Polytechnic University of Puerto Rico Revenues vs Expenses



## Appendix 0.C-2

### Appendix II

**POLYTECHNIC UNIVERSITY OF PUERTO RICO  
STATEMENT OF ACTIVITIES  
YEAR ENDED JULY 31,**

<u>REVENUES AND OTHER SUPPORT:</u>	2016	2017	2018	2019
GROSS TUITION AND FEES	30,167,696	30,821,065	31,621,378	33,310,250
LESS: INSTITUTIONAL DISCOUNTS & WAIVERS	(65,247)	(83,864)	(57,031)	(37,958)
NET TUITION AND FEES	<u>30,102,449</u>	<u>30,737,201</u>	<u>31,564,347</u>	<u>33,272,292</u>
GOVERNMENTAL GRANTS AND CONTRACTS	3,714,966	4,523,737	5,461,933	6,601,203
ENDOWMENT INCOME	18,863	26,149	28,864	28,926
OTHER INVESTMENT INCOME	534,016	469,425	554,706	676,307
CONTRIBUTIONS	32,250	87,813	54,700	45,002
REALIZED GAIN OR (LOSS) ON:				
ENDOWMENTS	(15,480)	16,082	30,743	31,322
OTHER INVESTMENTS	12,084	621,884	391,544	197,011
NET UNREALIZED GAIN OR (LOSS) ON:				
ENDOWMENTS	18,733	38,746	6,307	3,137
OTHER INVESTMENTS	(137,795)	129,340	171,993	253,029
NET AUXILIARY ENTERPRISES	604,339	634,638	625,222	770,194
GAIN ON SALE OF ASSETS	-	16,950	3,400	-
OTHER REVENUES	387,829	277,575	382,934	308,534
HOUSING INCOME	-	-	228,806	319,469
INSURANCE CLAIM INCOME	-	-	2,703,166	724,675
OTHER INCOME, FEMA	-	-	-	512,801
TOTAL REVENUE AND OTHER SUPPORT	<u>35,272,254</u>	<u>37,579,540</u>	<u>42,208,665</u>	<u>43,743,902</u>
<u>EXPENSES:</u>				
INSTRUCTION	10,844,883	10,997,668	11,088,058	11,401,484
ACADEMIC SUPPORT	1,417,702	1,469,648	1,503,153	1,656,835
STUDENT SERVICES	4,723,608	5,107,454	4,777,912	6,216,088
INSTITUTIONAL SUPPORT	5,192,645	5,437,616	5,284,230	5,384,762
INSTITUTIONAL SCHOLARSHIPS	571,746	570,499	602,822	572,274
OPERATION AND MAINTENANCE	6,228,688	6,231,180	5,764,145	7,097,057
RESEARCH AND DEVELOPMENT	1,051,000	1,360,335	1,605,273	2,108,154
INVESTMENT AND BOND FEES	93,969	122,710	131,045	146,355
DEPRECIATION AND AMORTIZATION	2,640,516	2,604,216	2,845,747	3,007,550
INTEREST	1,568,713	1,522,124	1,442,118	1,351,830
HOUSING EXPENSES	-	-	321,346	348,719
LOSS ON DISPOSAL OF ASSETS, HURRICANE RELATED	-	-	1,198,645	-
OTHER HURRICANE EXPENSES	-	-	868,877	451,452
TOTAL EXPENSES	<u>34,333,470</u>	<u>35,423,450</u>	<u>37,433,371</u>	<u>39,742,560</u>
CHANGE IN NET ASSETS	<u>\$ 938,784</u>	<u>\$ 2,156,090</u>	<u>\$ 4,775,294</u>	<u>\$ 4,001,342</u>

Appendix III

**BUDGET PREPARATION PROCESS**

The office of the Vice President for Administration and Finance sends a memorandum with instructions, time schedule and the forms, early in Spring of each year, to every office or Department, to submit a budget request for the next fiscal year that runs from August 1 to July 31 of next year.

Every office or Department determines the budget for the next fiscal year and submits it electronically and in paper to the office of the Vice President for Administration and Finance. This office consolidates all the requests made and compares the total expenses with the projected income for the same period.

Thereafter, meetings are held with the different Directors to analyze their budget proposals and make the necessary adjustments until a final agreement is reached. The Vice President for Administration and Finance prepares the institutional final version and submits it to the President and to the Board of Trustees for final approval. Once the Board of Trustees authorizes the budget, the Vice President for Administration and Finance sends the Authorized Version to every office or department. The office of the Vice President for Administration of Finance maintains control of the budget. The cycle is repeated every year.

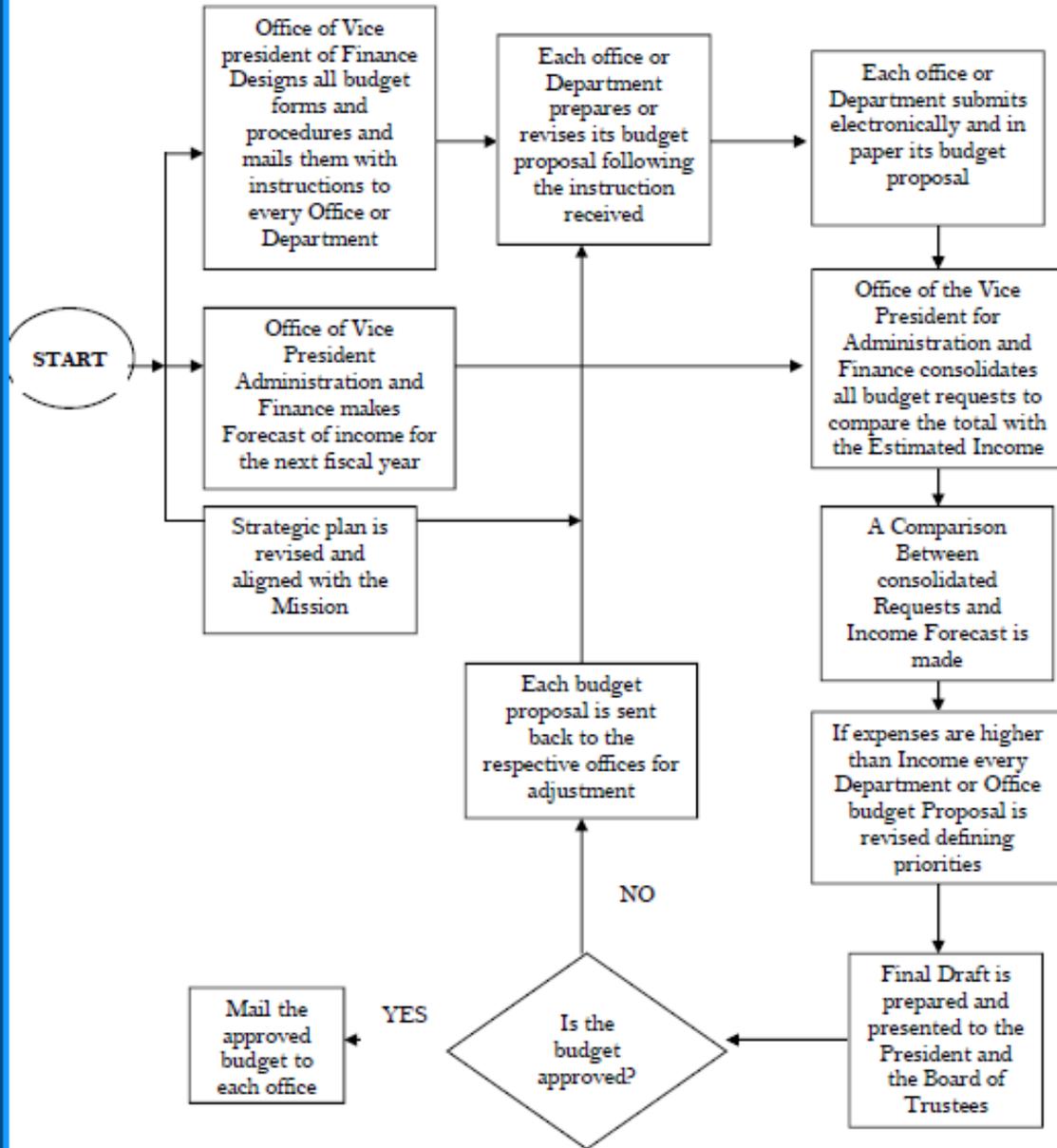
This process is diagrammed in Figure II-3.7-A.

The Budget Office is the person responsible of assessing this process. To do so the Budget Office will use the instruments provided in Appendix M-G and will do it annually.

Appendix IV

**BUDGET PREPARATION PROCESS**

Figure II-3.7-A



Note: This cycle is repeated every year starting in January for the next fiscal period which starts in August 1 to July 31 of next year.

# Appendix 0.C-5

Appendix V

## POLYTECHNIC UNIVERSITY OF PUERTO RICO V.P. FINANCE TREASURY

### BUDGET 2020 - 2021

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	1,500	1,000	500	5,000
01	10400	5201	0000	Computer Software	2,000	2,000			4,000
01	10400	5205	0000	Audiovisual Supplies	-	-	-	-	0
01	10400	5215	0000	Instructional Supplies	-	-	-	-	0
01	10400	5220	0000	Laboratory Supplies	2,500	17,500	1,500	-	21,500
01	10400	5310	0000	Contract Services	-	-	-	-	0
01	10400	5315	0000	Professional Services	24,000	24,000	24,000	9,350	81,350
01	10400	5400	0000	Travel expenses	-	-	-	-	0
01	10400	5406	0000	Per Diem	-	-	-	-	0
01	10400	5517	0000	Equipment Maintenance	500	500	500	-	1,500
01	10400	5871	0000	Special Activities Expenses	1,375	3,000	375	1,800	6,550
01	10400	5910	0000	Equipment Repairs	1,500	1,000	-	-	2,500
01	10400	5925	0000	Membership	11,563	100	-	-	11,663
01	10400	5930	0000	Subscription	-	-	-	-	0
01	10400	5935	0000	Seminars & Workshop	1,790	400	400	-	2,590
01	10400	5940	0000	Printing Services	500	1,000	500	11,150	13,150
01	10400	5945	0000	Graphic & Text Material	2,000	2,000	2,000	1,500	7,500
01	00000	1508	0000	Office Equipment	-	-	-	-	0
01	00000	1516	0000	Computer Equipment	-	-	-	-	0
01	00000	1523	0000	Audiovisual Equipment	-	-	-	-	0
01	00000	1528	0000	Laboratory Equipment	-	-	-	-	0
01	00000	5145	0000	Tuition Waiver 50 %	-	-	-	-	0
									<b>\$ 157,303.00</b>

## Appendix 0.D-1



t. 202.783.2007

f. 202.783.2822

e. info@naab.org

w. naab.org

National Architectural Accrediting Board, Inc.

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April 17, 2018

Carlos E. Betancourt-Llambías, AIA  
Dean  
School of Architecture  
Polytechnic University of Puerto Rico  
San Jaun, PR 00919-2017

Dear Dean Betancourt-Llambías:

It certainly was a pleasure for Ellen and me to meet with you and Mr. Rigau-Perez in Denver during the ACSA Annual Meeting. Kindly find, following, a confirmation of the items we discussed at that time.

First, we regret that the 2015 NAAB visiting team did not include a team member who was fluent in Spanish. We recognize the difficulties this may have caused for the school. Rest assured that a note has been made of this, and your program's next accreditation visit will include a fluent Spanish speaker as part of the team.

Additionally, we acknowledge and apologize that your communications regarding the school's credit-hour compliance was not dealt with in a timely manner nor given the proper audience or attention it deserved. As we confirmed with you during our meeting, the NAAB has researched this matter carefully, and has found that your allocation and accounting of your program's credit hours is factually correct. As such, it meets the NAAB's requirements.

Finally, as this matter of the credit hours is now resolved, we hope you will be able to submit your program's 2-Year Interim Progress Report by May 1, 2018. It will be reviewed and voted upon during either the June or July 2018 Board of Directors meetings.

If you have additional questions or concerns, please do not hesitate to contact Ellen Cathey, AIA or me.

With sincere regard,

A handwritten signature in black ink, appearing to read 'H. Combs Dreiling'.

Helene Combs Dreiling, FAIA

Cc: Jorge Rigau-Perez, FAIA  
Ellen S. Cathey, AIA

NAAB

**Maribel Rijos Perez**

---

**From:** Carlos E. Betancourt Llambias  
**Sent:** Tuesday, November 26, 2019 12:46 PM  
**To:** Maribel Rijos Perez  
**Subject:** Fwd: NAAB Annual Report - Thank you for your submission

Sent from my iPhone

Begin forwarded message:

**From:** [annualreport@naab.org](mailto:annualreport@naab.org)  
**Date:** November 26, 2019 at 12:43:16 PM AST  
**To:** [cbetancourt@pupr.edu](mailto:cbetancourt@pupr.edu)  
**Subject:** NAAB Annual Report - Thank you for your submission



[Login to Website](#)

Good Afternoon, Programs!

Thank you for submitting your annual report. If you would like to review your submission, you can continue to log in to the NAAB Annual Report Submission (ARS) website and view the data you submitted.

Sincerely,  
The NAAB Team

# Appendix 4.1-A



**COMMONWEALTH OF  
PUERTO RICO**  
Puerto Rico Council on Education

Certification Number 2015-695  
English Version

I, Ricardo Aponte-Parsi, President of the Puerto Rico Council on Education, hereby CERTIFY: -----

That the Puerto Rico Council on Education, at its regular meeting held on December 18, 2015, pursuant to the authority conferred by the Reorganization Plan Number 1, of July 26, 2010, as amended, approved the Renewal License to Universidad Politécnica de Puerto Rico to continue operating as a higher education institution in Puerto Rico. This license is valid for a five (5) years term (from December 18, 2015 to December 17, 2020) and is granted on the basis of the academic offerings mentioned below and the place where these are offered.

**SAN JUAN CAMPUS**  
405. Ponce de León Avenue  
Hato Rey, Puerto Rico

Academic Offering	Number of credits
Associate Degree in Land Surveying	65
Associate Degree in Engineering in Supply Chain and Logistic	72
Associate Degree in Engineering in the Development of Computer Applications	73
Associate Degree in Mechanical Engineering	71
Bachelor in Business Administration with major in Accounting	122
Bachelor in Business Administration with major in General Management	122
Bachelor in Business Administration with major in Construction Management	122
Bachelor in Business Administration with major in Marketing	122
Bachelor in Land Surveying and Mapping	139
Bachelor in Architecture	213
Bachelor of Science in Computer Sciences	122
Bachelor of Science in Environmental Engineering	147
Bachelor of Science in Computer Engineering	149
Bachelor of Science in Chemical Engineering	146
Bachelor of Science in Mechanical Engineering with major in Aerospace	150
Bachelor of Science in Civil Engineering	149
Bachelor of Science in Electrical Engineering	144
Bachelor of Science in Industrial Engineering	146
Bachelor of Science in Mechanical Engineering	147
Bachelor in Interior Design	138
Bachelor in Business Administration with major in Entrepreneurship	122
Master in Engineering Management	39
Master of Business Administration – General and Interdisciplinary	48
Master of Business Administration with specialization in International Enterprises	48
Master of Business Administration with specialization in Computer Information Systems (E-Commerce & Database)	

PO BOX 19900, San Juan, PR 00910-1900  
Tel. (787) 641-7100  
www.ce.pr.gov



Academic Offering	Number of credits
Master in Environmental Management	36
Master in Manufacturing Competitiveness with specialization in Quality Management	36
Master in Manufacturing Competitiveness with specialization in Pharmaceutical Processes	36
Master in Science in Manufacturing Competitiveness with specialization in Quality Management	36
Master of Science in Manufacturing Competitiveness with specialization in Pharmaceutical Products	36
Master of Science in Manufacturing Engineering with specialization in Pharmaceutical Processes	36
Master of Science in Manufacturing Engineering with specialization in Industrial Automation	36
Master of Science in Manufacturing Engineering with specialization in Quality Management	36
Master of Engineering in Manufacturing Engineering with specialization in Pharmaceutical Processes	36
Master of Engineering in Manufacturing Engineering with specialization in Industrial Automation	36
Master in Engineering in Manufacturing Engineering with specialization in Quality Management	36
Master of Science in Civil Engineering in Structures	36
Master of Science in Civil Engineering in Geotechnical	36
Master of Science in Civil Engineering in Water Resources	36
Master of Science in Civil Engineering in Water Treatment	36
Master of Engineering in Civil Engineering in Water Resources	36
Master of Engineering in Civil Engineering in Water Treatment	36
Master of Science in Electrical Engineering in Digital Signal Processing	30
Master of Engineering in Civil Engineering in Structures	36
Master of Science in Electrical Engineering in Communications Systems	36
Master of Engineering in Civil Engineering in Geotechnical	36
Master of Engineering in Electrical Engineering in Digital Signal Processing	36
Master of Engineering in Electrical Engineering with specialization in Communications Systems	36
Master of Science in Computer Engineering with specialization in Internet Engineering	33
Master of Science in Computer Engineering with specialization in Digital Signal Processing	33
Master of Engineering in Computer Engineering with specialization in Internet Engineering	39
Master of Science in Computer Engineering with specialization in Software Engineering	33
Master of Engineering in Computer Engineering with specialization in Software Engineering	33
Master of Engineering in Computer Engineering with specialization in Digital Signal Processing	39
Master of Science in Computer Sciences with specialization in Knowledge Discovery and Data Mining	33
Master of Science in Computer Sciences with specialization in Graphics and Game Technology	33
Master of Science in Computer Sciences with specialization in Information Technology Management and Information Assurance	33
Master in Computer Sciences with specialization in Knowledge Discovery and Data Mining	39
Master in Computer Sciences with specialization in Graphics and Game Technology	39
Master in Computer Sciences with specialization in Information Technology Management and Information Assurance	39
Master of Landscape Architecture	78
Master of Engineering in Mechanical Engineering with specialization in Aerospace	39
Master in Geospatial Science and Technology	36
Master in Science in Education in Mathematics and Natural Sciences	36
Master In Engineering Management (on line)	39

<b>Academic Offering</b>	<b>Number of credits</b>
Master of Business Administration with specialization in Computer Information System (E-Commerce & Database) (on line)	48
Master of Science in Manufacturing Competitiveness (on line)	36
Master in Manufacturing Competitiveness (on line)	36
Master of Science in Manufacturing Engineering (on line)	36
Master of Engineering in Manufacturing Engineering (on line)	36
Graduate Certificate in Information Assurance and Security	18
Graduate Certificate in Digital Forensics	18
Doctor of Philosophy in Engineering and Applied Sciences	60

**Academic offering in Moratorium San Juan Campus:**

Bachelor in Business Administration with major in Information Systems Management (Cert. Núm. 2008-069)

Bachelor in Business Administration with major in Industrial Management (Cert. Núm. 2008-069)

Bachelor of Science in Secondary Education in Natural Sciences and Mathematics (Cert. Num. ROA 2016 -001)

**EXTENSION CENTER BOSTON SCIENTIFIC - DORADO**

Carr 698 Ste. 1 Dorado, Puerto Rico

<b>Academic offering</b>	<b>Number of credits</b>
Master of Manufacturing Engineering with specialization in Industrial Automation	36
Master of Business Administration – General	48

**EXTENSION CENTER HOWARD JOHNSON HOTEL – MAYAGÜEZ**

Calle Méndez Vigo 70 Mayagüez, Puerto Rico

<b>Academic offering</b>	<b>Number of credits</b>
Master in Engineering Management	39

In addition the Institution shall submit a Compliance Report to be submitted within one month of receiving this notification regarding Physical facilities.

According to Section 23.2 of the Regulation for Licensing Institutions of Higher Education in Puerto Rico, Núm. 8265 of 2012, establishes as "Acts That May Constitute Grounds for Denial of a License or Amendment" includes "having implanted one or more substantial changes without having obtain council approval for said purposes". Article 41 of the Reorganization Plan Number 1, of July 26, 2010, as amended, and the Regulation 8265, establish that every natural or legal person operating an educational institution without the correct license or who is in violation with regards to any one of the Articles of the PR 1 or its Regulation thereof, will incur in an administrative fault and will be subject to having his/her license cancelled, being imposed a fine or both.

Based in Article 41 of the Reorganization Plan Number 1 – 2010, the Puerto Rico Council of Education determined at its regular meeting held on December 18, 2015, to apply a fine of \$5,000 because the institution have announced, enrolled and graduated students in the Master in Management Engineering program at the Instituto Tecnológico de Santo Domingo (INTEC) in Dominican Republic, operation that has not been approved by the Council.

The Institution will have a 30 day term period from the receiving of this notification to pay the fine, as established in Article VI (A) of the *Reglamento para el Cobro, Ajuste, Liquidación y Cancelación de Deudas del Consejo de Educación de Puerto Rico*, Num. 8352 of 2013.

This certification is issued under Articles 17 and 22 of the *Regulation for the Licensing of Institutions of Higher Education in Puerto Rico*, Number 8265 of 2012. The institution has the ongoing duty to comply with the responsibilities of its license as granted. The Council retains its authority to verify compliance in any instance during the validity of this license.

And for the record, I issue this Certification in San Juan, Puerto Rico, today, May 16, 2016.



Ricardo Aponte-Parsi  
President



## Appendix 4.1-B

# GOBIERNO DE PUERTO RICO DEPARTAMENTO DE ESTADO

Oficina de Registro y Licenciamiento de Instituciones de Educación



12 de abril de 2023

Ing. Ernesto Vázquez Martínez  
Presidente  
Universidad Politécnica de Puerto Rico  
PO Box 192017  
San Juan, PR 00919-2017

Estimado ingeniero Vázquez Martínez:

En atención a su solicitud, se certifica que la Universidad Politécnica de Puerto Rico posee Licencia de Renovación conferida por el entonces Consejo de Educación de Puerto Rico (CEPR) mediante la Certificación Número 2015-695.

La vigencia de esta Licencia de Renovación es por cinco (5) años, sin embargo, conforme con la Sección 16.5 del *Reglamento para el Otorgamiento de Licencia a Instituciones de Educación Superior en Puerto Rico, Núm. 8265 de 9 de octubre de 2012*, mediante la cual la licencia fue aprobada, la licencia continúa vigente. Esta sección dispone que:

Si una licencia vence mientras se están llevando a cabo normalmente los trámites de renovación, sin que haya mediado negligencia o culpa de la institución, el Consejo considerará que la licencia continúa en vigor bajo las condiciones establecidas hasta completado el trámite. Una vez completado el trámite aplicará la determinación que tome el Consejo sobre esta solicitud.

La Oficina de Registro y Licenciamiento de Instituciones de Educación se encuentra evaluando la Solicitud de Renovación de la Licencia sometida por la Institución bajo el Reglamento Núm. 8265.

La misma disposición en cuanto a la vigencia de la licencia se establece en la Sección 12.2 del Reglamento para el Licenciamiento de Instituciones Postsecundarias en Puerto Rico, Número 9272 de 2021, vigente en este momento.

De necesitar cualquier aclaración relacionada con este asunto, se puede comunicar con la Dra. María Isabel Ortiz Alvarado, Especialista en Licenciamiento y Acreditación, a través del correo electrónico [maortiz@estado.pr.gov](mailto:maortiz@estado.pr.gov) o del (787) 722-2121.

Cordialmente,

Damaris Nolasco Ortiz  
Directora Ejecutiva

Dr. Miguel Riestra, Vicepresidente para Asuntos Académicos



Appendix 4.1-C



**Middle States Commission on Higher Education**

3624 Market Street, Philadelphia, PA 19104-2680. Tel: 267-284-5000. Fax: 215-662-5501  
www.msche.org

June 26, 2015

Prof. Ernesto Vazquez-Barquet  
President  
Universidad Politecnica de Puerto Rico  
Box 192017  
San Juan, PR 00919-2017

Dear President Vazquez-Barquet:

At its session on June 25, 2015, the Middle States Commission on Higher Education acted:

To reaffirm accreditation. To request a progress report, due April 1, 2016, documenting a conflict of interest policy for the governing body which addresses matters such as remuneration, contractual relationships, employment, family, financial or other interests that could pose conflicts of interest (Standard 4). The Periodic Review Report is due June 1, 2020.

Enclosed for your information is a copy of the Statement of Accreditation Status for your institution. The Statement of Accreditation Status (SAS) provides important basic information about the institution and its affiliation with the Commission, and it is made available to the public in the Directory of Members and Candidates on the Commission's website at [www.msche.org](http://www.msche.org). Accreditation applies to the institution as detailed in the SAS; institutional information is derived from data provided by the institution through annual reporting and from Commission actions. If any of the institutional information is incorrect, please contact the Commission as soon as possible.

Please check to ensure that published references to your institution's accredited status (catalog, other publications, web page) include the full name, address, and telephone number of the accrediting agency. Further guidance is provided in the Commission's policy statement *Advertising, Student Recruitment, and Representation of Accredited Status*. If the action for your institution includes preparation of a progress report, monitoring report or supplemental report, please see our policy statement on *Follow-up Reports and Visits*. Both policies can be obtained from our website.

Please be assured of the continuing interest of the Commission on Higher Education in the well-being of Universidad Politecnica de Puerto Rico. If any further clarification is needed regarding the SAS or other items in this letter, please feel free to contact Dr. Tito Guerrero, Vice President.

Sincerely,

A handwritten signature in black ink, appearing to read 'George A. Pruitt', written over a horizontal line.

George A. Pruitt, Ph.D.  
Chair

c: Office of the Executive Director, Puerto Rico Council on Higher Education



**STATEMENT OF ACCREDITATION STATUS**

*The Statement of Accreditation Status (SAS) is the official statement of the Middle States Commission on Higher Education (MSCHE) about each institution's current accreditation status and scope of accreditation. The SAS also provides a brief history of the actions taken by the Commission.*

**Institution:** UNIVERSIDAD POLITECNICA DE  
PUERTO RICO San Juan, PR

**Address:** Box 192017  
San Juan, PR 00919-2017

**Phone:** (787) 622-8000

**URL:** [www.pupr.edu](http://www.pupr.edu)

**Accreditation Liaison Officer (ALO):** Dr. Miguel Riestra

**Commission Staff Liaison:** Dr. Melissa Hardin, Vice President

## Accreditation Summary

*For more information, see the Commission's [Accreditation Actions Policy and Procedures](#).*

**Phase:** Accredited

**Status:** Accreditation Reaffirmed

**Accreditation Granted:** 1985

**Last Reaffirmation:** 2015

**Next Self-Study Evaluation:** 2023-2024

**Next Mid-Point Peer Review:** 2028

### Alternative Delivery Methods

*The following represents approved alternative delivery methods included in the scope of the institution's accreditation:*

**Distance Education**

Approved to offer programs by this delivery method

**Correspondence Education**

Not approved for this delivery method

<h2>Credential Levels</h2>
----------------------------

**Approved Credential Levels**

*The following represents credential levels included in the scope of the institution's accreditation:*

- **Associate's Degree or Equivalent**  
Included within the scope:
- **Bachelor's Degree or Equivalent**  
Included within the scope:
- **Master's Degree or Equivalent**  
Included within the scope:
- **Doctor's Degree- Research/Scholarship**  
Included within the scope to offer ONE program:

<b>Locations</b>
------------------

*The following represents branch campuses, additional locations, and other instructional sites that are included within the scope of the institution's accreditation:*

Location	Type
<b>Polytechnic University of Puerto Rico - Miami Campus</b> 8180 NW 36th Street Suite 401 Miami, FL 33166	Branch Campus
<b>Polytechnic University of Puerto Rico - Orlando Campus</b> 550 North Econlockhatchee Trail Orlando, FL 32825	Branch Campus
<b>Instituto Nacional Tecnológico de Santo</b> Ave. Los Próceres Calle Gala Santo Domingo República Dominicana Dominican Republic	Additional Location
<b>Boston Scientific</b> 12 Carr.698 #1 Dorado, PR 00646	Other Instructional Site

*Definitions: For definitions of branch campus, additional locations, or other instructional sites, see the [Commission's Substantive Change Policy and Procedures](#).*

## Accreditation Actions

*The following represents the MSCHE accreditation actions taken in the last ten (10) years. For more information, see the Commission's Accreditation Actions Policy and Procedures and the Substantive Change Policy and Procedures.*

<b>March 4, 2021</b>	To note that the Mid-Point Peer Review has been conducted. To request that, beginning in 2021 and in conjunction with each Annual Institutional Update prior to the self-study visit in 2023-2024, the institution provide further evidence of (1) policies, processes and programs to admit, retain and facilitate the success of all students (Standard IV) and (2) improvement of key indicators of student success, including retention and graduation rates (Standard IV).
<b>November 15, 2018</b>	To acknowledge receipt of the supplemental information report. To note that a follow-up visit will not be conducted. The next evaluation visit is scheduled for 2023-2024.
<b>March 15, 2018</b>	To accept the supplemental information report. To request a supplemental information report, due August 1, 2018, regarding the status of the institution. A small team visit may follow submission of the report. The next evaluation visit is scheduled for 2023-2024.
<b>October 19, 2017</b>	To request a supplemental information report due December 1, 2017, regarding the status of the institution.
<b>June 23, 2016</b>	To accept the progress report. The date for the next accreditation review will be determined by the Commission when it revises the accreditation cycle.
<b>June 25, 2015</b>	To reaffirm accreditation. To request a progress report, due April 1, 2016, documenting a conflict of interest policy for the governing body which addresses matters such as remuneration, contractual relationships, employment, family, financial or other interests that could pose conflicts of interest (Standard 4). The Periodic Review Report is due June 1, 2020.
<b>June 30, 2014</b>	

To acknowledge receipt of the substantive change request and to include the Ph.D. program in Engineering and Applied Sciences within the scope of the institution's accreditation. The next evaluation visit is scheduled for 2014-2015.

**June 27, 2013**

To accept the monitoring report. The next evaluation visit is scheduled for 2014-2015.

**June 28, 2012**

To accept the monitoring report. To request a monitoring report, due March 1, 2013 documenting (1) further progress in the development of alternative funding sources (Standard 3); (2) progress on improving student enrollment and retention (Standard 8); and (3) steps taken to strengthen branch campuses, including use of institutional and student learning outcomes assessments results to improve effectiveness, learning, and teaching at the branch campuses (Standards 7, 13, 14). The next evaluation visit is scheduled for 2014-2015.

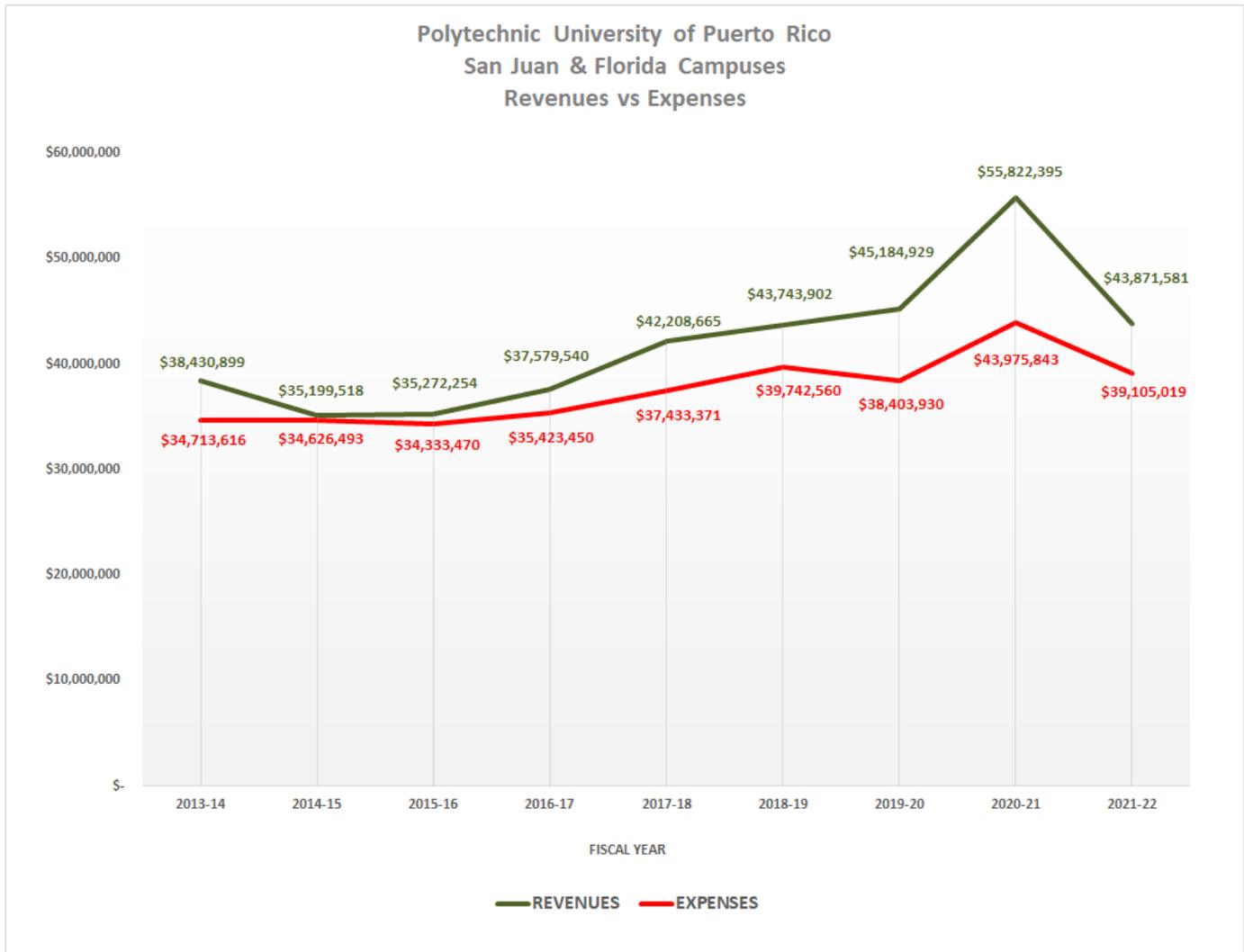
**March 1, 2012**

To note the visit by the Commission's representative and to affirm inclusion of the branch campus at 550 North Econlockhatchee Trail, Orlando, FL 32825 within the scope of the institution's accreditation. To remind the institution of the monitoring report due by March 1, 2012, documenting (1) further progress in the development of alternative funding sources, including updated cash and financial projections for the next five years (Standard 3); (2) audited financial statements and management letters for FY 2010 and 2011 (Standard 3); steps taken to improve student enrollment and retention, including increasing the yield of high quality student admissions and graduation (Standard 8); and (3) steps taken to strengthen branch campuses, including use of institutional and student learning outcomes assessments results to improve effectiveness, learning, and teaching at the branch campuses (Standards 7, 13, 14). The next evaluation visit is scheduled for 2014-2015.

### Information about the Middle States Commission on Higher Education

*The Middle States Commission on Higher Education (MSCHE) is one of seven institutional accrediting organizations in the United States and is recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation (CHEA). MSCHE accreditation applies to an institution as a whole rather than the specific programs within an institution. MSCHE does not approve or accredit individual programs. The MSCHE accreditation review cycle is continuous and accreditation does not expire. Each institution is reevaluated and monitored on a regular and consistent basis in accordance with the institution's assigned accreditation review cycle and Commission policy and procedures. An institution maintains its accreditation unless it is voluntarily surrendered or withdrawn by the Commission for cause, after the institution has been afforded due process. The institution's current accreditation phase and accreditation status are displayed on the institution's listing in the Institution Directory and in the Statement of Accreditation Status (SAS).*

Appendix 5.7-1



**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**STATEMENT OF ACTIVITIES**  
**YEAR ENDED JULY 31,**

<u>REVENUES AND OTHER SUPPORT:</u>	2019	2020	2021	2022
GROSS TUITION AND FEES	33,310,250	35,664,012	35,259,600	34,122,073
LESS: INSTITUTIONAL DISCOUNTS & WAIVERS	(37,958)	(60,222)	(54,692)	(60,404)
NET TUITION AND FEES	<u>33,272,292</u>	<u>35,603,790</u>	<u>35,204,908</u>	<u>34,061,669</u>
GOVERNMENTAL GRANTS AND CONTRACTS	6,601,203	6,481,714	6,722,395	4,075,874
ENDOWMENT INCOME	28,926	30,966	21,404	32,520
OTHER INVESTMENT INCOME	676,307	676,765	376,327	364,489
CONTRIBUTIONS	45,002	70,162	78,096	120,224
REALIZED GAIN OR (LOSS) ON:				
ENDOWMENTS	31,322	(12,535)	155,986	26,884
OTHER INVESTMENTS	197,011	(303,516)	343,552	174,695
NET UNREALIZED GAIN OR (LOSS) ON:				
ENDOWMENTS	3,137	45,144	67,902	(217,886)
OTHER INVESTMENTS	253,029	510,264	1,717,258	(2,225,510)
DEFERRED COMPENSATION CONTRACT ANNUITIES			18,736	30,934
NET AUXILIARY ENTERPRISES	770,194	563,055	530,731	606,326
GAIN ON SALE OF ASSETS	-	33,791	14,952	43,300
OTHER REVENUES	308,534	355,485	476,194	238,804
HOUSING INCOME	319,469	229,238	7,510	508,690
INSURANCE CLAIM INCOME	724,675			
OTHER INCOME, FEMA	512,801			
GAIN ON DEBT EXTINGUISHMENT, SBA PPP LOAN			3,768,000	
OTHER INCOME, HEERF GRANTS UNDER CARES, CRRSAA & ARP ACTS		<u>900,606</u>	<u>6,318,444</u>	<u>6,030,568</u>
<b>TOTAL REVENUE AND OTHER SUPPORT</b>	<b>43,743,902</b>	<b>45,184,929</b>	<b>55,822,395</b>	<b>43,871,581</b>
 <u>EXPENSES:</u>				
INSTRUCTION	11,401,484	11,762,983	11,453,366	11,945,978
ACADEMIC SUPPORT	1,656,835	1,511,079	1,570,628	1,641,003
STUDENT SERVICES	6,216,088	5,278,500	5,290,568	3,656,343
INSTITUTIONAL SUPPORT	5,384,762	5,643,543	5,541,504	5,477,863
INSTITUTIONAL SCHOLARSHIPS	572,274	584,624	584,991	610,274
OPERATION AND MAINTENANCE	7,097,057	6,007,717	5,783,934	6,963,180
RESEARCH AND DEVELOPMENT	2,108,154	2,192,307	2,116,023	1,595,101
INVESTMENT AND BOND FEES	146,355	146,660		
DEPRECIATION AND AMORTIZATION	3,007,550	2,804,466	3,197,280	3,958,265
INTEREST	1,351,830	1,252,250	2,139,453	568,043
HOUSING EXPENSES	348,719	240,612	112,502	458,618
OTHER. HURRICANE EXPENSES	451,452			
OTHER. COVID-19		979,189	4,227,699	1,932,732
LOSS ON BONDS PAYABLE EXTINGUISHMENT			95,000	
DEFERRED COMPENSATION PLAN EXPENSE			<u>1,862,895</u>	<u>297,619</u>
<b>TOTAL EXPENSES</b>	<b>39,742,560</b>	<b>38,403,930</b>	<b>43,975,843</b>	<b>39,105,019</b>
<b>CHANGE IN NET ASSETS</b>	<b><u>\$ 4,001,342</u></b>	<b><u>\$ 6,780,999</u></b>	<b><u>\$ 11,846,552</u></b>	<b><u>\$ 4,766,562</u></b>

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2014 - 2015**

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,577	1,250	1,250	1,250	6,327
01	10400	5201	0000	Computer Software	1,140				1,140
01	10400	5205	0000	Audiovisual Supplies	-				0
01	10400	5215	0000	Instructional Supplies	-				0
01	10400	5220	0000	Laboratory Supplies	1,000	2,000	500	500	4,000
01	10400	5310	0000	Contract Services	-				0
01	10400	5315	0000	Professional Services	22,400	27,400	21,400	9,400	80,600
01	10400	5400	0000	Travel expenses	8,238	11,300	11,700	4,200	35,438
01	10400	5406	0000	Per Diem	200	800	1,250	150	2,400
01	10400	5517	0000	Equipment Maintenance	250	250			500
01	10400	5871	0000	Special Activities Expenses	550	7,050	12,200	3,100	22,900
01	10400	5910	0000	Equipment Repairs	300	300	100		700
01	10400	5925	0000	Membership	12,063				12,063
01	10400	5930	0000	Subscription	150				150
01	10400	5935	0000	Seminars & Workshop	350	1,650			2,000
01	10400	5940	0000	Printing Services	4,050	2,920	7,000		13,970
01	10400	5945	0000	Graphic & Text Material	12,660	2,000	14,123	500	29,283
01	00000	1508	0000	Office Equipment					0
01	00000	1516	0000	Computer Equipment					0
01	00000	1523	0000	Audiovisual Equipment	7,650				7,650
01	00000	1528	0000	Laboratory Equipment					0
01	00000	5145	0000	Tuition Waiver 50 %	-				0
									<b>\$ 219,121.00</b>

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2015 - 2016**

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	2,000	2,000	-	6,000
01	10400	5201	0000	Computer Software					0
01	10400	5205	0000	Audiovisual Supplies					0
01	10400	5215	0000	Instructional Supplies					0
01	10400	5220	0000	Laboratory Supplies	2,600	2,300	1,400		6,300
01	10400	5310	0000	Contract Services					0
01	10400	5315	0000	Professional Services	18,304	19,500	24,500	5,200	67,504
01	10400	5400	0000	Travel expenses	6,280	6,040	4,200	3,300	19,820
01	10400	5406	0000	Per Diem	750	450	700	100	2,000
01	10400	5517	0000	Equipment Maintenance	900	900			1,800
01	10400	5871	0000	Special Activities Expenses	800	7,600	-	2,500	10,900
01	10400	5910	0000	Equipment Repairs	2,300				2,300
01	10400	5925	0000	Membership	10,788				10,788
01	10400	5930	0000	Subscription					0
01	10400	5935	0000	Seminars & Workshop	1,725	375	575		2,675
01	10400	5940	0000	Printing Services	1,000	3,600	-	5,000	9,600
01	10400	5945	0000	Graphic & Text Material	1,500	1,500	1,500	7,520	12,020
01	00000	1508	0000	Office Equipment					0
01	00000	1516	0000	Computer Equipment	1,327				1,327
01	00000	1523	0000	Audiovisual Equipment					0
01	00000	1528	0000	Laboratory Equipment					0
01	00000	5145	0000	Tuition Waiver 50 %					0
									<b>\$ 153,034.00</b>

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2016 - 2017**

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	2,000	2,000		6,000
01	10400	5201	0000	Computer Software					0
01	10400	5205	0000	Audiovisual Supplies					0
01	10400	5215	0000	Instructional Supplies					0
01	10400	5220	0000	Laboratory Supplies	2,400	1,900	1,000		5,300
01	10400	5310	0000	Contract Services					0
01	10400	5315	0000	Professional Services	20,000	18,500	19,500	3,700	61,700
01	10400	5400	0000	Travel expenses	15,030	5,720	7,650	1,200	29,600
01	10400	5406	0000	Per Diem	2,000	450	700	250	3,400
01	10400	5517	0000	Equipment Maintenance	500	500			1,000
01	10400	5871	0000	Special Activities Expenses	700	4,200	2,000	2,500	9,400
01	10400	5910	0000	Equipment Repairs	600				600
01	10400	5925	0000	Membership	10,988				10,988
01	10400	5930	0000	Subscription					0
01	10400	5935	0000	Seminars & Workshop		375	575	200	1,150
01	10400	5940	0000	Printing Services	2,000	6,500	1,100		9,600
01	10400	5945	0000	Graphic & Text Material	3,000	3,000	1,000		7,000
01	00000	1508	0000	Office Equipment					0
01	00000	1516	0000	Computer Equipment	-				0
01	00000	1523	0000	Audiovisual Equipment					0
01	00000	1528	0000	Laboratory Equipment					0
01	00000	5145	0000	Tuition Waiver 50 %					0
									<b>\$ 145,738.00</b>

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2017 - 2018**

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	2,000	2,000	-	6,000
01	10400	5201	0000	Computer Software	-	-	-	-	0
01	10400	5205	0000	Audiovisual Supplies	-	-	-	-	0
01	10400	5215	0000	Instructional Supplies	-	-	-	-	0
01	10400	5220	0000	Laboratory Supplies	900	700	500	-	2,100
01	10400	5310	0000	Contract Services	-	-	-	-	0
01	10400	5315	0000	Professional Services	22,300	22,300	24,300	4,400	73,300
01	10400	5400	0000	Travel expenses	6,170	3,600	7,300	7,375	24,445
01	10400	5406	0000	Per Diem	1,000	200	700	500	2,400
01	10400	5517	0000	Equipment Maintenance	750	750	-	-	1,500
01	10400	5871	0000	Special Activities Expenses	100	3,600	-	-	3,700
01	10400	5910	0000	Equipment Repairs	1,000	-	-	-	1,000
01	10400	5925	0000	Membership	11,063	550	150	100	11,863
01	10400	5930	0000	Subscription	-	-	-	-	0
01	10400	5935	0000	Seminars & Workshop	400	835	2,005	-	3,240
01	10400	5940	0000	Printing Services	10,647	1,000	200	200	12,047
01	10400	5945	0000	Graphic & Text Material	2,000	2,000	1,000	-	5,000
01	00000	1508	0000	Office Equipment	-	-	-	-	0
01	00000	1516	0000	Computer Equipment	-	-	-	-	0
01	00000	1523	0000	Audiovisual Equipment	-	-	-	-	0
01	00000	1528	0000	Laboratory Equipment	-	-	-	-	0
01	00000	5145	0000	Tuition Waiver 50 %	-	-	-	-	0
									<b>\$ 146,595.00</b>

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2018 - 2019**

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	2,000	1,000	1,000	6,000
01	10400	5201	0000	Computer Software	3,000	2,000			5,000
01	10400	5205	0000	Audiovisual Supplies	-	-	-	-	0
01	10400	5215	0000	Instructional Supplies	-	-	-	-	0
01	10400	5220	0000	Laboratory Supplies	2,600	2,600	1,100	-	6,300
01	10400	5310	0000	Contract Services	-	-	-	-	0
01	10400	5315	0000	Professional Services	20,100	21,100	20,100	2,500	63,800
01	10400	5400	0000	Travel expenses	7,900	5,100	5,860	3,600	22,460
01	10400	5406	0000	Per Diem	850	250	800	250	2,150
01	10400	5517	0000	Equipment Maintenance	500	500	500	-	1,500
01	10400	5871	0000	Special Activities Expenses	300	1,800	300	2,700	5,100
01	10400	5910	0000	Equipment Repairs	1,000	1,000	500	-	2,500
01	10400	5925	0000	Membership	10,738	475	550	100	11,863
01	10400	5930	0000	Subscription	-	-	-	-	0
01	10400	5935	0000	Seminars & Workshop	715	1,715	515	-	2,945
01	10400	5940	0000	Printing Services	4,850	700	3,500	6,350	15,400
01	10400	5945	0000	Graphic & Text Material	3,000	3,000	1,000	500	7,500
01	00000	1508	0000	Office Equipment	-	-	-	-	0
01	00000	1516	0000	Computer Equipment	-	-	-	-	0
01	00000	1523	0000	Audiovisual Equipment	-	-	-	-	0
01	00000	1528	0000	Laboratory Equipment	-	-	-	-	0
01	00000	5145	0000	Tuition Waiver 50 %	-	-	-	-	0
									<b>\$ 152,518.00</b>

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2019 - 2020**

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	1,500	1,000	500	5,000
01	10400	5201	0000	Computer Software	2,000	2,000			4,000
01	10400	5205	0000	Audiovisual Supplies	-	-	-	-	0
01	10400	5215	0000	Instructional Supplies	-	-	-	-	0
01	10400	5220	0000	Laboratory Supplies	2,250	2,100	1,150	-	5,500
01	10400	5310	0000	Contract Services	-	-	-	-	0
01	10400	5315	0000	Professional Services	25,000	25,000	25,000	10,350	85,350
01	10400	5400	0000	Travel expenses	7,200	4,350	4,860	4,200	20,610
01	10400	5406	0000	Per Diem	950	650	600	800	3,000
01	10400	5517	0000	Equipment Maintenance	500	500	500	-	1,500
01	10400	5871	0000	Special Activities Expenses	600	1,850	1,100	2,700	6,250
01	10400	5910	0000	Equipment Repairs	2,000	1,000	-	-	3,000
01	10400	5925	0000	Membership	12,363	100	-	-	12,463
01	10400	5930	0000	Subscription	-	-	-	-	0
01	10400	5935	0000	Seminars & Workshop	2,055	515	725	-	3,295
01	10400	5940	0000	Printing Services	500	1,000	500	12,150	14,150
01	10400	5945	0000	Graphic & Text Material	2,000	2,000	2,000	1,500	7,500
01	00000	1508	0000	Office Equipment	-	-	-	-	0
01	00000	1516	0000	Computer Equipment	-	-	-	-	0
01	00000	1523	0000	Audiovisual Equipment	-	-	-	-	0
01	00000	1528	0000	Laboratory Equipment	-	-	-	-	0
01	00000	5145	0000	Tuition Waiver 50 %	-	-	-	-	0
									<b>\$ 171,618.00</b>

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2020 - 2021**

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	1,500	1,000	500	5,000
01	10400	5201	0000	Computer Software	2,000	2,000	-	-	4,000
01	10400	5205	0000	Audiovisual Supplies	-	-	-	-	0
01	10400	5215	0000	Instructional Supplies	-	-	-	-	0
01	10400	5220	0000	Laboratory Supplies	2,500	17,500	1,500	-	21,500
01	10400	5310	0000	Contract Services	-	-	-	-	0
01	10400	5315	0000	Professional Services	24,000	24,000	24,000	9,350	81,350
01	10400	5400	0000	Travel expenses	-	-	-	-	0
01	10400	5406	0000	Per Diem	-	-	-	-	0
01	10400	5517	0000	Equipment Maintenance	500	500	500	-	1,500
01	10400	5871	0000	Special Activities Expenses	1,375	3,000	375	1,800	6,550
01	10400	5910	0000	Equipment Repairs	1,500	1,000	-	-	2,500
01	10400	5925	0000	Membership	11,563	100	-	-	11,663
01	10400	5930	0000	Subscription	-	-	-	-	0
01	10400	5935	0000	Seminars & Workshop	1,790	400	400	-	2,590
01	10400	5940	0000	Printing Services	500	1,000	500	11,150	13,150
01	10400	5945	0000	Graphic & Text Material	2,000	2,000	2,000	1,500	7,500
01	00000	1508	0000	Office Equipment	-	-	-	-	0
01	00000	1516	0000	Computer Equipment	-	-	-	-	0
01	00000	1523	0000	Audiovisual Equipment	-	-	-	-	0
01	00000	1528	0000	Laboratory Equipment	-	-	-	-	0
01	00000	5145	0000	Tuition Waiver 50 %	-	-	-	-	0
<b>\$ 157,303.00</b>									

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2021 - 2022**

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	1,500	1,000	500	5,000
01	10400	5201	0000	Computer Software	2,000	2,000	-	-	4,000
01	10400	5205	0000	Audiovisual Supplies	-	-	-	-	0
01	10400	5215	0000	Instructional Supplies	-	-	-	-	0
01	10400	5220	0000	Laboratory Supplies	6,000	3,500	3,000	-	12,500
01	10400	5310	0000	Contract Services	-	-	-	-	0
01	10400	5315	0000	Professional Services	23,600	23,600	21,600	13,800	82,600
01	10400	5400	0000	Travel expenses	-	-	-	-	0
01	10400	5406	0000	Per Diem	-	-	-	-	0
01	10400	5517	0000	Equipment Maintenance	500	500	500	-	1,500
01	10400	5871	0000	Special Activities Expenses	1,375	2,000	1,175	800	5,350
01	10400	5910	0000	Equipment Repairs	1,500	1,000	500	-	3,000
01	10400	5925	0000	Membership	11,563	100	-	-	11,663
01	10400	5930	0000	Subscription	-	-	-	-	0
01	10400	5935	0000	Seminars & Workshop	1,790	400	400	-	2,590
01	10400	5940	0000	Printing Services	500	1,000	500	11,150	13,150
01	10400	5945	0000	Graphic & Text Material	2,000	2,000	2,000	1,500	7,500
01	00000	1508	0000	Office Equipment	-	-	-	-	0
01	00000	1516	0000	Computer Equipment	-	-	-	-	0
01	00000	1523	0000	Audiovisual Equipment	-	-	-	-	0
01	00000	1528	0000	Laboratory Equipment	-	-	-	-	0
01	00000	5145	0000	Tuition Waiver 50 %	-	-	-	-	0
<b>\$ 148,853.00</b>									

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2022 - 2023**

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	1,500	1,000	500	<b>5,000</b>
01	10400	5201	0000	Computer Software	2,000	2,000			<b>4,000</b>
01	10400	5205	0000	Audiovisual Supplies	-	-	-	-	<b>0</b>
01	10400	5215	0000	Instructional Supplies	-	-	-	-	<b>0</b>
01	10400	5220	0000	Laboratory Supplies	6,500	3,500	3,000	-	<b>13,000</b>
01	10400	5310	0000	Contract Services	-	-	-	-	<b>0</b>
01	10400	5315	0000	Professional Services	20,500	21,000	20,500	13,100	<b>75,100</b>
01	10400	5400	0000	Travel expenses	-	2,550	3,000	-	<b>5,550</b>
01	10400	5406	0000	Per Diem	-	250	450	-	<b>700</b>
01	10400	5517	0000	Equipment Maintenance	500	500	500	-	<b>1,500</b>
01	10400	5871	0000	Special Activities Expenses	600	1,400	600	2,600	<b>5,200</b>
01	10400	5910	0000	Equipment Repairs	2,500	1,500	1,000	-	<b>5,000</b>
01	10400	5925	0000	Membership	11,850	100	-	-	<b>11,950</b>
01	10400	5930	0000	Subscription	-	-	-	-	<b>0</b>
01	10400	5935	0000	Seminars & Workshop	-	515	575	1,560	<b>2,650</b>
01	10400	5940	0000	Printing Services	1,800	2,100	8,600	500	<b>13,000</b>
01	10400	5945	0000	Graphic & Text Material	2,500	2,500	2,500	-	<b>7,500</b>
01	00000	1508	0000	Office Equipment	-	-	-	-	<b>0</b>
01	00000	1516	0000	Computer Equipment	-	-	-	-	<b>0</b>
01	00000	1523	0000	Audiovisual Equipment	-	-	-	-	<b>0</b>
01	00000	1528	0000	Laboratory Equipment	-	-	-	-	<b>0</b>
01	00000	5145	0000	Tuition Waiver 50 %	-	-	-	-	<b>0</b>
<b>\$ 150,150.00</b>									

## Appendix 5.7-2

**POLYTECHNIC UNIVERSITY OF PUERTO RICO  
V.P. FINANCE TREASURY  
BUDGET 2014 - 2015**

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,577	1,250	1,250	1,250	<b>6,327</b>
01	10400	5201	0000	Computer Software	1,140				<b>1,140</b>
01	10400	5205	0000	Audiovisual Supplies	-				<b>0</b>
01	10400	5215	0000	Instructional Supplies	-				<b>0</b>
01	10400	5220	0000	Laboratory Supplies	1,000	2,000	500	500	<b>4,000</b>
01	10400	5310	0000	Contract Services	-				<b>0</b>
01	10400	5315	0000	Professional Services	22,400	27,400	21,400	9,400	<b>80,600</b>
01	10400	5400	0000	Travel expenses	8,238	11,300	11,700	4,200	<b>35,438</b>
01	10400	5406	0000	Per Diem	200	800	1,250	150	<b>2,400</b>
01	10400	5517	0000	Equipment Maintenance	250	250			<b>500</b>
01	10400	5871	0000	Special Activities Expenses	550	7,050	12,200	3,100	<b>22,900</b>
01	10400	5910	0000	Equipment Repairs	300	300	100		<b>700</b>
01	10400	5925	0000	Membership	12,063				<b>12,063</b>
01	10400	5930	0000	Subscription	150				<b>150</b>
01	10400	5935	0000	Seminars & Workshop	350	1,650			<b>2,000</b>
01	10400	5940	0000	Printing Services	4,050	2,920	7,000		<b>13,970</b>
01	10400	5945	0000	Graphic & Text Material	12,660	2,000	14,123	500	<b>29,283</b>
01	00000	1508	0000	Office Equipment					<b>0</b>
01	00000	1516	0000	Computer Equipment					<b>0</b>
01	00000	1523	0000	Audiovisual Equipment	7,650				<b>7,650</b>
01	00000	1528	0000	Laboratory Equipment					<b>0</b>
01	00000	5145	0000	Tuition Waiver 50 %	-				<b>0</b>
								<b>\$ 219,121.00</b>	

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2015 - 2016**

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	2,000	2,000	-	6,000
01	10400	5201	0000	Computer Software					0
01	10400	5205	0000	Audiovisual Supplies					0
01	10400	5215	0000	Instructional Supplies					0
01	10400	5220	0000	Laboratory Supplies	2,600	2,300	1,400		6,300
01	10400	5310	0000	Contract Services					0
01	10400	5315	0000	Professional Services	18,304	19,500	24,500	5,200	67,504
01	10400	5400	0000	Travel expenses	6,280	6,040	4,200	3,300	19,820
01	10400	5406	0000	Per Diem	750	450	700	100	2,000
01	10400	5517	0000	Equipment Maintenance	900	900			1,800
01	10400	5871	0000	Special Activities Expenses	800	7,600	-	2,500	10,900
01	10400	5910	0000	Equipment Repairs	2,300				2,300
01	10400	5925	0000	Membership	10,788				10,788
01	10400	5930	0000	Subscription					0
01	10400	5935	0000	Seminars & Workshop	1,725	375	575		2,675
01	10400	5940	0000	Printing Services	1,000	3,600	-	5,000	9,600
01	10400	5945	0000	Graphic & Text Material	1,500	1,500	1,500	7,520	12,020
01	00000	1508	0000	Office Equipment					0
01	00000	1516	0000	Computer Equipment	1,327				1,327
01	00000	1523	0000	Audiovisual Equipment					0
01	00000	1528	0000	Laboratory Equipment					0
01	00000	5145	0000	Tuition Waiver 50 %					0
									<b>\$ 153,034.00</b>

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2016 - 2017**

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	2,000	2,000		6,000
01	10400	5201	0000	Computer Software					0
01	10400	5205	0000	Audiovisual Supplies					0
01	10400	5215	0000	Instructional Supplies					0
01	10400	5220	0000	Laboratory Supplies	2,400	1,900	1,000		5,300
01	10400	5310	0000	Contract Services					0
01	10400	5315	0000	Professional Services	20,000	18,500	19,500	3,700	61,700
01	10400	5400	0000	Travel expenses	15,030	5,720	7,650	1,200	29,600
01	10400	5406	0000	Per Diem	2,000	450	700	250	3,400
01	10400	5517	0000	Equipment Maintenance	500	500			1,000
01	10400	5871	0000	Special Activities Expenses	700	4,200	2,000	2,500	9,400
01	10400	5910	0000	Equipment Repairs	600				600
01	10400	5925	0000	Membership	10,988				10,988
01	10400	5930	0000	Subscription					0
01	10400	5935	0000	Seminars & Workshop		375	575	200	1,150
01	10400	5940	0000	Printing Services	2,000	6,500	1,100		9,600
01	10400	5945	0000	Graphic & Text Material	3,000	3,000	1,000		7,000
01	00000	1508	0000	Office Equipment					0
01	00000	1516	0000	Computer Equipment	-				0
01	00000	1523	0000	Audiovisual Equipment					0
01	00000	1528	0000	Laboratory Equipment					0
01	00000	5145	0000	Tuition Waiver 50 %					0
									<b>\$ 145,738.00</b>

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2017 - 2018**

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	2,000	2,000	-	6,000
01	10400	5201	0000	Computer Software	-	-	-	-	0
01	10400	5205	0000	Audiovisual Supplies	-	-	-	-	0
01	10400	5215	0000	Instructional Supplies	-	-	-	-	0
01	10400	5220	0000	Laboratory Supplies	900	700	500	-	2,100
01	10400	5310	0000	Contract Services	-	-	-	-	0
01	10400	5315	0000	Professional Services	22,300	22,300	24,300	4,400	73,300
01	10400	5400	0000	Travel expenses	6,170	3,600	7,300	7,375	24,445
01	10400	5406	0000	Per Diem	1,000	200	700	500	2,400
01	10400	5517	0000	Equipment Maintenance	750	750	-	-	1,500
01	10400	5871	0000	Special Activities Expenses	100	3,600	-	-	3,700
01	10400	5910	0000	Equipment Repairs	1,000	-	-	-	1,000
01	10400	5925	0000	Membership	11,063	550	150	100	11,863
01	10400	5930	0000	Subscription	-	-	-	-	0
01	10400	5935	0000	Seminars & Workshop	400	835	2,005	-	3,240
01	10400	5940	0000	Printing Services	10,647	1,000	200	200	12,047
01	10400	5945	0000	Graphic & Text Material	2,000	2,000	1,000	-	5,000
01	00000	1508	0000	Office Equipment	-	-	-	-	0
01	00000	1516	0000	Computer Equipment	-	-	-	-	0
01	00000	1523	0000	Audiovisual Equipment	-	-	-	-	0
01	00000	1528	0000	Laboratory Equipment	-	-	-	-	0
01	00000	5145	0000	Tuition Waiver 50 %	-	-	-	-	0
									<b>\$ 146,595.00</b>

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2018 - 2019**

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	2,000	1,000	1,000	6,000
01	10400	5201	0000	Computer Software	3,000	2,000	-	-	5,000
01	10400	5205	0000	Audiovisual Supplies	-	-	-	-	0
01	10400	5215	0000	Instructional Supplies	-	-	-	-	0
01	10400	5220	0000	Laboratory Supplies	2,600	2,600	1,100	-	6,300
01	10400	5310	0000	Contract Services	-	-	-	-	0
01	10400	5315	0000	Professional Services	20,100	21,100	20,100	2,500	63,800
01	10400	5400	0000	Travel expenses	7,900	5,100	5,860	3,600	22,460
01	10400	5406	0000	Per Diem	850	250	800	250	2,150
01	10400	5517	0000	Equipment Maintenance	500	500	500	-	1,500
01	10400	5871	0000	Special Activities Expenses	300	1,800	300	2,700	5,100
01	10400	5910	0000	Equipment Repairs	1,000	1,000	500	-	2,500
01	10400	5925	0000	Membership	10,738	475	550	100	11,863
01	10400	5930	0000	Subscription	-	-	-	-	0
01	10400	5935	0000	Seminars & Workshop	715	1,715	515	-	2,945
01	10400	5940	0000	Printing Services	4,850	700	3,500	6,350	15,400
01	10400	5945	0000	Graphic & Text Material	3,000	3,000	1,000	500	7,500
01	00000	1508	0000	Office Equipment	-	-	-	-	0
01	00000	1516	0000	Computer Equipment	-	-	-	-	0
01	00000	1523	0000	Audiovisual Equipment	-	-	-	-	0
01	00000	1528	0000	Laboratory Equipment	-	-	-	-	0
01	00000	5145	0000	Tuition Waiver 50 %	-	-	-	-	0
									<b>\$ 152,518.00</b>

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2019 - 2020**

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	1,500	1,000	500	5,000
01	10400	5201	0000	Computer Software	2,000	2,000	-	-	4,000
01	10400	5205	0000	Audiovisual Supplies	-	-	-	-	0
01	10400	5215	0000	Instructional Supplies	-	-	-	-	0
01	10400	5220	0000	Laboratory Supplies	2,250	2,100	1,150	-	5,500
01	10400	5310	0000	Contract Services	-	-	-	-	0
01	10400	5315	0000	Professional Services	25,000	25,000	25,000	10,350	85,350
01	10400	5400	0000	Travel expenses	7,200	4,350	4,860	4,200	20,610
01	10400	5406	0000	Per Diem	950	650	600	800	3,000
01	10400	5517	0000	Equipment Maintenance	500	500	500	-	1,500
01	10400	5871	0000	Special Activities Expenses	600	1,850	1,100	2,700	6,250
01	10400	5910	0000	Equipment Repairs	2,000	1,000	-	-	3,000
01	10400	5925	0000	Membership	12,363	100	-	-	12,463
01	10400	5930	0000	Subscription	-	-	-	-	0
01	10400	5935	0000	Seminars & Workshop	2,055	515	725	-	3,295
01	10400	5940	0000	Printing Services	500	1,000	500	12,150	14,150
01	10400	5945	0000	Graphic & Text Material	2,000	2,000	2,000	1,500	7,500
01	00000	1508	0000	Office Equipment	-	-	-	-	0
01	00000	1516	0000	Computer Equipment	-	-	-	-	0
01	00000	1523	0000	Audiovisual Equipment	-	-	-	-	0
01	00000	1528	0000	Laboratory Equipment	-	-	-	-	0
01	00000	5145	0000	Tuition Waiver 50 %	-	-	-	-	0
									<b>\$ 171,618.00</b>

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2020 - 2021**

Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	1,500	1,000	500	5,000
01	10400	5201	0000	Computer Software	2,000	2,000	-	-	4,000
01	10400	5205	0000	Audiovisual Supplies	-	-	-	-	0
01	10400	5215	0000	Instructional Supplies	-	-	-	-	0
01	10400	5220	0000	Laboratory Supplies	2,500	17,500	1,500	-	21,500
01	10400	5310	0000	Contract Services	-	-	-	-	0
01	10400	5315	0000	Professional Services	24,000	24,000	24,000	9,350	81,350
01	10400	5400	0000	Travel expenses	-	-	-	-	0
01	10400	5406	0000	Per Diem	-	-	-	-	0
01	10400	5517	0000	Equipment Maintenance	500	500	500	-	1,500
01	10400	5871	0000	Special Activities Expenses	1,375	3,000	375	1,800	6,550
01	10400	5910	0000	Equipment Repairs	1,500	1,000	-	-	2,500
01	10400	5925	0000	Membership	11,563	100	-	-	11,663
01	10400	5930	0000	Subscription	-	-	-	-	0
01	10400	5935	0000	Seminars & Workshop	1,790	400	400	-	2,590
01	10400	5940	0000	Printing Services	500	1,000	500	11,150	13,150
01	10400	5945	0000	Graphic & Text Material	2,000	2,000	2,000	1,500	7,500
01	00000	1508	0000	Office Equipment	-	-	-	-	0
01	00000	1516	0000	Computer Equipment	-	-	-	-	0
01	00000	1523	0000	Audiovisual Equipment	-	-	-	-	0
01	00000	1528	0000	Laboratory Equipment	-	-	-	-	0
01	00000	5145	0000	Tuition Waiver 50 %	-	-	-	-	0
									<b>\$ 157,303.00</b>

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2021 - 2022**

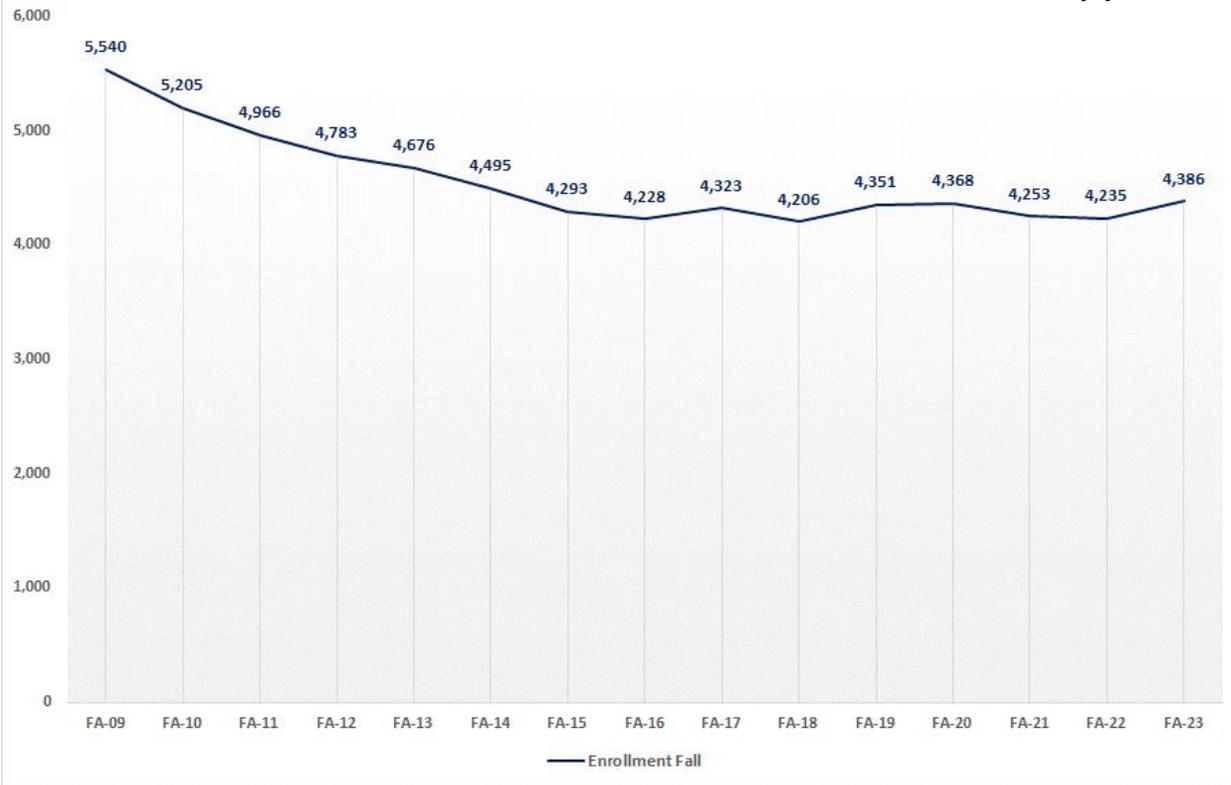
Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	1,500	1,000	500	5,000
01	10400	5201	0000	Computer Software	2,000	2,000	-	-	4,000
01	10400	5205	0000	Audiovisual Supplies	-	-	-	-	0
01	10400	5215	0000	Instructional Supplies	-	-	-	-	0
01	10400	5220	0000	Laboratory Supplies	6,000	3,500	3,000	-	12,500
01	10400	5310	0000	Contract Services	-	-	-	-	0
01	10400	5315	0000	Professional Services	23,600	23,600	21,600	13,800	82,600
01	10400	5400	0000	Travel expenses	-	-	-	-	0
01	10400	5406	0000	Per Diem	-	-	-	-	0
01	10400	5517	0000	Equipment Maintenance	500	500	500	-	1,500
01	10400	5871	0000	Special Activities Expenses	1,375	2,000	1,175	800	5,350
01	10400	5910	0000	Equipment Repairs	1,500	1,000	500	-	3,000
01	10400	5925	0000	Membership	11,563	100	-	-	11,663
01	10400	5930	0000	Subscription	-	-	-	-	0
01	10400	5935	0000	Seminars & Workshop	1,790	400	400	-	2,590
01	10400	5940	0000	Printing Services	500	1,000	500	11,150	13,150
01	10400	5945	0000	Graphic & Text Material	2,000	2,000	2,000	1,500	7,500
01	00000	1508	0000	Office Equipment	-	-	-	-	0
01	00000	1516	0000	Computer Equipment	-	-	-	-	0
01	00000	1523	0000	Audiovisual Equipment	-	-	-	-	0
01	00000	1528	0000	Laboratory Equipment	-	-	-	-	0
01	00000	5145	0000	Tuition Waiver 50 %	-	-	-	-	0
									<b>\$ 148,853.00</b>

**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**V.P. FINANCE TREASURY**  
**BUDGET 2022 - 2023**

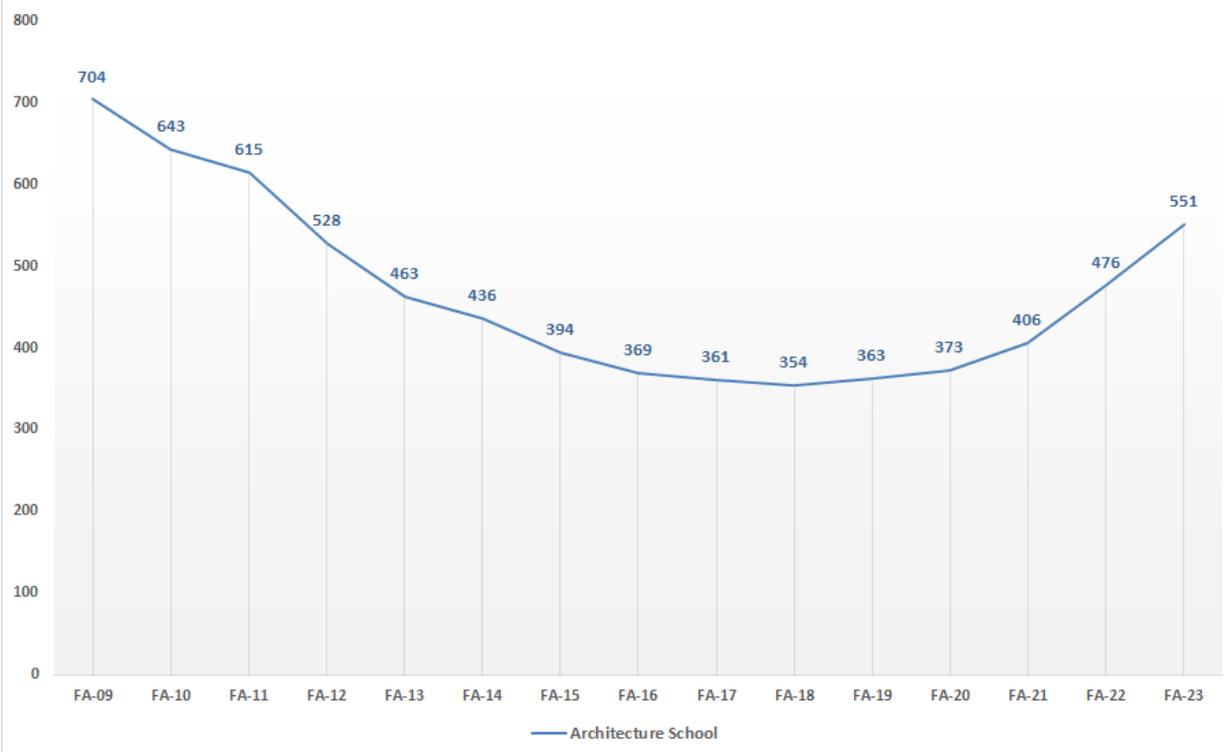
Fund	Function	Object	Project	Description	Budget				Total Budget
					Agst - Oct	Nov - Jan	Feb - Apr	May - Jul	
01	10400	5200	0000	Office Supplies	2,000	1,500	1,000	500	5,000
01	10400	5201	0000	Computer Software	2,000	2,000	-	-	4,000
01	10400	5205	0000	Audiovisual Supplies	-	-	-	-	0
01	10400	5215	0000	Instructional Supplies	-	-	-	-	0
01	10400	5220	0000	Laboratory Supplies	6,500	3,500	3,000	-	13,000
01	10400	5310	0000	Contract Services	-	-	-	-	0
01	10400	5315	0000	Professional Services	20,500	21,000	20,500	13,100	75,100
01	10400	5400	0000	Travel expenses	-	2,550	3,000	-	5,550
01	10400	5406	0000	Per Diem	-	250	450	-	700
01	10400	5517	0000	Equipment Maintenance	500	500	500	-	1,500
01	10400	5871	0000	Special Activities Expenses	600	1,400	600	2,600	5,200
01	10400	5910	0000	Equipment Repairs	2,500	1,500	1,000	-	5,000
01	10400	5925	0000	Membership	11,850	100	-	-	11,950
01	10400	5930	0000	Subscription	-	-	-	-	0
01	10400	5935	0000	Seminars & Workshop	-	515	575	1,560	2,650
01	10400	5940	0000	Printing Services	1,800	2,100	8,600	500	13,000
01	10400	5945	0000	Graphic & Text Material	2,500	2,500	2,500	-	7,500
01	00000	1508	0000	Office Equipment	-	-	-	-	0
01	00000	1516	0000	Computer Equipment	-	-	-	-	0
01	00000	1523	0000	Audiovisual Equipment	-	-	-	-	0
01	00000	1528	0000	Laboratory Equipment	-	-	-	-	0
01	00000	5145	0000	Tuition Waiver 50 %	-	-	-	-	0
									<b>\$ 150,150.00</b>

Polytechnic University of Puerto Rico  
San Juan Campus  
Enrollment Headcount - Fall

Appendix 5.7-3



Polytechnic University of Puerto Rico  
San Juan Campus  
Enrollment Headcount - Fall  
Architecture School



## Appendix 3

### PUPR INSTITUTIONAL MISSION

“The Polytechnic University of Puerto Rico provides opportunities to individuals from diverse backgrounds to cultivate their potential for leadership, productivity, and competitiveness with the aim of contributing to society. PUPR achieves its mission by serving individuals from different academic, economic, geographical, and ethnic contexts through exposure to intellectual, scientific, humanistic, and technological advancement, and by applying innovative methods of delivery”. ( <http://www.pupr.edu/about/mission/> )

### PUPR INSTITUTIONAL LEARNING GOALS /OUTCOMES

**There are 8 (eight) Student Learning Goals/Outcomes (ILOs) or core competencies that have been defined at PUPR, aligned with the Institutional Mission, and Appropriate for Higher Education Competencies. By the time of graduation, PUPR graduates are expected to attain the following eight competencies:**

- a. **ILO1. Effective Communication:** *To clearly express ideas in oral, written, and graphical mode.*
- b. **ILO2. Scientific and Quantitative Reasoning:** *Apply scientific and mathematical reasoning to the solution of problems.*
- c. **ILO3. Critical Thinking:** *To accurately interpret evidence, statements, graphics, and questions in order to draw justified, educated, reasonable and truthful conclusions.*
- d. **ILO4. Technological Competence:** *Use technology and tools to gather, process and analyze information required to solve problems in the field of study.*
- e. **ILO5. Information Literacy:** *Acknowledge, locate and evaluate the information needed to accomplish a specific purpose.*
- f. **ILO6. Lifelong Learning:** *Recognize the need to engage in lifelong learning.*
- g. **ILO7. Ethical and Social Responsibility:** *Be aware of ethical, professional, and social responsibilities.*
- h. **ILO8. Teamwork:** *Contribute to achieve team goals.*

## Appendix 3

### Polytechnic University of Puerto Rico Architecture Student Learning Assessment Mission Statement, Learning Outcomes, & Assessment Opportunities

The purpose of this document is to describe the process of student learning assessment (SLA) for a program/academic unit whose name appears in the title of the document. Also presents guidelines for reporting the results of the collected measurements.

Department/Program or Academic Unit	School of Architecture
Assessment Coordinator for this Program or Academic Unit	Diana Rivera Rivera
Department Chair Name and Signature	Diana Rivera Rivera, Dean
Date Updated / Date Submitted	November 15, 2022

#### Deanship/School Mission Statement.

*Through joint **intellectual, humanistic, creative, and technical pursuits**, the School of Architecture encourages individuals from diverse backgrounds to acquire the **knowledge, skills and sense of social responsibility** that are considered to be fundamental to a discipline concerned with the betterment of the human condition and the physical environment. By expounding an **understanding of historical processes, rapidly-advancing technology and ever-present social predicaments**, the school empowers students **to exercise their potential for service, collaboration, creativity, productivity, leadership and civic engagement** within society.*

#### Program Educational Objectives (PEOs)

**PEO 1. To uphold the contemporary relevance of a holistic understanding of Architecture**, one that facilitates comprehension of how different professional components are interrelated and integrated. (ILO6)

**PEO 2. To further creative, critical and ethical stances** framed within an understanding of multiculturalism, diversity and citizenship to best fulfill the basic demands of the architecture profession, if not transcend them. (ILO3, ILO7, ILO8)

## Appendix 3

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**PEO 3. To nurture personal, intellectual, and professional skills and** competencies needed to research, conceive, design, coordinate, supervise, and evaluate the construction of buildings and spaces. (ILO2, ILO6)

**PEO 4. To increase technological knowledge and** proficiency as fundamental to in-depth learning, professional performance, innovation and lifelong learning, all supported by scientific and quantitative reasoning. (ILO2, ILO4, ILO5, ILO6)

**PEO 5. To foster information literacy and expertise in modes of** communication (oral, written, graphic) as essential for the exchange of ideas, analysis, problem solving, collaboration, and knowledge transfer. (ILO1, ILO3, ILO4, ILO5, ILO6)

**PEO 6. To encourage initiatives that build up leadership and entrepreneurial dexterity** in organizational skills related to planning, management, finances, the identification of business opportunities, and civic engagement. (ILO2, ILO7, ILO8)

**PEO 7. To promote a wide-scoped approach to social accountability,** encompassing health and safety concerns, stewardship of the land, endorsement of sustainability practices, the ethical use of information, and the preservation of cultural and built legacies. (ILO5, ILO7)

**PEO 8. To advance mutual trust between academia and practice,** encouraging interaction with architects and representatives of the construction industry through collaborative research, team effort, interdisciplinary initiatives and community service. (ILO1, ILO6, ILO8)

**TABLE 1:** Cross-reference of the Institutional Learning Outcomes (ILO's) and the Architecture Program Learning Objectives (PEO's).

	<b><i>ILO 1</i></b>	<b><i>ILO 2</i></b>	<b><i>ILO 3</i></b>	<b><i>ILO 4</i></b>	<b><i>ILO 5</i></b>	<b><i>ILO 6</i></b>	<b><i>ILO 7</i></b>	<b><i>ILO 8</i></b>
<b>PEO 1</b>						x		
<b>PEO 2</b>			x				x	x
<b>PEO 3</b>		x				x		
<b>PEO 4</b>		x		x	x	x		
<b>PEO 5</b>	x		x	x	x	x		
<b>PEO 6</b>		x					x	x
<b>PEO 7</b>							x	
<b>PEO 8</b>	x					x		x

*All Institutional Learning Goals are related to at least two Program Educational Objectives:*

***ILO 1 [2], ILO 2 [3], ILO 3 [2], ILO 4 [2], ILO 5 [2], ILO 6 [5], ILO 7 [3], ILO 8 [3]***

## Appendix 3

**Program Student Learning Outcomes (SOs).** List the program or academic unit student outcomes. Make sure that program SOs are aligned with the Program Educational Objectives (PEOs).

The School of Architecture adheres to the *Criteria of Student Performance* established by the National Architectural Accrediting Board (NAAB). The criteria seek to evaluate the outcomes of architecture programs and student work.

Criteria are identified according to two levels: **Program Criteria (PC)**  
**Student Criteria (SC)**

**Program Criteria (PC):** evaluates program outcomes through curriculum, structure, and other experiences.

**Student Criteria (SC):** evaluates student outcomes through curriculum, and other experiences, with emphasis on the articulation of learning objectives and assessment.

### Program Criteria (PC)

- PC.1 Career Paths:** Understanding of the paths to becoming licensed as an architect in the United States and the range of available career opportunities that utilize the discipline's skills and knowledge.
- PC.2 Design:** Instilling in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.
- PC.3 Ecological Knowledge and Responsibility:** Instilling in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.
- PC.4 History and Theory:** Ensuring that students understand the histories and theories of architecture and urbanism, framed by diverse social, cultural, economic, and political forces, nationally and globally.
- PC.5 Research and Innovation:** Preparing students to engage and participate in architectural research to test and evaluate innovations in the field.
- PC.6 Leadership and Collaboration:** Ensuring that students understand approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts, and learn how to apply effective collaboration skills to solve complex problems.
- PC.7 Learning and Teaching Culture:** Fostering and ensuring a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.
- PC.8 Social Equity and Inclusion:** Furthering and deepening students' understanding of diverse cultural and social contexts and helps them translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities.

## Appendix 3

### Student Criteria (SC): Student Learning Objectives and Outcomes

- SC.1 Health, Safety, and Welfare in the Built Environment:** Understanding of the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities.
- SC.2 Professional Practice:** How the program ensures that students understand professional ethics, the regulatory requirements, the fundamental business processes relevant to architecture practice in the United States, and the forces influencing change in these subjects.
- SC.3 Regulatory Context:** Understanding of the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in the United States, and the evaluative process architects use to comply with those laws and regulations as part of a project.
- SC.4 Technical Knowledge:** Understanding of the established and emerging systems, technologies, and assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects.
- SC.5 Design Synthesis:** Ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.
- SC.6 Building Integration:** Ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

## Appendix 3

**Relationship Matrix between Program Educational Objectives (PEOs) and Student Outcomes (SOs).** Include a table indicating the relationship between the Program Educational Objectives (PEOs) and the Student Outcomes (SOs). Adapt table to the number of PEOs and SOs in your program/academic unit. Please, make sure to list the PEOs and SOs using a legend so that the table is self-explanatory.

Table 2: Cross-reference of the Architecture Program's Educational Objectives (PEO's) and the Student Learning Outcomes (SO's).

<b>Student Learning Outcomes (SO's)</b>	<b>PEO 1:</b> <i>Holistic understanding of Architecture</i>	<b>PEO 2.</b> <i>Creative, critical, ethical stances</i>	<b>PEO 3.</b> <i>Professional skills and competencies</i>	<b>PEO 4.</b> <i>Technological knowledge and proficiency</i>	<b>PEO 5.</b> <i>Information literacy and expertise in modes of communication</i>	<b>PEO 6.</b> <i>Leadership and entrepreneurial dexterity</i>	<b>PEO 7.</b> <i>Social accountability</i>	<b>PEO 8.</b> <i>Mutual trust between academia &amp; practice</i>
<b>Program Criteria (PC)</b>								
<b>PC.1</b> Career Paths (4)	X		X			X		X
<b>PC.2</b> Design (5)	X	X	X			X	X	
<b>PC.3</b> Ecological Knowledge and Responsibility (3)	X	X					X	
<b>PC.4</b> History and Theory (3)		X			X		X	
<b>PC.5</b> Research and Innovation (3)				X	X	X		
<b>PC.6</b> Leadership and Collaboration (5)	X		X		X	X		X
<b>PC.7</b> Learning and Teaching Culture (4)		X			X	X		X
<b>PC.8</b> Social Equity and Inclusion (4)	X	X			X		X	
<b>Student Criteria (SC)</b>								
<b>SC.1</b> Health, Safety, and Welfare in the Built Environment (3)	X	X					X	
<b>SC.2</b> Professional Practice (4)	X					X	X	X
<b>SC.3</b> Regulatory Context (4)	X	X	X		X			
<b>SC.4</b> Technical Knowledge (5)	X			X	X		X	X
<b>SC.5</b> Design Synthesis (5)	X	X	X		X		X	
<b>SC.6</b> Building Integration (5)	X		X	X		X		X
<b>TOTALS</b>	11	8	6	3	8	7	8	6

### Notes on Table 2:

1. The number of Architecture Program Educational Objectives (PEO's) directly related to each individual Student Learning Outcome (SO) is indicated next to the latter in parenthesis.

## Appendix 3

- Each of the fourteen (14) Student Learning Outcomes (SO's) addresses at least three (3) of the eight (8) Architecture Program Educational Objectives (PEO's). However, taken as an average, said figure rises to 4.
- Architecture Program Educational Objective PEO 1 encompasses eleven (11) Student Learning Outcomes (SO's). This is to be expected, given their breadth of scope: PEO 1 addresses *the holistic understanding of Architecture*.

**Relationship Matrix between the Institutional Learning Goals/Outcomes (ILOs) and the Student Outcomes (SOs).** Include a table indicating the relationship between the Institutional Learning Goals/Outcomes (ILOs) and the Program/Academic Unit Student Outcomes (SOs).

Institutional Learning Goals/Outcomes (ILOs)	Program/Academic Unit Student Outcomes (SOs)													
	PC.1	PC.2	PC.3	PC.4	PC.5	PC.6	PC.7	PC.8	SC.1	SC.2	SC.3	SC.4	SC.5	SC.6
ILO1. Effective Communication		X				X	X	X					X	X
ILO2. Scientific and Quantitative Reasoning					X							X		X
ILO3. Critical Thinking		X		X	X	X			X		X	X	X	X
ILO4. Technological Competence			X		X				X	X		X		X
ILO5. Information Literacy	X	X		X	X					X	X		X	
ILO6. Lifelong Learning	X	X			X	X	X	X					X	
ILO7. Ethical and Social Responsibility	X		X			X		X	X	X			X	
ILO8. Teamwork						X	X	X						

Institutional Learning Goals (ILOs)	Student Outcomes (SOs)
<p><b>ILO1. Effective Communication:</b> To clearly express ideas in oral, written, and graphical mode.</p> <p><b>ILO2. Scientific and Quantitative Reasoning:</b> Apply scientific and mathematical reasoning to the solution of problems.</p> <p><b>ILO3. Critical Thinking:</b> To accurately interpret evidence, statements, graphics, and questions in order to draw justified, educated, reasonable and truthful conclusions.</p> <p><b>ILO4. Technological Competence:</b></p>	<p><b>Program Criteria (PC)</b></p> <p><b>PC.1 Career Paths:</b> Understanding of the paths to becoming licensed as an architect in the United States and the range of available career opportunities that utilize the discipline's skills and knowledge.</p> <p><b>PC.2 Design:</b> Instilling in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.</p> <p><b>PC.3 Ecological Knowledge and Responsibility:</b> Instilling in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.</p> <p><b>PC.4 History and Theory:</b> Ensuring that students understand the histories and theories of architecture and urbanism, framed by diverse social, cultural, economic, and political forces, nationally and globally.</p> <p><b>PC.5 Research and Innovation:</b></p>

## Appendix 3

*Use technology and tools to gather, process and analyze information required to solve problems in the field of study.*

**ILO5. Information Literacy:**

*Acknowledge, locate and evaluate the information needed to accomplish a specific purpose.*

**ILO6. Lifelong Learning:**

*Recognize the need to engage in lifelong learning.*

**ILO7. Ethical and Social Responsibility:**

*Be aware of ethical, professional and social responsibilities.*

**ILO8. Teamwork:**

*Contribute to achieve team goals.*

Preparing students to engage and participate in architectural research to test and evaluate innovations in the field.

**PC.6 Leadership and Collaboration:**

Ensuring that students understand approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts, and learn how to apply effective collaboration skills to solve complex problems.

**PC.7 Learning and Teaching Culture:**

Fostering and ensuring a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.

**PC.8 Social Equity and Inclusion:**

Furthering and deepening students' understanding of diverse cultural and social contexts and helps them translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities

**Student Criteria (SC):**

**SC.1 Health, Safety, and Welfare in the Built Environment:**

Understanding of the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities.

**SC.2 Professional Practice:**

How the program ensures that students understand professional ethics, the regulatory requirements, the fundamental business processes relevant to architecture practice in the United States, and the forces influencing change in these subjects.

**SC.3 Regulatory Context:**

Understanding of the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in the United States, and the evaluative process architects use to comply with those laws and regulations as part of a project.

**SC.4 Technical Knowledge:**

Understanding of the established and emerging systems, technologies, and assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects.

**SC.5 Design Synthesis:**

Ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.

**SC.6 Building Integration:**

Ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

## Appendix 3

### Student Learning Assessment Process.

The formal process by which our program measures, analyzes, and implements changes to improve student learning has been **developed from varied, informal student evaluation practices that have been carried out throughout the years**, even if then lacking a consistent structure per se. The establishment of more clear assessment goals within the last years has enriched and allowed us to expand these. In our assessment plan, assessment **takes place at direct and indirect levels** and by means of different tools and methods. The assessment process is **initiated at course level and enhanced by analysis at program and component levels**. Required by accrediting institutions, various tools of cyclical reporting grant the program a comprehensive understanding of progress related to the assessment process. **Alumni performance in the Architectural Registration Exam (ARE)** administered by the *National Council of Architectural Registration Boards* (NCARB) is tracked and analyzed comparatively in terms of: a) passing grade rates, b) performance of students from peer institutions in Puerto Rico, and, c) level of accomplishment in the individual sections of the exam.

#### *TOOLS TO MEASURE PERFORMANCE:*

The tools listed below comprise a set of instruments to be used prospectively in the implementation of our assessment plan. Those in **bold** and *italics* highlight the ones initially used and from which we have collected data so far :

#### **Program level:**

1. *Middle States Association of Colleges and Schools Accreditation*
2. Accreditation by the *National Architectural Accrediting Board* (NAAB)  
***Annual Report submitted to the NAAB reporting on conditions met or yet to meet.***
3. ***Student's evaluation of all course sections and professor each trimester.***
4. Faculty, students, and alumni surveys.
5. The Program's *Outcomes Assessment Committee* assists component coordinators and faculty members in the preparation and evaluation of rubrics and diagnostic tests.
6. Analysis of alumni performance in the *Architectural Registration Exam* (ARE)

#### **Course level:**

7. Team revision of student work by professors integrating related course components.
8. ***Individual rubrics to assess projects, texts, and assignments, as well as courses.***
9. Diagnostic testing: before and after examinations at selected courses.
10. Oral and written reports.
11. ***Critiques of student work complemented by professionals invited as jurors.***
12. Dean's dialogue with professor regarding student evaluations.

Assessment activities can be summed up as follows: MEASUREMENT initiates at course level; ANALYSIS is undertaken at component and administration levels. IMPROVEMENTS are then originated at program level, trickling down to the components and the courses.



## **APPENDIX 5.2.1.1**

# **Polytechnic University of Puerto Rico**

## **Long-Range Plan 2016-2021**

**Department:** School of Architecture

**Department Dean:** Carlos E. Betancourt-Llambías

**Date:** Spring 2016

### **Introduction**

The Long-Range Plan and the specific objectives outline indicate how these objectives respond to the Institutional Goals and objectives and the NAAB Perspectives. An Annual Work Plan includes the Key Institutional Objectives, Specific Departmental Objectives, and activities attached to Specific Objectives.

Education has experienced changes that impose new challenges due to the spiral of technological changes, economic downturn, and climate change. A Long-Range Plan extends and widens the use of technology to expand knowledge and opportunities and our field of action in collaboration agreements on support of the community. It is geared to strengthening our laboratories to fuel design courses as platforms for research and exploration and identify curricular opportunities with other programs of the institution to expand connections and collaboration opportunities.

The Long-Range Plan strengthens academic initiatives both in the creation of new programs and intertwining themes of allied disciplines. Being a university where Engineering branches such as Civil Engineering, Environmental Engineering, Industrial Engineering, Chemical Engineering, Mechanical Engineering, Electrical Engineering and Construction Management predominate, we expect to encourage students to cross borders to diversify their academic profile by taking electives from other programs.

## Highlights of the Long-Range Plan respond to the NAAB Perspectives

- Architectural education and the academic community: The plan proposes to strengthen ties between the different programs of the Institution and develop programs to create combined studies, dual degrees and master's program grounded in the disciplines of engineering and management.
- Architectural Education and students: The plan proposes to create exchanges and study trips that promote diversity. Exchanges allow students to validate socio-cultural and life issues understanding in other cities.
- Architectural Education and the profession/regulatory environment: The plan proposes to structure the Internship Development Program (IDP) for students in the fourth-year level.
- Architectural Education and the Profession: The plan proposes to provide the students with broad perspectives of practice alternatives in today's changing world.
- Architectural education and the public good: The plan proposes cooperation agreements with local government agencies, and non-profit associations and corporations.

Key Institutional Objective	Specific Departmental Objective	NAAB Perspective
1. Diversify institutional sources of income.	SDO 1: To steer students towards a holistic practical educational experience so that our graduates are capable of meeting the basic demands of our profession with critical and ethical responsibility	Perspective B: Architectural Education and Students  Perspective D: Architectural Education and the Profession
	SDO 2: To develop instruments and mechanisms to recognize and reward academic excellence among students and faculty	Perspective A: Architectural Education and the Academic Community  Perspective B: Architectural Education and Students
	SDO 3: To encourage students to become architects responsible for the build heritage.	Perspective E: Architectural Education and the Public Good
	SDO 4: To encourage a constant interaction between academia and practice in order to help students' transition from one world to another	Perspective C: Architectural Education and the Regulatory Environment
	SDO 5: To strengthens the collaboration between the school and the community	Perspective E: Architectural Education and the Public Good
	SDO 6: To develop the organizational structure processes and infrastructure to support high quality education	Perspective A: Architectural Education and the Academic Community

2. Evolve from a purely teaching institution to a teaching, research, consulting institution	<p>SDO 7: To increase the retention and graduation rates of the students of the Architecture Program</p> <p>SDO 8: To continue the improvement of the assessment processes associated with the teaching/learning dynamics and student outcomes</p>	<p>Perspective B: Architectural Education and Students</p> <p>Perspective B: Architectural Education and Students</p>
3. Foster educational alignment with educational trends	SDO 9: To initiate the development of distance learning offerings	Perspective A: Architectural Education and the Academic Community
4. Increase student recruitment	SDO 10: To increase the offerings in the design fields	Perspective D: Architectural Education and the Profession
5. Increase retention and graduation rates	<p>SDO 11: To continue to attract a diverse student body</p> <p>SDO 12: To promote our programs within the academic community</p> <p>SDO 13: To increase presence within local and regional community</p>	<p>Perspective B: Architectural Education and Students</p> <p>Perspective A: Architectural Education and the Academic Community</p> <p>Perspective B: Architectural Education and Students</p>

For each Specific Departmental Objectives (SDO) activities are listed and constitute the Long-range Plan from 2016-2021.

SDO 1: To steer students towards a holistic practical educational experience so that our graduates are capable of meeting the basic demands of our profession with critical and ethical responsibility

Actions:

1. Participate in ACSA's events and NAAB's orientations
2. Identify coordinators for each design levels and each curricular component
3. Restructure the Curriculum Committee

4. Revise all syllabus in accordance to outline learning outcomes

SDO 2: To develop instruments and mechanisms to recognize and reward academic excellence among students and faculty

Actions:

1. Establish the Departmental Personnel Committee
2. Promote Full-time faculty
3. Implement Multi-year contracts for Full-time faculty
4. Integrate competitions within the core curriculum, electives and extracurricular activities
5. Develop the full time equivalent positions

SDO 3: To encourage students to become architects responsible to the build heritage

Actions:

1. Open to the community the Conservation Laboratory as resource
2. Incorporate real case studies into the conservation design studio and Lab.
3. Stimulate the participation of students in competitions related to conservation and documentation

SDO 4: To encourage a constant interaction between academia and practice in order to help students' transition

Actions:

1. Name a faculty member to establish and coordinate the Intern Development Program (IDP)
2. Further representation of the School at the Annual NCARB Meeting, IDP Division
3. Encourage participation of consultants from different fields in student juries, especially fourth and fifth year students
4. Encourage participation of other professionals related to Architecture in professional practice courses and Design juries
5. Incorporate Engineering Professors to the Tech Talks

SDO 5: To strengthen the collaboration between the school and the community

Actions:

1. Establish the *Taller de Participación Comunitaria*, Community Participation Laboratory
2. Collaborate with high schools offering pre-architecture design workshops at the School

SDO 6: To develop the organizational structure, processes and infrastructure to support high quality education

Actions:

1. Complete the proposed expansion of the School
2. Revise of the program's organizational structure and assign tasks of each position
3. Incorporate to the administrative structure the Director of the Graduate School of Landscape Architecture and the Director of the Interior Design Program

SDO 7: To increase the retention and graduation rates of the students of the Architecture Program

Actions:

1. Offer faculty workshop on the Finish Line Program
2. Implement the Institutions' Early Alert Program
3. Revise the pre-requisite structure
4. Revise the curricular sequence
5. Articulate the integration and sequence between the three level of Capstone Design

SDO 8: To continue the improvement of the assessment processes associated with the teaching/learning dynamics and student learning outcomes

Actions:

1. Establish the Departmental Outcomes Assessment Committee
2. Develop the Outcomes Assessment Plan

SDO 9: To initiate the development of distance learning offerings

Actions:

1. Presentation to faculty members on Quality Matters and Distance Learning
2. Identify faculty and courses to re-design for distance learning
3. Initiate distance learning courses in the Architecture curriculum

SDO 10: To increase the offerings in the design fields

Actions:

1. Inaugurate offering the Bachelor Degree on Interior Design

2. Develop a program on Industrial Product Design
3. Plan a Certificate on Architectural Conservation
4. Plan a degree in Graphic Design
5. Plan a Graduate Program in Landscape Urbanism and Architectural Engineering

SDO 11: To continue to attract a diverse student body

Actions:

1. Collaborate more actively with the Institution Admissions and Promotion Office to promote our program
2. Establish additional exchange agreements with other architectural schools' outside Puerto Rico

SDO 12: To promote our programs within the academic community

Actions:

1. Promote combined design studios with the Engineering and Management Programs
2. Promote Capstone joint projects among Engineering, Architecture and Landscape Architecture students
3. Encourage our students to participate in the Combine Graduate Studies Program.

SDO 13: To increase presence within local and regional community

Actions:

1. Work closely with the Institutions Development and Public Relations agency
2. Promote participation in professional and community initiatives

## **APPENDIX 5.2.1.2**

Polytechnic University of Puerto Rico



## **Institutional Strategic Plan 2016-2021**

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January 2016

## INTRODUCTION

Polytechnic University of Puerto Rico is a private, non-profit university providing access to education through its main campus in San Juan, PR, and branch campus in Miami and Orlando, Florida. Polytechnic University of Puerto Rico fosters learning, scholarship, and service in the core area of liberal arts, and in the professional fields of architecture, business, education, land surveying and engineering. The Polytechnic University of Puerto Rico has in place a system to ensure that the strategic planning and resource allocation process is consistent with its mission and goals. The process starts with the preparation of the Institutional Strategic Plan. The Institutional Strategic Planning Committee develops the Institutional Strategic Plan. The institutional Strategic Planning Committee is currently composed of the Executive Vice-President for Administration and Finance, the Vice-President for Enrollment Management and Student Services, the Library Director, the Dean of Engineering, Land Surveying and Geospatial Sciences, the Dean of Graduate School, the Dean of Architecture, the Distance Learning Director, the Director of Sponsored Research Office and two faculty members. The Strategic Planning Committee develops the Institutional Strategic Plan on the basis of the institutional priorities determined by the participation of the President, Vice-presidents, Deans and Department Heads in the process.

There is a track record of strategic planning efforts at Polytechnic University of Puerto Rico (PUPR) since 2002. 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 three clearly identifiable cycles within the strategic planning endeavors at PUPR: 2002-2007, 2004-2009 and 2010-2015. The first two cycles overlapped as part of the strategic planning renewal process to adapt to internal and external changes to allow PUPR to maintain excellence as a top higher education institution. The last cycle was revised at its midterm during the academic year 2012-2013. The revised edition of the Institutional Strategic Plan was presented to the Board of Trustees on December 2012. The Institutional Strategic Plan midterm revision process led to key adjustments. The principal modifications adopted were the development of new academic offerings to address demographic changes in the K-12 student population and socio-economic activity shifts.

The Institutional Strategic Plan 2010-2015 was used to improve programs and services. For instance, as part of the achievement of Planning Goal 6, the Graduate Program has been considerably improved by the development of a Doctoral Degree Program focused on Applied Engineering Sciences. Several improvements in the teaching facilities, such as, the

development of smart teaching rooms have been motivated by Planning Goal 4. Enhancements of the mentoring and course tutorial programs have been driven by Planning Goal 2 and the advancement of pre-college bridge programs are the direct result of addressing Planning Goal 1. Also, as a consequence of strategic planning, PUPR have strengthened their accreditation commitments projects. As a result, PUPR is continuously embarking in integrating efforts from several accreditation criteria: ABET, MSACS, NAAB, and IACBE to improve the student learning assessment and outcomes excellence. From the latest revision criteria at the Institutional level, provided by the Middle States, PUPR's Institutional Strategic Plan for 2016-2021 has been developed. This plan was built upon the revision and discussion of PUPR's Mission, Vision and Mission Goals, the findings of appointed subcommittees of the Institutional Strategic Planning Committee, and from the evaluation of accomplishments in key initiatives that were identified in the PUPR's Institutional Strategic Plan 2010-2015. The following sections present the Institutional Mission, Vision and Mission Goals upon which the strategic planning process is based on, the strategic plan design framework, the articulated strategic goals and activities, and the implementation plan.

## **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, 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.

## **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.

## **MISSION GOALS**

The following goals guide Polytechnic University in meeting its mission:

- To contribute to regional and global socio-economic development, sustained by a capable and committed Faculty and through the formation of competitive professionals in the fields of architecture, applied sciences, business, engineering, math, and science education.
- To provide access to higher education through on-campus and at a distance programs of study in compliance with guidelines that comprise hallmarks of quality.
- To instill in PUPR graduates a genuine interest to search for solutions to the challenges associated with the needs and aspirations of society.
- To promote the dissemination of knowledge through the teaching-learning process and through publications, and to develop an interest in applied research.
- To adapt current and develop new programs of study that respond to the needs and realities of PUPR constituents and to society in general.
- To foster the linkage between PUPR and industry, government, commerce, professional associations, as well as with other universities.
- To promote teaching and learning best practices supported by “state of the art” technology.
- To achieve long-term sustainable growth in financial resources.
- To promote global and socio-cultural exposure of the PUPR community.
- To continuously seek innovative ways to increase student retention and graduation rates, and to reduce students’ time to degree attainment.

## **STRATEGIC PLAN FRAMEWORK**

The design of the strategic plan was envisioned using the SMART Approach: **S**pecific, **M**easurable, **A**chievable, **R**elevant, and **T**ime Bound. As part of the initial discussions of the Institutional Strategic Planning Committee the following strategic design questions were acknowledged:

- Who are our peers?
- Who are our aspirational peers?
- What are our gaps relative to our aspirational peers?
- What is our aspiration?

- What are the trends on higher education?
- What is the short and middle term landscape of Puerto Rico and the USA?
- What are our strengths and weaknesses?

In order to address these questions, four subcommittees composed from selected members of the faculty and the Strategic Planning Committee were appointed to comprehensively study and answer the design questions. The appointed subcommittees were the following:

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

The following figure presents the envisioned design framework:



Each subcommittee submitted a report and presentation of findings to the Institutional Strategic Planning Committee. 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.

## INSTITUTIONAL PLANNING GOALS ACTIVITIES 2016-2021

Based on the SMART approach, the following goals activities were defined for each strategic goal:

Strategic Goal 1: Diversify institutional sources of income.				
Activity	Owner	Time Frame	Resources	Assessment Criteria
1. Attract external funds through grants, intramural professional practice, continuous education, subcontracts, and fund raising aligned with national priorities and industry needs. 1.1. Enhance Sponsored Research Office resources to attract external funds for Ph.D. students, faculty, departments and university purposes.	Deans	2016-2021 1.1. FA16	TA and RA funding (50% tuition cost)	1. Number of awarded projects (goal: 3/year) 2. Amount of external funds (goal: 25% of operating costs)
2. Develop Centers/Clusters of Excellence. 2.1. Identify national areas of interest and funding trends. 2.2. Analyze our capabilities with respect to the areas of interest. 2.3. Attract, recruit and/or develop faculty and resources aligned with the proposed Centers.	Deans, DHs	2016-2018 2.1. FA16 2.2. FA16 2.2. SP18	Seed money (varies according to propose center)	1. Number of developed clusters (goal: 4). 2. Number of awarded projects through clusters (goal: 2 per cluster)
3. Develop consortiums with universities and key organizations.	Deans	2016-2021	TBD	Number of consortiums

<b>Strategic Goal 2: Evolve from a purely teaching institution to a teaching/research/consulting institution.</b>				
<b>Activity</b>	<b>Owner</b>	<b>Time Frame</b>	<b>Resources</b>	<b>Assessment Criteria</b>
1. Provide financial support to the graduate programs. 1.1. Identify RFPs and submit proposals focused on increasing Hispanic Masters and PhDs. 1.2. Include in the College annual budget funding for TA's and RA's. 1.3. Enhance Sponsored Research Office resources to attract external funds for graduate students, faculty, departments and university purposes.	Graduate School Dean, SRO	2016-2021 1.1. 2016-2021 1.2. 2016-2021 1.3. FA16	TA and RA funding (50% tuition cost)	1. Number of submitted proposals (goal: 3 per year) 2. Number of awarded proposals (goal: 1 per year)
2. Develop intramural professional practice. 2.1. Develop policies and conditions that promote intramural professional practice. 2.2. Motivate faculty to engage on intramural professional practice.	VPs, Deans	2.1. W116 2.2. 2016-2021	TBD	Number of faculty members engage on intramural practice
3. Identify and develop new continuing education opportunities.	CEPA	2016-2021	TBD	Increment on continuous education demand (goal: 25%)
4. Identify and develop new subcontract opportunities.	Deans, DHs	2016-2021	TBD	Number of subcontracts deals

<b>Strategic Goal 3: Foster institutional alignment with educational trends.</b>				
<b>Activity</b>	<b>Owner</b>	<b>Time Frame</b>	<b>Resources</b>	<b>Assessment Criteria</b>
1. Leverage existing college programs and courses to develop new degrees, minors, and/or dual degree programs aligned with national priorities and industry needs. 1.1. Identify programs of interest based on market needs. 1.2. Analyze our capabilities with respect to the programs. 1.3. Attract, recruit and/or develop faculty and resources aligned with the proposed programs.	Deans, DHs	2016-2018 1.1. FA16 1.2. WI16 1.3. SP18	Varies with program	1. Number of new programs 2. Enrollment on new programs
2. Develop and offer undergraduate and graduate online programs. 2.1. Fulfill the requirements of ongoing grants related to online course development. 2.2. Identify RFPs and submit proposals to support online course development and deployment. 2.3. Promote faculty engagement.	Deans	2016-2021 2.1. FA21 2.2. 2016-2021 2.3. 2016-2021	\$8,500,000	Number of academic programs fully available online (goal: 80% of current academic programs)
3. Incorporate cutting edge teaching/learning methodologies in the classroom.	Deans	2016-2021	\$1,000,000	Retention and graduation rate improvement

<b>Strategic Goal 4: Increase student recruitment.</b>				
<b>Activity</b>	<b>Owner</b>	<b>Time Frame</b>	<b>Resources</b>	<b>Assessment Criteria</b>
1. Streamline the process of admissions and financial aid.	Director of Financial Aid Office	WI16	\$500,000	Students Satisfaction Survey (goal: 90%)
2. Strengthen our relationship/collaboration with K-12 institutions to attract honor students. 2.1. Promote our academic programs through active involvement with students' associations. 2.2. Develop and promote summer camps. 2.3. Improve pre-college program (PES). 2.4. Establish cooperative agreements with high schools, non for profits and community based organizations.	Director of Admissions Office, Deans, DHs, Student Services Office	2016-2021	\$75,000/year	1. Number of students participating in pre-college program 2. Number of PES students admitted to PUPR BS programs.
3. Promote our academic programs through active involvement with HACU, SHPE and SWE, among others.	DHs	2016-2021	Faculty member	Number of students and faculty members actively involved.
4. Develop and promote internship programs at PUPR.	Deans, DHs	SP17	TBD	Number of students participating
5. Establish cooperative agreements with enterprises for their personnel development.	Deans	2016-2021	TBD	Enrollment
6. Establish cooperative agreements with educational institutions.	Deans	2016-2021	TBD	Enrollment
7. Attract veterans, active military personnel, continental USA population, and international students.	Registrar, Admissions Director	2016-2021	TBD	Enrollment
8. Participate in selected ranking surveys.	Deans	2016-2021	\$5,000/year	Ranking trend

<b>Strategic Goal 5: Increase retention and graduation rates.</b>				
<b>Activity</b>	<b>Owner</b>	<b>Time Frame</b>	<b>Resources</b>	<b>Assessment Criteria</b>
1. Improve the institutional process of students learning. 1.1. Improve the assessment process of student learning. 1.2. Improve student learning.	Student Learning Assessment Committee	2016-2021	\$40,000/year	1. Retention and graduation rates 2. Maintain accreditation as a standard of excellence
2. Improve and enhance the quality of the university experience and scholastic environment. 2.1. Improve the quality and reliability of IT infrastructure and services. 2.2. Improvement of Business Intelligence. 2.3. Develop a student center. 2.4. Increase the space allocated for study areas. 2.5. Facilitate the availability of dormitories for students. 2.6. Improve extra-curricular activities offerings. 2.7. Establish universal time.	VPs, Deans, IT Director	2016-2021 2.1. FA16 2.2. FA16 2.3. WI17 2.4. SP17 2.5. SP21 2.6. SP21 2.7. FA16	2.1. TBD 2.2. TBD 2.3. \$300,000 2.4. TBD 2.5. TBD 2.6. TBD 2.7. TBD	Student, faculty and personnel satisfaction survey
3. Provide tutoring services for low-passing rate courses not currently attended.	Directors of Tutoring Programs	2016-2021	\$1,000,000	Retention and graduation rates
4. Capacitate faculty on the early identification and intervention of high-risk students.	VP Student Services, Deans, DHs	SP17	TBD	Retention and graduation rates

## IMPLEMENTATION

As part of the execution process of the Institutional Strategic Plan a procedure has been established to ensure that the resource allocation associated with the activities conducted by the institutional academic and administrative departments and offices address the Institutional Mission and Planning Goals. At the academic and administrative unit level, goals-based annual work plans are prepared. The annual work plan standard form requires that the activities/tasks of the academic and administrative units are directly link with specific objectives that are link to one or more Planning Goals. Also each activity/task has to be linked with an assessment tool that facilitates the evaluation of the level of accomplishment. A progress report and a final assessment report are submitted to the dean and/or vice president (depending on the nature of the institutional unit) at the midterm and at the end of the academic year, respectively.

The work plan is the basis for the annual budget proposal that is submitted by each institutional unit to the Vice President for Administration and Finances. As part of the standard budget proposal form, each solicited item requires a justification describing how it aligns with the academic and/or administrative unit operational needs, its specific objectives and the Institutional Planning Goals. Examples of Annual Work Plans Forms and Budget Proposal Forms will be available for review during the visit.

The budget proposal procedure starts at the Office of the Vice President for Administration and Finance. During the spring academic period, 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 to July 31.

Each administrative and/or academic unit prepares its budget for the next fiscal year and submits it electronically and/or in paper to the Office of the Vice President for Administration and Finance. This office consolidates all the requests made and compares the total expenses with the projected income for the same period.

As necessary, budget revisions are requested by the Office of the Vice President for Administration and Finance to the Directors of the administrative and/or academic units. The revisions are analyzed and discussed with the Directors until a final agreement is reached. The Vice President for Administration and Finance prepares the institutional final version and submits it to the President and to the Board of Trustees for final approval. Once the Board of Trustees authorizes the budget, the Vice President for Administration and Finance sends the Authorized Version to each administrative and/or academic unit. The

Office of the Vice President for Administration of Finance maintains control of the budget and it is the institutional unit responsible of assessing this process.

## CERTIFICACIÓN

Yo, Francisco Martínez Ubarri, secretario de la Junta de Síndicos de la Universidad Politécnica de Puerto Rico, Inc., una corporación sin fines de lucro organizada de acuerdo con las leyes del Estado Libre Asociado de Puerto Rico, localizada en el 377 de la Avenida Ponce de León, en San Juan, Puerto Rico, por la presente **CERTIFICO** que:

En la reunión ordinaria de la Junta de Síndicos de la Universidad Politécnica de Puerto Rico celebrada el 26 de febrero de 2016, en sus oficinas centrales, debidamente convocada y establecido el cuórum correspondiente, se aprobó unánimemente el Plan Estratégico Institucional 2016-2021.

En San Juan, Puerto Rico, a 26 de febrero de 2016.

  
FRANCISCO MARTINEZ UBARRI  
Secretario

## **APPENDIX 5.2.1.3**

# Polytechnic University of Puerto Rico

## Work Plan 2018-2019

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**Department:** School of Architecture

**Department Dean:** Carlos E. Betancourt-Llambías

**Date:** Spring 2018

### Introduction

*The School of Architecture, known as ARQPOLI, has focused its civic responsibility on rendering the profession as an accessible goal. In terms of architectural education, our rationale (at an undergraduate level) of research as resource and learning tool has promoted intellectual curiosity among students, while simultaneously expanding the scope of subject matters and design themes beyond local architectural practices. The School's extended outreach is clear in the local community's trust in Polytechnic as resource, the alliances and partnerships with local and international institutions, and the recognition of technical expertise in the areas of architectural preservation, urban planning, urban design, community outreach programs, product design, entrepreneurship and leadership.*

Feeling responsible for students' professional outlook and possibilities, attention has also been given to the importance of architectural practice and to promoting an inclusive approach to other fields. Our curriculum emphasizes critical thinking and research as applied to a series of topics, such as architectural preservation, history and theory, the local tradition of architecture, emerging paradigms, and explores sustainability issues beyond recent trends.

The Work Plan that follows has been developed on the basis of goals achievement. The Specific School Objectives address the Institutional Planning Goals for 2016-2021. The Institutional Planning Goals and Specific School Objectives for 2018-2019 are presented below.

### Institutional Planning Goals 2016-2021

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.

### Specific School Objectives 2018-2019

1. To fully meet the requirements for the NAAB's accreditation.
2. To improve the retention and graduation rates.
3. To encourage a constant interaction of academia and practice.
4. Develop and offer online courses (undergraduate).

5. To expand academic offering through the development and implementation of new academic offerings.
6. To increase the recruitment of local students and to develop outreach recruitment platforms for international students.
7. To contribute in the execution of collaboration agreements between other universities such as Internships, Study Abroad, among others.
8. To continue the development of the assessment process.
9. Attract external funds through grants.

**Relationship between Specific School Objectives and Institutional Planning Goals**

The following table presents the relationship between the Specific School Objectives for 2018-2019 and the planning goals of the Institutional Strategic Plan 2016-2021:

<b>Specific School Objectives</b>	<b>Institutional Planning Goals Addressed</b>
1	1, 3, 5
2	4, 5
3	3
4	3, 4, 5
5	1, 4
6	1, 4
7	3, 4
8	3, 5
9	1, 2

**Work Plan 2018-2019**

The Annual Work Plan of the School of Architecture is presented in the following table. As part of the general operation, extensive faculty and institutional support is required in order to fully accomplish several of the objectives. The column of Resources and Budget provides the details of the required support.

<b>Specific School Objectives</b>	<b>Activities Attached to Specific Objectives</b>	<b>Itinerary</b>	<b>Assessment Criteria: 4-Excellent 0-Failed</b>	<b>Resources and Budget</b>	<b>Institutional Goals Addressed</b>
To fully meet the requirements for the NAAB's accreditation.	To participate in ACSA's events and NAAB's orientations	Fall 2018 March 2019	To integrate relevant issues of architectural education and be informed on NAAB's recommendations	Program Budget 2018-2019	
	To submit NAAB's Annual Report	November 2018	Evidences are reflected in NAAB's Annual Report	Salaries	
	To address concerns presented in latest <i>Visiting Team Report (VTR)</i>	FA/WI/SP 2018-19	Evidences are reflected in <i>Visiting Team Report (VTR)</i>	Salaries	
	To continue acquiring the required laboratory resources, equipment and supplies	FA/WI/SP 2018-19	Complete Laboratory Supplies and Laboratory Equipment resources as planned	Program Budget 2018-2019	
To improve the retention and graduation rates.	Mentoring students throughout the completion of the program	Ongoing each academic term		Salaries	
	Group revisions with course coordinators to monitor the assessment plan	Spring 2019		Salaries	
	Monitor the revised faculty evaluation form to evaluate students' feedback	Ongoing each academic term	Documented feedback from the Dean on improving teaching performance	Salaries	

Specific School Objectives	Activities Attached to Specific Objectives	Itinerary	Assessment Criteria: 4-Excellent 0-Failed	Resources and Budget	Institutional Goals Addressed
	To continue the development of a curricular revision.	Fall 2018	Attain a curricular revision	Salaries	
	To submit a curricular revision to the PUPR's Academic Council.	Spring 2019	Increase recruitment aligned with educational trends	Salaries	
	To provide flexibility in terms of pre requisites	Ongoing each academic term	Maintain a high retention rate	Salaries	
To encourage a constant interaction of academia and practice.	Improve the integration of Capstone Design courses sequence	Ongoing each academic term	Increase the rate of passing grades on Capstone Design courses	Salaries	
	Identify and provide consultants and practice related resources for fourth and fifth year students	Ongoing each academic term	Assessment rubric analysis to determine applied knowledge	Program Budget 2018-2019	
	To provide allocation of faculty by area of expertise and/or experience.	Ongoing each academic term	Faculty evaluation from students and adjunct faculty retention rate	Salaries Program Budget 2018-2019	
	To maintain our (AXP) Architecture Experience Program (former IDP Program)	Ongoing each Spring	Press and social media coverage	Salaries CISP-Career & Internship Services Program	
Develop and offer online courses (undergraduate).	To complete the first phase of online courses Design	Fall 2019	faculty development: History/Theory, Representation and Technology components	Salaries & Program Budget 2018-2019 Identify external funding	
	Faculty Development in <i>Distance Learning</i>	Ongoing each academic term	faculty development	Salaries CEDUP	
	To participate in the NCARB's 2019 Board Member/ Educators Conference	Summer 2019	Sessions will discuss on architectural education and licensure (AXP)	Program Budget 2018-2019	

Specific School Objectives	Activities Attached to Specific Objectives	Itinerary	Assessment Criteria: 4-Excellent 0-Failed	Resources and Budget	Institutional Goals Addressed
To expand academic offering through the development and implementation of new academic offerings.	To begin offering a Minor in Urban Planning	Fall 2018	Submitted, pending approval from the Council of Education-PR	Salaries	
	To begin a proposal for a Bachelor in Landscape Architecture	Academic year 2018-2019	To submit the proposal to the Council of Education-PR	Program Budget 2018-2019	
	To begin the development of a Master in Design Studies (M.DES)	Academic year 2018-2019	To submit the proposal to the Council of Education-PR	Program Budget 2018-2019	
	To begin a proposal for a Master in Urban Design	Fall 2018	To submit the proposal to the Council of Education-PR	Salaries	
	To begin offering an Associate Degree in Product Design	Fall 2018	Submitted, pending approval from the Council of Education-PR	Salaries	
	To begin offering a Master in Architectural Conservation and Rehabilitation	Fall 2018	Submitted, pending approval from the Council of Education-PR	Salaries	
To increase the recruitment of local students and to develop outreach recruitment platforms for international students.	Pre Architecture Summer Program	Ongoing each Summer	To increase recruitment rate and to have press and social media coverage	Program Budget 2018-2019	
	Visits to High Schools and Campus Tour	Ongoing each academic term	To increase recruitment rate	Salaries Dean and the Office of Promotions	
	Publication of School's catalog [de]BRIEF and journal Polimorfo	[de]BRIEF 2016 Fall 2018 Polimorfo Spring 2019	Local, regional and international exposure	Program Budget 2018-2019	
	To partially support the PUPR web portal as a promotion tool of the Architecture program	Ongoing each academic term	Maintain the number of applications	Salaries Web master, School's administrative staff, Program Budget 2018-2019	

Specific School Objectives	Activities Attached to Specific Objectives	Itinerary	Assessment Criteria: 4-Excellent 0-Failed	Resources and Budget	Institutional Goals Addressed
	To promote the <i>combined studies program</i> to undergraduate students	Ongoing each academic term	To increase the amount of our students on <i>combined studies program</i>	Salaries Administrative Staff	
	To visit and offer orientations to potential transfer students	Ongoing each year	To increase transfer student's rate	Salaries Administrative Staff	
To contribute in the execution of collaboration agreements between other universities such as Internships, Study Abroad, among others.	Establish agreements with municipalities communities	Ongoing each year	Press and social media coverage	Salaries	
	To support international study abroad and internship initiatives	Ongoing each year	Press and social media coverage	Salaries	
	To participate on institutional committees as part of the MSCHE reaccreditation process	Ongoing each academic term	To provide documents as requested	Salaries	
To continue the development of the assessment process.	To coordinate a series of meetings and workshops on Outcomes Assessment	Spring 2019	To continue the Program's Assessment Plan	Program Budget 2018-2019	
Attract external funds through grants.	To identify sources of external funding (Grants)	Ongoing each academic term	To submit the proposals	Special funding	

## **APPENDIX 5.2.3**

# Polytechnic University of Puerto Rico

## Work Plan 2018-2019 Progress Report

**Department/Office:** Architecture

**Department Head:** Carlos E. Betancourt Llambías

**Date:**

### Introduction

(Brief description of work progress)

Institutional Planning Goal	Specific Department/Office Objectives	Activities Attached to Specific Objectives	Itinerary	Assessment Criteria: 4-Excellent 0-Failed	Resources and Budget	Status and/or Level of Achievement as of August 9, 2019
	To fully meet the requirements for the NAAB's accreditation.	To participate in ACSA's events and NAAB's orientations	Fall 2018 March 2019	To integrate relevant issues of architectural education and be informed on NAAB's recommendations	Program Budget 2018-2019	Completed
		To submit NAAB's Annual Report	November 2018	Evidences are reflected in NAAB's Annual Report	Salaries	Completed
		To address concerns presented in latest <i>Visiting Team Report</i> (VTR)	FA/WI/SP 2018-19	Evidences are reflected in <i>Visiting Team Report</i> (VTR)	Salaries	Completed
		To continue acquiring the required laboratory resources, equipment and supplies	FA/WI/SP 2018-19	Complete Laboratory Supplies and Laboratory Equipment resources as planned	Program Budget 2018-2019	Completed

Institutional Planning Goal	Specific Department/Office Objectives	Activities Attached to Specific Objectives	Itinerary	Assessment Criteria: 4-Excellent 0-Failed	Resources and Budget	Status and/or Level of Achievement as of August 9, 2019
	To improve the retention and graduation rates	Mentoring students throughout the completion of the program	Ongoing each academic term		Salaries	Completed
		Group revisions with course coordinators to monitor the assessment plan	Spring 2019		Salaries	Completed
		Monitor the revised faculty evaluation form to evaluate students' feedback	Ongoing each academic term	Documented feedback from the Dean on improving teaching performance	Salaries	Completed
		To continue the development of a curricular revision.	Fall 2018	Attain a curricular revision	Salaries	Completed
		To submit a curricular revision to the PUPR's Academic Council.	Spring 2019	Increase recruitment aligned with educational trends	Salaries	Completed
		To provide flexibility in terms of pre requisites	Ongoing each academic term	Maintain a high retention rate	Salaries	Completed
	To encourage a constant interaction of academia and practice.	Improve the integration of Capstone Design courses sequence	Ongoing each academic term	Increase the rate of passing grades on Capstone Design courses	Salaries	Completed

Institutional Planning Goal	Specific Department/Office Objectives	Activities Attached to Specific Objectives	Itinerary	Assessment Criteria: 4-Excellent 0-Failed	Resources and Budget	Status and/or Level of Achievement as of August 9, 2019
		Identify and provide consultants and practice related resources for fourth and fifth year students	Ongoing each academic term	Assessment rubric analysis to determine applied knowledge	Program Budget 2018-2019	Completed
		To provide allocation of faculty by area of expertise and/or experience.	Ongoing each academic term	Faculty evaluation from students and adjunct faculty retention rate	Salaries	Not Completed
		To maintain our (AXP) Architecture Experience Program (former IDP Program)	Ongoing each Spring	Press and social media coverage	Salaries CISP-Career & Internship Services Program	Not Completed
	Develop and offer online courses (undergraduate).	To complete the first phase of online courses Design	Fall 2019	faculty development: History/Theory, Representation and Technology components	Salaries & Program Budget 2018-2019 Identify external funding	Not Completed
		Faculty Development in Distance Learning	Ongoing each academic term	faculty development	Salaries CEDUP	Completed

Institutional Planning Goal	Specific Department/Office Objectives	Activities Attached to Specific Objectives	Itinerary	Assessment Criteria: 4-Excellent 0-Failed	Resources and Budget	Status and/or Level of Achievement as of August 9, 2019
		To participate in the NCARB's 2019 Board Member/Educators Conference	Summer 2019	Sessions will discuss on architectural education and licensure (AXP)	Program Budget 2018-2019	Completed
	To expand academic offering through the development and implementation of new academic offerings.	To begin offering a Minor in Urban Planning	Fall 2018	Submitted, pending approval from the Council of Education-PR	Salaries	Completed
		To begin a proposal for a Bachelor in Landscape Architecture	Academic year 2018-2019	To submit the proposal to the Council of Education-PR	Program Budget 2018-2019	Not Completed
		To begin the development of a Master in Design Studies (M.DES)	Academic year 2018-2019	To submit the proposal to the Council of Education-PR	Program Budget 2018-2019	Not Completed
		To begin a proposal for a Master in Urban Design	Fall 2018	To submit the proposal to the Council of Education-PR	Salaries	Not Completed
		To begin offering an Associate Degree in Product Design	Fall 2018	Submitted, pending approval from the Council of Education-PR	Salaries	Completed
		To begin offering a Master in Architectural Conservation and Rehabilitation	Fall 2018	Submitted, pending approval from the Council of Education-PR	Salaries	Completed

Institutional Planning Goal	Specific Department/Office Objectives	Activities Attached to Specific Objectives	Itinerary	Assessment Criteria: 4-Excellent 0-Failed	Resources and Budget	Status and/or Level of Achievement as of August 9, 2019
	To increase the recruitment of local students and to develop outreach recruitment platforms for international students.	Pre Architecture Summer Program	Ongoing each Summer	To increase recruitment rate and to have press and social media coverage	Program Budget 2018-2019	Completed
		Visits to High Schools and Campus Tour	Ongoing each academic term	To increase recruitment rate	Salaries Dean and the Office of Promotions	Completed
		Publication of School's catalog [de]BRIEF and journal Polimorfo	[de]BRIEF 2016 Fall 2018 Polimorfo Spring 2019	Local, regional and international exposure	Program Budget 2018-2019	Completed
		To partially support the PUPR web portal as a promotion tool of the Architecture program	Ongoing each academic term	Maintain the number of applications	Salaries Web master, School's administrative staff, Program Budget 2018-2019	Completed
		To promote the <i>combined studies program</i> to undergraduate students	Ongoing each academic term	To increase the amount of our students on combined studies program	Salaries Administrative Staff	Completed
		To visit and offer orientations to potential transfer students	Ongoing each year	To increase transfer student's rate	Salaries Administrative Staff	Not Completed
	To contribute in the execution of collaboration	Establish agreements with municipalities communities	Ongoing each year	Press and social media coverage	Salaries	Not Completed

Institutional Planning Goal	Specific Department/Office Objectives	Activities Attached to Specific Objectives	Itinerary	Assessment Criteria: 4-Excellent 0-Failed	Resources and Budget	Status and/or Level of Achievement as of August 9, 2019
	agreements between other universities such as Internships, Study Abroad, among others.	To support international study abroad and internship initiatives	Ongoing each year	Press and social media coverage	Salaries	Completed
		To participate on institutional committees as part of the MSCHE reaccreditation process	Ongoing each academic term	To provide documents as requested	Salaries	Completed
	To continue the development of the assessment process	To coordinate a series of meetings and workshops on Outcomes Assessment	Spring 2019	To continue the Program's Assessment Plan	Program Budget 2018-2019	Completed
	Attract external funds through grants.	To identify sources of external funding (Grants)	Ongoing each academic term	To submit the proposals	Special funding	Not Completed

## **APPENDIX 5.3.1**



**POLYTECHNIC UNIVERSITY OF PUERTO RICO  
SAN JUAN, PUERTO RICO**

## **Institutional Student Learning Assessment (SLA) Plan**

Last Reviewed in September 2023

Prepared by

**Co-Chairs of Institutional Student Learning Assessment Committee**

A handwritten signature in blue ink, appearing to read 'Miguel A. Riestra', is written over the text.

Approved by

**Dr. Miguel Riestra  
Vice-President of Academic Affairs**

## Preface

A fundamental aspect of assessment processes is the assessment of student learning. The previous revision of the Institutional Student Learning Assessment (SLA) Plan was performed in 2015 and since then the focus has been placed on refining and standardizing the process of assessing the institutional learning goals (ILOs). The result of these efforts is reflected in this 2023 edition of the PUPR SLA Plan.

As a decentralized system, each academic program at PUPR has its own student learning assessment plan in place, in compliance with program-specific accreditation agencies, but also in alignment with the institutional guidelines compiled in this document.

PUPR SLA institutional efforts have been channeled since 2013 through the *Institutional Student Learning Assessment Committee*, a body that gathers the assessment coordinators/representatives of all the academic areas including general education (Math and Sciences and Socio-humanistic Studies). This Committee's main role is to provide support to all Deanships/Schools in the systematic implementation of learning assessment processes and continuous improvement efforts for the institutional learning goals (ILOs) and the program/area learning outcomes (SOs).

## Table of Contents

Preface .....	ii
Introduction .....	1
Section 1 - The Student Learning Assessment – Background, Plan, and Methodology .....	2
Plan and Methodology.....	4
Section 2 - The Student Learning Assessment Process at PUPR – Information and Documentation.....	6
<b>1) Develop clearly articulated key learning outcomes at all levels</b> .....	6
<b>2) Design courses, programs, and experiences that provide learning opportunities to achieve learning outcomes.</b> .....	9
<b>3) Assessing student achievement of the learning outcomes</b> .....	11
<b>4) Use results of assessment to improve teaching and learning</b> .....	13
<b>5) Dissemination of Student Learning Assessment Results</b> .....	15
<b>6) Assessment of the Effectiveness of the Student Learning Assessment Processes at PUPR</b> .....	16
Section 3 - Assessment Plan for the Institutional Learning Goals / Outcomes (ILOs) .....	16
Rubrics and Performance Indicators to Assess the Institutional Learning Goals / Outcomes (ILOs) .....	22
Sample Template of a Standardize Excel Workbook Used by the Academic Areas to Report the Assessment Results of an Institutional Learning Goal/Outcome (ILO).....	35
References .....	46
Appendices.....	47
Appendix A. 2023 Published PUPR Mission, Vision, Goals, Strategic Goals, and Institutional Student Learning Assessment Goals .....	47
Appendix B. Institutional Learning Goals/Outcomes (ILOs) .....	51
<b>Appendix B.1. 2023 Institutional Learning Goals/Outcomes (ILOs), Ratification Process, and President’s Letter</b> .....	51
<b>Appendix B.2. 2014 Institutional Learning Goals/Outcomes, and President’s Letter - Historic Information</b> .....	59
Appendix C. Templates 2022. Program Student Learning Assessment Plan for Undergraduate Programs and for Graduate School. ....	61
<b>Appendix C.1. Template 2022. Program Student Learning Assessment Plan for Undergraduate Programs</b> .....	61
<b>Appendix C.2. Template 2022. Student Learning Assessment Plan for Graduate School.</b> .....	74

Appendix D. Examples of Summarized Assessment Reports to Identify Attainment of the Institutional Learning Goals (ILOs).....	90
<b>Appendix D.1. Level of attainment of the program-level learning outcomes per program (2013).</b>	<b>91</b>
<b>Appendix D.2. 2016-2018 ILOs Level of Attainment using Rubrics (pilot report).</b> .....	<b>95</b>
<b>Appendix D.3. Summary for Engineering based on the 2019 ABET Self-Study Reports.</b> .....	<b>99</b>
Appendix E. Adapted MSCHE Rubric for Evaluating Institutional Student Learning Assessment Processes.....	100
<b>Appendix E.1. Historic Results of the Self-Evaluation of the PUPR Student Learning Assessment Processes using the Adapted Version of the MSCHE Rubric for this Purpose</b> .....	<b>101</b>
Appendix F. Program Assessment Coordinator Tasks and Responsibilities .....	103
Appendix G. Program/Areas Student Learning Assessment Plans Addendum - Separate Document(s) .....	107

## List of Tables

<b>Table 1.</b> Mapping of Institutional Goals and School/Area Learning Outcomes (2023).....	8
<b>Table 2.</b> Assessment Tools/Instruments at Course, Program/Area, and Institutional Levels. Threshold, Frequency and Source of Data Collection.....	18
<b>Table 3.</b> Data Collection Plan for the Institutional Goals (ILOs) for a 6-year period (Year 1 = Academic Year 2023-2024).....	19
<b>Table 4.</b> Cycle of Activity for Each Institutional Learning Goal (ILO) Over a 6-Year Period.....	21

## List of Figures

<b>Figure 1.</b> The Student Learning Assessment Cycle .....	2
<b>Figure 2.</b> Timeline - Background of Student Learning Assessment at PUPR (2023) .....	3

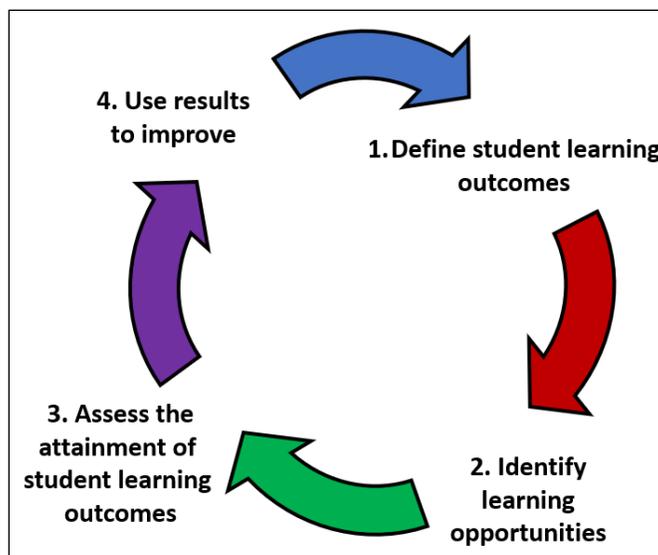
## Introduction

The diverse Accreditation Agencies for Higher Education Programs in the United States of America establish standards of accreditation with the intention of promoting, nourishing, and fostering the institutional progress, and ensuring a quality education. The accreditation processes emphasize the importance of self-study and the evaluation by peers as part of the activities stimulating the growth and development of the institution. A fundamental aspect in accreditation standards for a Higher Education Institution is the assessment of student learning.

As stated in standard V of the MSCHE Standards of Accreditation and Requirements of Affiliation (2015), “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.” The MSCHE Standard III adds that the institution “offers a curriculum designed so that students acquire and demonstrate essential skills including at least oral and written communication, scientific and quantitative reasoning, critical analysis and reasoning, technological competency, and information literacy. Consistent with mission, the general education program also includes the study of values, ethics, and diverse perspectives”.

Considering Higher Education standards, the Assessment of Student Learning has the purpose to demonstrate “what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills, and behaviors that students acquire as they progress through the program.” (ABET, 2021) This is accomplished at PUPR through a cyclic process that, in general terms, must comply with the following four stages (See *Figure 1*):

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



*Figure 1. The Student Learning Assessment Cycle*

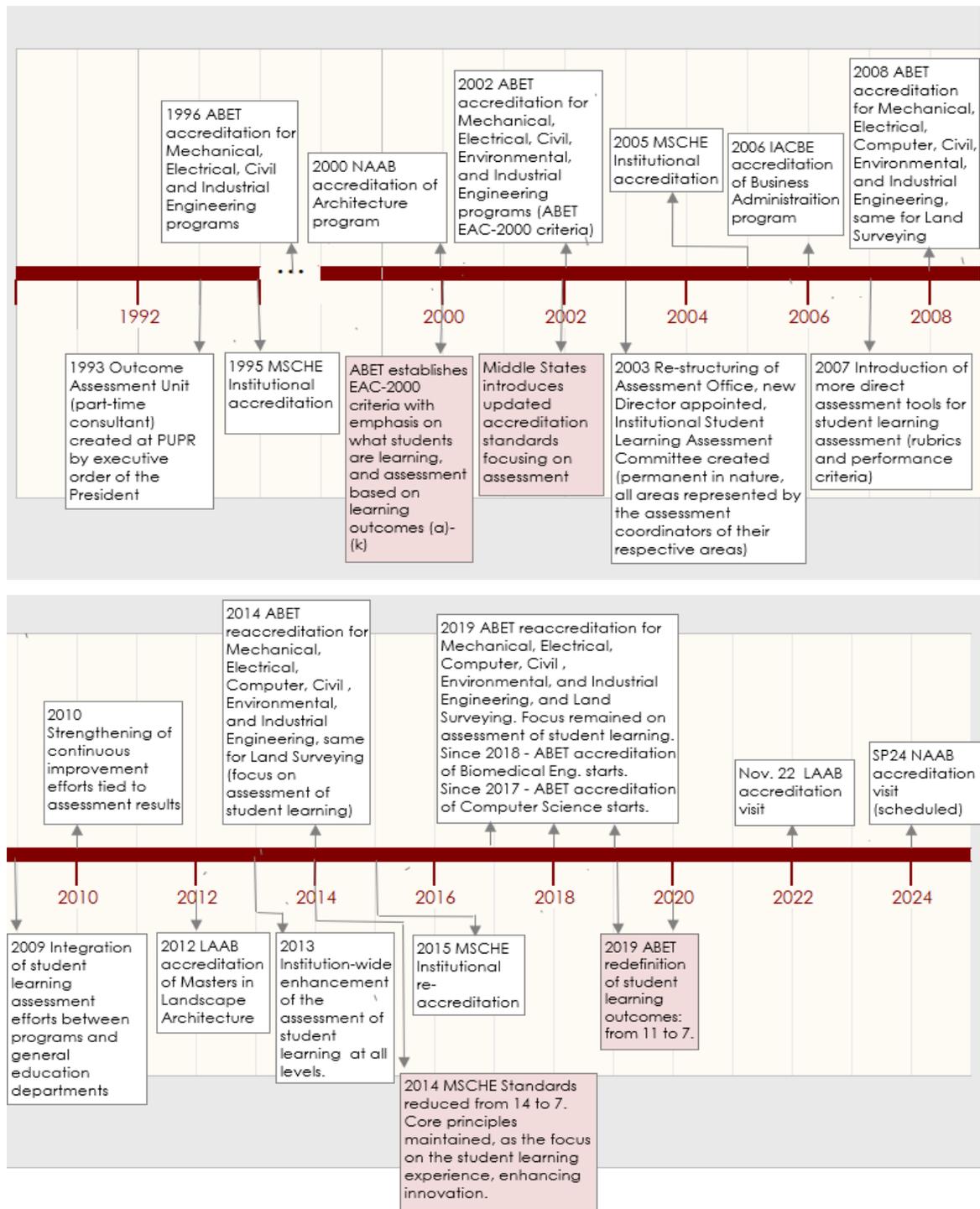
This manual provides the basic/minimum guidelines that the academic programs/areas at the Polytechnic University of PR are expected to comply in terms of the assessment of student learning for the program/area outcomes (SOs) and the institutional learning goals (ILOs).

## **Section 1 - The Student Learning Assessment - Background, Plan, and Methodology**

**Background.** At PUPR, the assessment culture has been gradually established for the last 28 years. In year 2000, PUPR started focusing assessment efforts on student learning.

All academic programs at the Polytechnic University of Puerto Rico (PUPR) 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 1995. All bachelor programs at the School of Engineering 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. More detailed

licensing and accreditation information can be found in the Institutional web page, catalog, and other official documentation.



*Figure 2. Timeline - Background of Student Learning Assessment at PUPR (2023)*

## Plan and Methodology.

PUPR 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). These processes are both aligned and in compliance with institutional assessment guidelines which are compiled in this document.

The School of Arts, Sciences, and Education represents the general education component and includes two departments: Math and Sciences and Socio-humanistic Studies. Like the other academic departments, these areas also have clearly defined learning outcomes as well as an assessment plan and process in place.

At the program/area level, the Dean of the corresponding 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. They also assist 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. These instruments provide support for assessment to the academic and administrative areas.

The provost created the *Institutional Student Learning Assessment Committee* and, in 2013, delegated its guidance to three co-chairs who are also faculty members in charge of their respective program assessment plans (See Regulations of the Institutional Student Learning Assessment Committee, 2023). The current composition of the Committee brings together the assessment coordinators/representatives of all programs/academic areas of the Institution. It also includes members from the Florida campuses and supporting areas (Socio-humanistic Studies, Mathematics

and Sciences). This is an effective way to integrate institution-wide efforts, provide general guidelines and establish minimum assessment of student learning requirements, define institutional learning goals (ILOs) which are aligned with program/area learning outcomes (SOs), align learning assessment processes, share assessment findings, and disseminate assessment results. This Committee also facilitates the integration of institution-wide student learning assessment efforts. The current focus of the Committee is directed toward processes enhancement, particularly the refinement, and standardization of the process to evaluate the attainment of the institutional learning goals (ILOs). Through this body, all programs and supporting areas (Socio-humanistic Studies, Mathematics and Sciences) at PUPR are guided to develop aligned assessment processes for the program learning outcomes (SOs) and the institutional learning goals (ILOs).

The main objectives of the *Institutional Student Learning Assessment Committee* are (See the Committee Regulations):

1. to establish general guidelines for student learning assessment,
2. to assure that the areas/programs assessment plans comply with the minimum requirements established in the general institutional guidelines,
3. to oversee the alignment of learning outcomes at the institutional, program, and course level, and to the institutional mission and goals,
4. to orient and support areas/programs in the development and implementation of assessment strategies,
5. to facilitate the integration of assessment processes of related educational areas and to standardize processes as much as possible,
6. to assist academic programs/areas with assessment-driven continuous improvement activities,
7. to oversee how student learning assessment findings are used to improve programs and student services,
8. to contribute to the dissemination of the assessment of student learning results,
9. to share assessment best practices and promote continuing education.

In general, the Institution follows the four stages assessment cycle depicted in *Figure 1*. The first two stages (Stage 1: Define/Review the Learning Outcomes, and Stage 2: Identify the Learning Opportunities) have been established and are not expected to change drastically over a short-term period; they are, however, reviewed periodically, as considered appropriate, on the following basis:

1. findings of the assessment process itself,
2. changes in accreditation requirements,
3. review of PUPR mission statement,
4. constituencies requests/needs,
5. in the academic programs, due to updates in the Program Educational Objectives of the academic program,

Stages 3 and 4 (Stage 3: Assess the Attainment of the Student Learning Outcomes, and Step 4: Use of Results in the Continuous Improvement Process), are performed on cycles of one (1) to three (3) years, according to the department/area/program specific assessment plan (See *Program Student Learning Assessment Plan 2022 Template* on *Appendix C*). For the institutional learning outcomes, there is a 6-year plan in place that defines two-3 years cycles (See *Table 3* in Section 3).

## **Section 2 - The Student Learning Assessment Process at PUPR – Information and Documentation**

A summary that describes the state and general PUPR guidelines for each of the four steps of the assessment cycle presented in *Figure 1* is included next.

### ***1) Develop clearly articulated key learning outcomes at all levels***

PUPR currently has clearly articulated expected student learning outcomes at all levels:

### ***a. Institutional level***

There is currently a set of eight (8) approved institutional learning goals/outcomes (ILOs) that were developed in alignment with the PUPR mission, higher education standards and general education requirements. These were formulated and approved in a plenary meeting by the ***Institutional Student Learning Assessment Committee*** in 2014 after a thorough evaluation of the assessment processes institution wide. The institutional learning goals/outcomes (ILOs) were then endorsed by the President and disseminated in a letter to the academic community (See Appendix B). In 2023, these goals went through a ratification process that implied a close review and approval by the ***Institutional Student Learning Assessment Committee*** members, and then approval by the VP for Academic Affairs and the PUPR President (See ***Appendix B.1***). These goals/outcomes (ILOs) are published in the PUPR web page and other means.

### ***b. Program level***

Each academic program has a set of program goals defined and stated in terms of student learning outcomes (SOs) aligned with the institutional learning goals (ILOs) and the PUPR mission. Using the ***Program Student Learning Assessment Plan 2022 Template*** (See ***Appendix C***) all areas present documented evidence that the program outcomes (SOs) are aligned with the institutional learning goals (ILOs).

For graduate programs, a set of general goals at graduate level has also been defined and included in the ***Graduate School Student Learning Assessment Plan 2022 Template*** (See ***Appendix C.2***). Individual graduate programs might add program-specific learning outcomes, as considered appropriate.

The program learning outcomes (SOs) are made available to current and prospective students through the PUPR Catalog and web page, bulletin boards, and syllabi.

### c. Course level

Each syllabus at the institution must include a section that clearly states the course objectives or expected learning outcomes. It is recommended that the syllabus contain a section indicating the course relationship with the program-level learning outcomes (SOs) which are strongly supported by it.

### *Relationship between the institutional learning goals (ILOs) and the program/area outcomes (SOs)*

**Table 1** presents the relationship of the institutional learning goals (ILOs), and the school or area learning outcomes (SOs). It summarizes, per School, the information contained in the *Program/Areas Student Learning Assessment Plans* (See *Template* on *Appendix G*). The library is also included due to its strong contribution to the development of essential skills, especially information literacy. **Table 1** is a summarized version of the mapping presented by the academic areas' assessment coordinators in the Program Student Learning Assessment Plan.

**Table 1. Mapping of Institutional Goals and School/Area Learning Outcomes (2023)**

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

The School of Arts, Sciences and Education has two academic units/areas that constitute the general education component of the curricula:

- Socio-Humanistic Studies, and
- Mathematics and Sciences.

These units/areas support all undergraduate programs in developing the general education abilities that will be needed, and further enhanced, later in the academic programs leading to a degree. There is a link between the assessment plans for these areas and those of the academic programs supported. Both areas complement developing the skills and demonstrating the attainment of the learning outcomes at program/area-level (SOs) and institutional level (ILOs). For example, the Socio-Humanistic Studies Department courses have a strong contribution to the development of several professional skills, such as Social and Ethical Responsibility, Lifelong Learning, and Information Literacy, and the Mathematics and Sciences Department contribute to the development of scientific and quantitative reasoning. Similarly, the Library and the Information Literacy Program provide support to the development of this essential skill, among others.

A robust link/alignment has been established between the supporting academic units/areas assessment plans and those of the degree programs. In *Table 1* one can appreciate how all areas contribute valuable support/evidence for assessment of the institutional learning goals (ILOs).

## ***2) Design courses, programs, and experiences that provide learning opportunities to achieve learning outcomes.***

For the design of courses, programs, and experiences that provide learning opportunities to achieve the learning outcomes:

- PUPR courses, programs, and experiences are 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, <https://www.pupr.edu/wp-content/uploads/2021/05/Academic-Program->

Review-Policy). For new courses or programs and other relevant curricular changes, the Academic Council gets involved in evaluating and approving these. (Academic Council Regulations 2016, Article II and Section 8.4).

- The design of courses, programs, and experiences are performed at the academic departments, are centered on the student and seek to reach their full potential. This process considers alignment and support to the PUPR mission and strategic goals, 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/senior design projects. In addition, students are encouraged to participate in enriching experiences such as internships, COOP, undergraduate research, competitions, and others.
- Curricula are designed with a pre-requisite and co-requisite structure that guarantees gradual growth and mastering of the student's skills and a culminating experience that prepares them for professional practice. This culminating experience is based upon previously acquired knowledge and skills and integrates technical and non-technical competencies gained throughout the program of study. This experience allows the evaluation of the level of attainment of the student outcomes at the time of graduation.
- The academic areas have a documented assessment plan and process in place. These are consistent with the general guidelines included in this document. It considers program-specific accreditation requirements (e.g., ABET, NAAB, LAAB, IACBE). 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. (See the *Program Student Learning Assessment Plan 2022 Template* in *Appendix C*)

Each academic department and associated faculty are responsible for the development and identification of appropriate learning opportunities to demonstrate the attainment of the learning outcomes at the required taxonomic level, as well as for the design of instruments for the proper assessment of those learning outcomes.

### ***3) Assessing student achievement of the 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 web page Library Services Information Literacy <https://www.pupr.edu/library/servicios/>). The diverse course and program assessment tools and instruments are documented on each area's student learning assessment plan. (See the *Program Student Learning Assessment Plan 2022 Template* in *Appendix C*).

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. As culminating experiences, the Capstone project courses, the Graduate Project EXPO poster session, and the architectural design jury evaluations, 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 of student learning at the program/component level is mainly based on direct assessment measures obtained from course level assessment. According to the plan prepared by the assessment coordinator of the area/program, the faculty collects assessment data in strategic courses using the most appropriate means (e.g., exam questions, lab. reports, assignments, oral presentations, and projects). Then, the faculty prepares course summative reports based on a rubric and its 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), for which their assessment is accomplished through the monitoring of related outcomes at the program level, and the mapping with their associated performance indicators.

The assessment results are integrated and processed in meaningful ways by the assessment coordinator of the area/program (See *Assessment Coordinator Roles and Responsibilities* in *Appendix F*). Upon completion of the above, these results are presented to the faculty members to inform departmental decisions and provide insight for continuous improvement efforts.

With information collected in strategic courses identified in the assessment plan as key for assessing the institutional learning goals (ILOs), the program/area assessment coordinator also prepares and delivers an assessment report for the ILOs to the co-chairs of the *Institutional Student Learning Assessment Committee* (See *Program Student Learning Assessment Plans* in *Appendix G*). Then, the co-chairs integrate and analyze these results and disseminate them to the Institution.

Since 2015 the *Institutional Student Learning Assessment Committee* has focused on strengthening and unifying the assessment and evaluation of the attainment of the institutional learning goals (ILOs) resulting in refined assessment practices. (See *Sample Excel Template to Report Assessment Results* for an ILO in *Section 3*). After the definition of a rubric and a set of performance indicators for each institutional learning goal (ILO) (See *Section 3*), in 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 area, its analysis and the identification of continuous improvement efforts implemented in the academic

areas. It also supports the preparation of institutional reports and the identification of actions that must be carried out at the institutional level.

The current assessment plan for the institutional learning goals (ILOs) is summarized in **Table 2, Table 3 and Table 4 of Section 3**. It includes the assessment instruments/tools, the 6-year cycle data collection plan (comprised of two 3-years cycles) approved by **Institutional Student Learning Assessment Committee** in the January 20, 2023 meeting (**Table 3**), and the planned 6-year period cycle of activity of each institutional learning goal (ILO) (**Table 4**). Also, the rubrics and performance indicators for the assessment of the institutional learning goals/outcomes (ILOs).

Leveraging the annual reports prepared by the Office of Planning and Development, and the Institutional Research Office, the **Institutional Student Learning Assessment Committee** performs a longitudinal analysis of the annual results of the Exit Interview Survey and the Satisfaction Survey (See Institutional Exit Interview, Longitudinal Analysis of the 2013 to 2022 Exit Interview Survey Results in **Appendix H**). These analyses evaluate trends in different institutional aspects that impact educational effectiveness. The results of these longitudinal analyses are disseminated and 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. These reports are available for use in assessment. (See Office of Institutional Research and Assessment PUPR web page <https://www.pupr.edu/institutionalresearch/>).

#### ***4) Use results of assessment to improve teaching and learning***

The results of the assessment of student learning are used in the continuous improvement of academic areas/programs. 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 they are successful or not. Deans conduct regular meetings with the department heads and related

personnel to address and define strategies for all matters concerning the school's academic programs.

As a result of the assessment process itself, a need for a review/change in the learning outcomes or curricula, the learning opportunities and/or the assessment instruments might arise. This may include:

- 1) Review of the course activity/instrument to be used for assessment.
- 2) Strengthen, refine, or increase the learning opportunities leading to the attainment of the learning outcomes.
- 3) Develop or review the rubrics and performance criteria/indicators to assess the learning outcomes.
- 4) Evaluation of the assessment methods and practices.
- 5) Incorporate additional direct or indirect methods of assessment.

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 of 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, which are distributed among all interested parties prior to the next *Committee* meeting for their approval.

Based on the assessment results multiple actions have been implemented in the past, 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)

*Appendix D* presents examples of summarized reports evaluating the level of attainment of the institutional learning goals (ILOs), based on the information provided by the academic areas. There are three types of reports:

- 1) Level of attainment of the program-level learning outcomes per program (2013).
- 2) 2016-2018 ILOs level of attainment using rubrics (pilot report while implementing rubrics for the first four institutional learning goals/outcomes (ILOs))
- 3) A summary based on the 2019 ABET self-study reports.

Changes are expected in the format of the institutional report due to the newly implemented standardized Excel Worksheets for the ILOs developed in 2022.

#### *5) Dissemination of Student Learning Assessment Results*

The dissemination of student learning assessment results is conducted in two directions:

**a. Constituencies.** Forums in which student learning assessment results are currently shared include the academic unit staff, industry representatives, school deans, *Institutional Student Learning Assessment Committee*, students and, in some programs, representatives from professional societies.

**b. Institution Leadership.** The student learning assessment results from the programs are communicated to the institution leadership through the Department Head, and the corresponding Dean; this, in turn, aids in the allotment of resources required to implement improvement strategies identified as a result of the assessment findings.

Some areas have established a systematic mechanism to share the student learning assessment results; others, however, have done it in a more informal way. One of the purposes of the *Institutional Student Learning Assessment Committee* is to provide a forum for the dissemination of the student learning assessment results. The standardization of the forms to report the

assessment of the ILOs seeks to facilitate the preparation of annual reports to disseminate to all stakeholders.

The impact of student learning assessment in budget and resource allocation decisions is currently evidenced through the annual work plans prepared by the academic units, which are linked to the PUPR strategic goals.

#### ***6) Assessment of the Effectiveness of the Student Learning Assessment Processes at PUPR***

PUPR uses an adapted version of the MSCHE 2008 “rubric for evaluating the institutional student learning assessment processes” to assess the effectiveness of the assessment processes at the institution based on thirteen (13) performance indicators (See *Appendix E*). This survey has been done 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 with the purpose to implement actions to strengthen the aspects that require it. This instrument is especially useful during challenging times to evaluate the impact that internal and external (such as natural phenomenon -hurricanes and earthquakes-, and pandemics) challenges have on the assessment processes. It also provides evidence to be shared with stakeholders.

### **Section 3 - Assessment Plan for the Institutional Learning Goals / Outcomes (ILOs)**

In Section 2, the specifics of the structure of the assessment processes at PUPR, and the responsible parties, were explained. In this section, the current assessment plan for the institutional learning goals/outcomes (ILOs) is summarized. It includes the following tables:

**Table 2** contains the assessment tools/instruments used at course, program/area, and institutional levels, the threshold/goal for each, and the frequency and source of data collection. As explained before in this manual, PUPR has a decentralized assessment process and the institutional learning goals/outcomes (ILOs) are evaluated through the scaling of the assessment information gathered

by the academic areas/programs for the program outcomes. Table 2 allows to appreciate how this scaling occurs from the course and program levels to the institutional level.

**Table 3** presents the 6-year cycle data collection plan (comprised of two 3-years cycles) approved by *Institutional Student Learning Assessment Committee* in the January 20, 2023 meeting. During the same meeting, the Committee decided that year 1 for this data collection plan is the academic year 2023-2024.

**Table 4** illustrates a recommended plan for the 6-year period cycle of activity of each institutional learning goal/outcome (ILO)

After **Table 4** the set of rubric and performance indicators approved by the *Institutional Student Learning Assessment Committee* for each of the eight (8) institutional learning goals / outcomes (ILOs) is included. These are followed by a sample template of the standardized Excel workbook created by the Institutional Student Learning Assessment co-chairs and approved by the Committee members in 2022. The academic areas are using these forms for reporting their assessment results for the institutional learning goals/outcomes (ILOs).

*Table 2. Assessment Tools/Instruments at Course, Program/Area, and Institutional Levels. Threshold, Frequency and Source of Data Collection*

<b>Tools</b>	<b>Data Collection Plan Frequency</b>	<b>Data Analysis and Improvement Actions</b>	<b>Source</b>	<b>Goal/Target/Threshold</b>
<b>Course Level</b>				
Written exams	-Every time the course is offered to evaluate the attainment of the course's objectives.		Faculty teaching the course	Depends on the course
Oral Presentations				
Projects				
Laboratory Reports				
Assignments				
Faculty assessment reports based on the program outcomes rubrics	-In assigned courses, according to the timetable in the program assessment plan. -For measuring the level of attainment of the program learning outcomes the course supports.		Faculty teaching the course	Depends on the academic area. Typically, 70% or more of students are at levels 3+4 on the rubrics scale. This level might be higher for the culminating course.
<b>Program Level</b>				
Program outcomes summary report for a cycle.	-At the end of each assessment cycle based on the program assessment plan (cycle length varies by program). -Integration of the course assessment reports based on the program outcomes rubrics. -According to the timetable for closing the loop. -All learning outcomes are evaluated in a cycle.	At the end of each assessment cycle (closing the loop).	The faculty provides a copy of the assessment reports to the assessment coordinator.	Depends on the academic area.
Exit Survey and/or Exit Interview.	Yearly	At the end of each academic year.	Institutional instrument or departmental version.	Depends on the academic area. Typically, 80% are at levels of satisfied or fully satisfied levels.
<b>Institutional Level</b>				
Institutional learning goals (ILOs) summary report for a cycle.	-At the end of each assessment cycle based on the institutional student learning assessment plan (all learning goals are evaluated in a 3-year period).	At the end of each assessment cycle (closing the loop).	The assessment coordinator of each academic area prepares an assessment report for each ILO, based on the alignment between	70% at levels 3 or 4 in rubric.

Tools	Data Collection Plan Frequency	Data Analysis and Improvement Actions	Source	Goal/Target/Threshold
	-Integration of the academic areas assessment reports for the ILOs. -According to the timetable for closing the loop for the ILOs. -All learning outcomes are evaluated in a cycle.		the program outcomes rubric and performance indicators and the institutional learning goals rubrics and performance indicators.	
Exit Interview	Yearly	At the end of each academic year.	Institutional.	90% at levels of satisfied or fully satisfied levels.

*Table 3. Data Collection Plan for the Institutional Goals (ILOs) for a 6-year period (Year 1 = Academic Year 2023-2024)*

Institutional Learning Goal/Outcome (ILO)	Where direct assessment data is collected**			Assessment Instrument*		Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6
	1	2	3	1	2						
<b>ILO 1. Effective Communication.</b> <i>Express ideas in oral, written, and graphic modes.</i>	X		X	X	X	X			X		
<b>ILO 2. Scientific and Quantitative Reasoning.</b> <i>Apply scientific and mathematical reasoning to the solution of problems.</i>		X	X	X	X		X			X	
<b>ILO 3. Critical Thinking.</b> <i>Interpret and question evidence, statements, and graphics, to draw justified, educated, reasonable, and truthful conclusions.</i>	X	X	X	X	X	X			X		
<b>ILO 4. Technological Competence.</b> <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			X	

Institutional Learning Goal/Outcome (ILO)	Where direct assessment data is collected**			Assessment Instrument*		Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6
	1	2	3	1	2						
<b>ILO 5. Information Literacy.</b> <i>Acknowledge, locate, and evaluate the information needed to accomplish a specific purpose.</i>	X		X	X	X			X			X
<b>ILO 6. Lifelong Learning.</b> <i>Recognize the need to engage in lifelong learning.</i>	X		X	X	X			X			X
<b>ILO 7. Ethical and Social Responsibility.</b> <i>Be aware of ethical, professional, and social responsibilities.</i>	X		X	X	X			X			X
<b>ILO 8. Teamwork.</b> <i>Contribute to achieving team goals.</i>	X	X	X	X	X		X			X	

**\*\*Legend:**  
Where **direct** assessment data is collected  
 1) Socio-Humanistic Studies strategic course(s) as per Area SLA Plan  
 2) Math and Sciences strategic course(s) as per Area SLA Plan  
 3) Academic Program Intermediate course(s) and/or culminating course (e.g. Capstone) as per Program SLA Plan

**\*Legend:**  
Assessment Instrument:  
 1) Program/Area Rubric  
 2) ILO Rubric

Threshold for institutional learning outcomes: >= 70% at levels 3 and 4 in rubric

**Table 4.** *Cycle of Activity for Each Institutional Learning Goal (ILO) Over a 6-Year Period.*

	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6
Review the performance indicators that define the outcome	X			X		
Review the map of educational strategies related to performance indicators		X			X	
Review mapping and identify where data will be collected		X			X	
Develop and/or review assessment methods used to assess performance indicators		X			X	
Collect data (See plan in <i>Table 3</i> )			X			X
Evaluate assessment data including processes				X		
Report findings				X		
Take action, when necessary				X		

## **Rubrics and Performance Indicators to Assess the Institutional Learning Goals / Outcomes (ILOs)**

(Next page)

## ILO 1. Effective Communication. Express ideas in oral, **written**, and graphic modes.

### WRITTEN COMMUNICATION VALUE RUBRIC

for more information, please contact [value@aacu.org](mailto:value@aacu.org)



#### Definition

Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

*Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.*

	Capstone 4	Milestones		Benchmark 1
		3	2	
<b>Context of and Purpose for Writing</b> <i>Includes considerations of audience, purpose, and the circumstances surrounding the writing task(s).</i>	Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).	Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions).	Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).
<b>Content Development</b>	Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.	Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.	Uses appropriate and relevant content to develop and explore ideas through most of the work.	Uses appropriate and relevant content to develop simple ideas in some parts of the work.
<b>Genre and Disciplinary Conventions</b> <i>Formal and informal rules inherent in the expectations for writing in particular forms and/or academic fields (please see glossary).</i>	Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task (s) including organization, content, presentation, formatting, and stylistic choices	Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices	Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation	Attempts to use a consistent system for basic organization and presentation.
<b>Sources and Evidence</b>	Demonstrates skillful use of high-quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing	Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing.	Demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing.	Demonstrates an attempt to use sources to support ideas in the writing.
<b>Control of Syntax and Mechanics</b>	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.	Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.	Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.	Uses language that sometimes impedes meaning because of errors in usage.

## ILO 1. Effective Communication. Express ideas in **oral**, written, and graphic modes.

### ORAL COMMUNICATION VALUE RUBRIC

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#### Definition

Oral communication is a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.

*Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.*

	Capstone 4	Milestones		Benchmark 1
		3	2	
<b>Organization</b>	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable and is skillful and makes the content of the presentation cohesive.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable within the presentation.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is intermittently observable within the presentation.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is not observable within the presentation.
<b>Language</b>	Language choices are imaginative, memorable, and compelling, and enhance the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are thoughtful and generally support the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are mundane and commonplace and partially support the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are unclear and minimally support the effectiveness of the presentation. Language in presentation is not appropriate to audience.
<b>Delivery</b>	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation compelling, and speaker appears polished and confident.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation interesting, and speaker appears comfortable.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation understandable, and speaker appears tentative.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) detract from the understandability of the presentation, and speaker appears uncomfortable.
<b>Supporting Material</b>	A variety of types of supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that significantly supports the presentation or establishes the presenter's credibility/authority on the topic.	Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that generally supports the presentation or establishes the presenter's credibility/authority on the topic.	Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that partially supports the presentation or establishes the presenter's credibility/authority on the topic.	Insufficient supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make reference to information or analysis that minimally supports the presentation or establishes the presenter's credibility/authority on the topic.
<b>Central Message</b>	Central message is compelling (precisely stated, appropriately repeated, memorable, and strongly supported.)	Central message is clear and consistent with the supporting material.	Central message is basically understandable but is not often repeated and is not memorable.	Central message can be deduced, but is not explicitly stated in the presentation.

**ILO 2. Scientific and Quantitative Reasoning.** *Apply scientific and mathematical reasoning to the solution of problems.*

<b>ILO 2. Scientific and Quantitative Reasoning Rubric – Feb 2021</b>				
	<b>Capstone 4</b>	<b>Milestones</b>		<b>Benchmark 1</b>
		<b>3</b>	<b>2</b>	
<b>1. Problem Statement</b>	Demonstrates the ability to construct a clear and insightful problem statement with evidence of all relevant contextual factors.	Demonstrates the ability to construct a problem statement with evidence of the most relevant contextual factors, and the problem statement is adequately detailed.	Demonstrates the ability to construct a problem statement with evidence of relevant contextual factors, but the problem statement is superficial.	Demonstrates a limited ability in identifying a problem statement or related contextual factors.
<b>2. Problem Formulation / Representation</b> <i>Ability to convert relevant information, considering constraints/ contextual factors, into various mathematical forms (e.g., equations, graphs, diagrams, tables, words)</i>	Skillfully converts relevant information into an insightful mathematical portrayal in a way that contributes to a further or deeper understanding.	Competently converts relevant information into an appropriate and desired mathematical portrayal.	Completes the conversion of information but the resulting mathematical portrayal is only partially appropriate or accurate.	Completes the conversion of information but the resulting mathematical portrayal is inappropriate or inaccurate.
<b>3. Calculation</b> <i>Solve problems using quantitative tools/ methods</i>	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem. Calculations are also presented elegantly (clearly, concisely, etc.)	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem.	Calculations attempted are either unsuccessful or represent only a portion of the calculations required to comprehensively solve the problem.	Calculations are attempted but are both unsuccessful and are not comprehensive.
<b>4. Analysis and Conclusion</b> <i>Ability to make judgments and draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis</i>	Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for ordinary judgments, drawing plausible conclusions from this work.	Uses the quantitative analysis of data as the basis for tentative, limited judgments, although is hesitant or uncertain about drawing conclusions from this work.

**ILO 3. Critical Thinking.** *Interpret and question evidence, statements, and graphics, to draw justified, educated, reasonable, and truthful conclusions.*

<b>ILO 3. Critical Thinking</b>				
<b>Performance Indicator</b>	<b>Capstone 4</b>	<b>Milestone 3</b>	<b>Milestone 2</b>	<b>Benchmark 1</b>
<b>1. Explanation of issues</b>  <i>PC E (Peter Facione Holistic Rubric)</i>	Issue/problem to be considered critically is stated clearly and described comprehensively, delivering all relevant information necessary for full understanding.  Justifies key results and procedures, explains assumptions and reasons.	Issue/problem to be considered critically is stated, described, and clarified so that understanding is not seriously impeded by omissions.  Justifies some results or procedures, explains reasons	Issue/problem to be considered critically is stated but description leaves some terms undefined, ambiguities unexplored, boundaries undetermined, and/or backgrounds unknown.  Justifies few results or procedures, seldom explains reasons	Issue/problem to be considered critically is stated without clarification or description.  Does not justify results or procedures, nor explain reasons.
<b>2. Evidence</b>  <i>Selecting and using the information to investigate a point of view or conclusion</i>  <i>PC A, F (Peter Facione Holistic Rubric)</i>	Information is taken from source(s) with enough interpretation/evaluation to develop a comprehensive analysis or synthesis. Viewpoints of experts are questioned thoroughly.  <b>Consistently</b> Accurately interprets evidence, statements, graphics, questions, etc.	Information is taken from source(s) with enough interpretation/evaluation to develop a coherent analysis or synthesis. Viewpoints of experts are subject to questioning.  Accurately interprets evidence, statements, graphics, questions, etc.	Information is taken from source(s) with some interpretation/evaluation, but not enough to develop a coherent analysis or synthesis. Viewpoints of experts are taken as mostly fact, with little questioning.  Misinterprets evidence, statements, graphics, questions, etc.	Information is taken from source(s) without any interpretation/evaluation. Viewpoints of experts are taken as fact, without question.  Offers biased interpretations of evidence, statements, graphics, questions, information, or the points of view of others.
<b>3. Influence of context and assumptions</b>  <i>PC B (Peter Facione Holistic Rubric)</i>	Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.  Identifies the most important arguments (reasons and claims) pro and con	Identifies own and others' assumptions and several relevant contexts when presenting a position.  Identifies relevant arguments (reasons and claims) pro and con.	Questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of others' assumptions than one's own (or vice versa).  Fails to identify strong, relevant counterarguments	Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position.  Fails to identify or hastily dismiss strong, relevant counterarguments.

Performance Indicator	Capstone 4	Milestone 3	Milestone 2	Benchmark 1
<b>4. Student's position</b>  <b>(perspective, thesis/hypothesis)</b>  <i>PCC (Peter Facione Holistic Rubric)</i>	<p>Specific position (perspective, thesis/hypothesis) is imaginative, taking into account the complexities of an issue. Limits of position (perspective, thesis/hypothesis) are acknowledged. Others' points of view are synthesized within position (perspective, thesis/hypothesis).</p> <p>Thoughtfully analyzes and evaluates major alternative points of view.</p>	<p>Specific position (perspective, thesis/hypothesis) takes into account the complexities of an issue. Others' points of view are acknowledged within position (perspective, thesis/hypothesis).</p> <p>Offers analyses and evaluations of obvious alternative points of view.</p>	<p>Specific position (perspective, thesis/hypothesis) acknowledges different sides of an issue.</p> <p>Ignores or superficially evaluates obvious alternative points of view.</p>	<p>Specific position (perspective, thesis/hypothesis) is stated, but is simplistic and obvious.</p> <p>Ignores or superficially evaluates obvious alternative points of view.</p>
<b>5. Conclusions and related outcomes</b>  <b>(implications and consequences)</b>  <i>PCD (Peter Facione Holistic Rubric)</i>	<p>Conclusions and related outcomes (consequences and implications) are logical and reflect student's informed evaluation and ability to place evidence and perspectives discussed in priority order.</p> <p>Draws warranted, judicious, non-fallacious conclusions.</p>	<p>Conclusion is logically tied to a range of information, including opposing viewpoints; related outcomes (consequences and implications) are identified clearly.</p> <p>Draws warranted, non-fallacious conclusions.</p>	<p>Conclusion is logically tied to information (because information is chosen to fit the desired conclusion); some related outcomes (consequences and implications) are identified clearly.</p> <p>Draws unwarranted or fallacious conclusions.</p>	<p>Conclusion is inconsistently tied to some of the information discussed; related outcomes (consequences and implications) are oversimplified.</p> <p>Argues using fallacious or irrelevant reasons, and unwarranted claims.</p>

### Merge of AACU and the Holistic Critical Thinking Scoring by P Facione Rubrics

Reviewed in December 10, 2016. Includes PUPR MSCHE SLA Committee recommendations and copyright claims

Adapted from:

- 1) the "Critical Thinking VALUE Rubric" developed by VALUE: Valid Assessment of Learning in Undergraduate Education. Copyright Association of American Colleges and Universities. <http://www.aacu.org/value/index>.
- 2) "The Holistic Critical Thinking Scoring Rubric - HCTSR" developed by P. Facione, Insight Assessment. [http://www.insightassessment.com/About-Us/Measured-Reasons/pdf-file/Holistic-Critical-Thinking-Scoring-Rubric-in-English-PDF/\(language\)/eng-US](http://www.insightassessment.com/About-Us/Measured-Reasons/pdf-file/Holistic-Critical-Thinking-Scoring-Rubric-in-English-PDF/(language)/eng-US) to assess the quality of thinking displayed in verbal presentations or written reports.

## ILO 4. Technological Competence.

Use technology and tools to gather, process, and analyze the information required to solve problems in the field of study.

<b>ILO 4. Technological Competence – Feb. 2021</b>				
	<b>Capstone 4</b>	<b>Milestones</b>		<b>Benchmark 1</b>
		<b>3</b>	<b>2</b>	
<b>1. Technology Fluency in Academics and Professional Life</b>  <i>Use of technology broad enough to apply it productively in academic studies and professional practice, e.g. word processing, presentation, and electronic worksheets.</i>	Skillful use of technology and common software tools utilized in academic studies and professional practice to complete and improve the quality of the work to be performed.	Use of technology and common software tools utilized in academic studies and professional practice to complete and improve the quality of the work to be performed.	Use of technology and common software tools utilized in academic studies and professional practice to complete the work to be performed, but the quality of the work could improve with more skilled use of these resources.	Rudimentary use of technology and common software tools utilized in academic studies and professional practice to complete the work to be performed. Shows an unskillful use of these resources.
<b>2. Specialized Technology Resources/Tools used in <u>Problem-Solving</u></b>  <i>Ability to apply technological resources/tools in the problem-solving process (to gather, process, and/or analyze information)</i>	Apply, skillfully and accurately, the technological resources/tools required in the problem-solving process leading to problem resolution.	Apply, most of the time, and/or with minor flaws, the technological resources/tools required in the problem-solving process in a way that leads to problem resolution.	Apply, with limitations, the technological resources/tools required in the problem-solving <u>process</u> , or uses a methodology that does not fully lead to problem resolution.	Apply, with many limitations or inaccuracies, the technological resources/tools required in the problem-solving process, or the methodology only leads to a limited problem resolution

Reference:

- 1) VALUE: Valid Assessment of Learning in Undergraduate Education. Copyright Association of American Colleges and Universities (AACU). <http://www.aacu.org/value/index>.

## ILO 5. Information Literacy. *Acknowledge, locate, and evaluate the information needed to accomplish a specific purpose.*

<b>ILO 5. Information Literacy, Approved on April 9, 2021</b>				
	<b>Capstone 4</b>	<b>Milestones</b>		<b>Benchmark 1</b>
		<b>3</b>	<b>2</b>	
<b>1. Determine the Extent of Information Needed</b>	Types of information (sources) selected directly relate to concepts or answer the research question. <b>The full scope of the research question or thesis is considered/defined thoughtfully as well as the definition of key concepts.</b>	Types of information (sources) selected relate to concepts or answer the research question. The scope of the research question or thesis is defined, as well as the definition of key concepts.	Types of information (sources) selected partially relate to concepts or answer the research question. The scope of the research question or thesis is incomplete (parts are missing, remains too broad or too narrow, etc.). Can determine key concepts.	The types of information (sources) selected do not relate to concepts or answer the research question. Has difficulty defining the scope of the research question or thesis, and determining key concepts.
<b>2. Locate the Needed Information</b>	<b>Locates</b> information using effective, well-designed search strategies and the most appropriate information sources, <b>which is evidenced by the selection of a variety of information sources appropriate to the scope and discipline of the research question.</b>	<b>Locates</b> information using a variety of search strategies and some relevant information sources. Demonstrates ability to refine search. <b>This is evidenced by the selection of a variety of information sources appropriate to the scope and discipline of the research question.</b>	<b>Locates</b> information using simple search strategies; retrieves information from limited or similar sources but presents <b>several information sources.</b>	<b>Locates</b> information randomly; retrieves information that lacks relevance and quality. <b>Chooses a few information sources.</b>
<b>3. Evaluate Information and its Sources Critically*</b>	Selects sources after considering the importance (to the researched topic) of the multiple criteria used (such as relevance to the research question, currency, authority, audience, and bias or point of view).	Selects sources using multiple criteria (such as relevance to the research question, currency, and authority).	Selects sources using basic criteria (such as relevance to the research question and currency).	Selects sources using limited criteria (such as relevance to the research question).
<b>4. Use Information Effectively to Accomplish a Specific Purpose</b>	Communicates, organizes, and synthesizes information from sources to fully achieve a specific purpose, with clarity and depth.	Communicates, organizes and synthesizes information from sources. The intended purpose is achieved.	Communicates and organizes information from sources. The information is not yet synthesized, so the intended purpose is not fully achieved.	Communicates information from sources. The information is fragmented and/or used inappropriately (misquoted, taken out of context, or incorrectly paraphrased, etc.), so the intended purpose is not achieved.
<b>5. Use Information Ethically and Legally</b>	The student correctly <b>use</b> all of the following information use strategies (citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrate a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students correctly use three of the following information use strategies (citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students correctly use two of the following information use strategies (citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students correctly use one of the following information use strategies (citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.

Reference: Modified from Information Literacy Rubric - VALUE: Valid Assessment of Learning in Undergraduate Education. Copyright Association of American Colleges and Universities (AACU). <http://www.aacu.org/value/index>. ||| (PUPR Library Information Literacy support - [pupr.libguides.com/destrezas](http://pupr.libguides.com/destrezas))

**ILO 6. Lifelong Learning.** *Recognize the need to engage in lifelong learning.*

<b>ILO 6. Lifelong Learning (10/08/2021)</b>				
	<b>Capstone 4</b>	<b>Milestones</b>		<b>Benchmark 1</b>
		<b>3</b>	<b>2</b>	
<b>1. Curiosity / Initiative</b> -CE, IE, ARQ, EE, ORL	<b>Meets/exceeds all work requirements.</b> Explores a topic in-depth, showing intense interest in the subject. Generates and pursues opportunities to expand knowledge, skills, and abilities.	<b>Meets all work requirements.</b> Explores a topic in-depth, showing interest in the subject. Identifies and pursues opportunities to expand knowledge, skills, and abilities.	<b>Meets work requirements partially.</b> Explores a topic with some evidence of depth, showing mild interest in the subject. Identifies opportunities to expand knowledge, skills, and abilities.	<b>Meets work requirements poorly.</b> Explores a topic at a surface level, showing low interest in the subject.
<b>2. Independence</b> <i>(Might be evaluated using a survey, e.g. Exit Interview)</i> -CE, ARQ, ORL	Educational interests and pursuits exist and flourish outside classroom requirements. Knowledge and/or experiences are pursued independently.	Beyond classroom requirements, pursues substantial, additional knowledge and/or actively pursues independent educational experiences.	Beyond classroom requirements, pursues additional knowledge and/or shows interest in pursuing independent educational experiences.	<b>Doesn't pursue additional knowledge</b> beyond classroom requirements <b>or doesn't show interest</b> in pursuing knowledge independently.
<b>3. Transfer</b> <i>Apply knowledge to new situations</i> -EE, ARQ, ORL	<b>Makes explicit references to previous learning and creatively applies that knowledge and skills to new situations, or to address more complex issues in original ways.</b>	<b>Makes references to previous learning and applies that knowledge and skills to new situations, or to address more complex issues.</b>	<b>Makes references to previous learning and attempts to apply that knowledge and skills to new situations, or to address more complex issues.</b>	<b>Unable to apply knowledge and skills to new situations, or to address more complex issues.</b>

Reference: VALUE: Valid Assessment of Learning in Undergraduate Education. Copyright Association of American Colleges and Universities (AACU).

<http://www.aacu.org/value/index>.

**ILO 7. Ethical and Social Responsibility.** *Be aware of ethical, professional, and social responsibilities.*

<b>ILO 7. Ethical and Social Responsibility (10/08/2021)</b>				
	<b>Capstone 4</b>	<b>Milestones</b>		<b>Benchmark 1</b>
		<b>3</b>	<b>2</b>	
<b>1. Ethical Self-Awareness</b>  -SOHU	The student discusses in detail/analyzes both core beliefs and the origins of the core beliefs and the discussion has greater depth and clarity.	The student discusses in detail/analyzes both core beliefs and the origins of the core beliefs.	The student states both core beliefs and the origins of the core beliefs.	The student states either their core beliefs or articulates the origins of the core beliefs, but not both.
<b>2. Understanding Different Ethical Perspectives / Concepts</b>  -SOHU	The student names the theory or theories; can present the gist of said theory or theories, and accurately explains the details of the theory or theories used.	The student can name the major theory or theories she/he uses, can present the gist of said theory or theories, and attempts to explain the details of the theory or theories used, but has some inaccuracies.	The student can name the major theory she/he uses, and is only able to present the gist of the named theory.	The student only names the major theory she/he uses.
<b>3. Ethical Issue Recognition</b>  -SOHU -IE -ARQ -EE, CIV, ENVE	The student can recognize ethical issues when presented in a complex, multilayered (gray) context AND can recognize cross relationships among the issues.	The student can recognize ethical issues when issues are presented in a complex, multilayered (gray) context OR can grasp cross relationships among the issues.	The student can recognize basic and obvious ethical issues and grasp (incompletely) the complexities or interrelationships among the issues.	The student can recognize basic and obvious ethical issues but fails to grasp complexity or interrelationships.
<b>4. Use of Code of Ethics or Professional Standards/Perspectives</b>  -SOHU? -IE -ARQ -EE, CIV, ENVE	The student accurately uses the code of ethics or <b>professional standards/perspectives in the solution of a problem</b> , fully considering its implications.	The student uses the code of ethics or <b>professional standards/perspectives in the solution of a problem</b> , considering its implications.	The student uses, with some flaws, the code of ethics or <b>professional standards/perspectives in the solution of a problem</b> , partially considering its implications.	The student poorly uses the code of ethics or <b>professional standards/perspectives in the solution of a problem</b> .

<i>ILO 7. Ethical and Social Responsibility (10/08/2021)</i>				
	Capstone 4	Milestones		Benchmark 1
		3	2	
<b>5. Personal and Social Responsibility</b>  <i>Note: Relevant Factors might include: public health, safety/risks/security, welfare, legal implications, as well as global, cultural, social, environmental and economic factors, among others</i>	The student <b>deeply</b> analyzes the ethical, social, environmental, and other relevant <b>factors</b> , and takes informed and responsible action to <b>fully address</b> these challenges <b>after evaluating the broader consequences</b> .	The student analyzes the ethical, social, environmental, and other relevant <b>factors</b> , and takes responsible action to <b>address</b> these challenges <b>after evaluating the broader consequences</b> .	The student <b>identifies</b> ethical, social, environmental, and other relevant factors, but the analysis lacks strength for one or more of these factors. Actions to address these challenges don't <b>always evaluate the broader consequences</b> .	The student identifies ethical, social, environmental, and other relevant factors <b>superficially</b> or <b>incompletely</b> . Actions to address these challenges are limited, or not contemplated.

## Reference:

- 1) VALUE: Valid Assessment of Learning in Undergraduate Education. Copyright Association of American Colleges and Universities (AACU). <http://www.aacu.org/value/index>.

**ILO 8. Teamwork.** *Contribute to achieving team goals.*

<b><i>ILO 8. Teamwork</i></b>				
	<b>Capstone 4</b>	<b>Milestone 3</b>	<b>Milestone 2</b>	<b>Benchmark 1</b>
<b>1. Contributes to Team Meetings</b>	Helps the team move forward by articulating the merits of alternative ideas or proposals.	Offers alternative solutions or courses of action that build on the ideas of others.	Offers new suggestions to advance the work of the group.	Shares ideas but does not advance the work of the group.
<b>2. Facilitates the Contributions of Team Members</b>	Engages team members in ways that facilitate their contributions to meetings by both constructively building upon or synthesizing the contributions of others as well as noticing when someone is not participating and inviting them to engage.	Engages team members in ways that facilitate their contributions to meetings by constructively building upon or synthesizing the contributions of others.	Engages team members in ways that facilitate their contributions to meetings by restating the views of other team members and/or asking questions for clarification.	Engages team members by taking turns and listening to others without interrupting.
<b>3. Individual Contributions Outside of Team Meetings</b>	Completes all assigned tasks by the deadline; work accomplished is thorough, and comprehensive and advances the project. Proactively helps other team members complete their assigned tasks to a similar level of excellence.	Completes all assigned tasks by the deadline; work accomplished is thorough, and comprehensive and advances the project.	Completes all assigned tasks by the deadline; work accomplished advances the project.	Completes all assigned tasks by the deadline.

<b><i>ILO 8. Teamwork</i></b>				
	<b>Capstone 4</b>	<b>Milestone 3</b>	<b>Milestone 2</b>	<b>Benchmark 1</b>
<b>4. Fosters Constructive Team Climate</b>	<p>Supports a constructive team climate by doing all of the following:</p> <ul style="list-style-type: none"> <li>• Treats team members respectfully by being polite and constructive in communication.</li> <li>• Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work.</li> <li>• Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it.</li> <li>• Provides assistance and/or encouragement to team members.</li> </ul>	<p>Supports a constructive team climate by doing any three of the following:</p> <ul style="list-style-type: none"> <li>• Treats team members respectfully by being polite and constructive in communication.</li> <li>• Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work.</li> <li>• Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it.</li> <li>• Provides assistance and/or encouragement to team members.</li> </ul>	<p>Supports a constructive team climate by doing any two of the following:</p> <ul style="list-style-type: none"> <li>• Treats team members respectfully by being polite and constructive in communication.</li> <li>• Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work.</li> <li>• Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it.</li> <li>• Provides assistance and/or encouragement to team members.</li> </ul>	<p>Supports a constructive team climate by doing any one of the following:</p> <ul style="list-style-type: none"> <li>• Treats team members respectfully by being polite and constructive in communication.</li> <li>• Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work.</li> <li>• Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it.</li> <li>• Provides assistance and/or encouragement to team members.</li> </ul>
<b>5. Responds to Conflict</b>	<p>Addresses destructive conflict directly and constructively, helping to manage/resolve it in a way that strengthens overall team cohesiveness and future <u>effectiveness</u></p>	<p>Identifies and acknowledges conflict and stays engaged with <u>it</u></p>	<p>Redirecting focus toward common ground, toward task at hand (away from conflict)</p>	<p>Passively accepts alternate viewpoints/ideas/opinions.</p>

Reference:

- 1) VALUE: Valid Assessment of Learning in Undergraduate Education. Copyright Association of American Colleges and Universities (AACU). <http://www.aacu.org/value/index>.

**Sample Template of a Standardize Excel Workbook Used by the Academic Areas to Report the Assessment Results of an Institutional Learning Goal/Outcome (ILO)**

(See next page)

INSTRUCTIONS TO COMPLETE THIS FORM	
Table of Content and description of each sheet in this Workbook	
<b>Sheet "01 ILO 2 Rubric"</b>	<p><b>Description:</b> Rubric for the Institutional Learning Goal/Outcome #2 (ILO 2) This is a reference. There is nothing to complete in this sheet.</p>
<b>Sheet "02 Data for Period"</b>	<p><b>Description:</b> Data for the period (academic year) under evaluation, source for data collection and alignment between the student outcomes (SO) indicators and the ILO indicators. Contains Tables 1, 2, 3 and 4. Complete <b>Table 1</b> and <b>Appendix Table 2 and 3</b> below it, following the detailed instructions included below in the section "how to complete each sheet in this workbook". <b>Table 4</b> (at the right of <b>Table 1</b>) is <b>AUTOMATICALLY generated</b> to feed the graph on sheet "03". <b>DO NOT FILL IT.</b></p>
<b>Sheet "03 Chart for Period"</b>	<p><b>Description:</b> Graphical representation (chart) of the information in <b>Table 1</b> (sheet "02") There is nothing to complete in this sheet, it is <b>AUTOMATICALLY</b> generated. Adjust the <b>threshold red line</b>, if necessary.</p>
<b>Sheet "04 ILO 2 All Periods"</b>	<p><b>Description:</b> Comparison of results obtained from different evaluation periods/cycles (to assess variations over time) The table is <b>NOT AUTOMATICALLY generated</b>. <b>MANUALLY</b> copy the information from sheet "02" (column 9 with title %3&amp;4) in <b>Table 1</b>, which is the percent that attained each performance indicator for the current evaluation period). For previous evaluation periods, copy the same information (<b>Table 1</b>, column 9 with title %3&amp;4) from the corresponding Excel worksheet for that period.</p>
<b>Sheet "05 ILO 2 Chart All Periods"</b>	<p><b>Description:</b> Graphical representation (chart) of the information in sheet "04" (2 charts). There is nothing to complete in this sheet, both charts are <b>AUTOMATICALLY</b> generated. Adjust the <b>threshold red line</b>, if necessary.</p>

## How to Complete Each Sheet in this Workbook

### Sheet "01 ILO 2 Rubric"

1) Rubric for the Institutional Learning Goal/Outcome (ILO). Use the rubric as a reference to complete the information in sheet with prefix "02". **There is nothing to complete in this sheet.**

### Sheet "02 Data for Period" - Table 1

1) Complete the **heading information** (cells highlighted in grey) in sheet "02 Data for Period". This includes:

**Department:** (Place department or academic area *official* name)  
**Academic Program/Area:** (Place academic program or area *official* name)  
**Assessment Coordinator:** (Place name of the assessment coordinator who prepared this report)  
**Academic Year:** (Place the academic year in which the data for this report was collected.  
 For example: 2019-2020)

2) Complete **Table 1** consistent with **Appendix Tables 2** (starts at row 24) **and 3** (starts at row 37). This includes the following columns:

a) Column 1 - ILO Performance Indicator

**DO NOT MODIFY THIS COLUMN.** It already contains the performance indicators for the **ILO 2**, as these appear in the **ILO 2** rubric

b) Column 2 - **Unit SO# - Perf. Indicator #**

Complete column 2 consistent with Appendix **Table 3** (starts at row 24)

-- **Unit = Academic Program / Area Identification** (e.g. **CE** for Civil Eng., **EE** for Electrical Eng.)

-- **SO # = Program / Academic Area Student Outcome #**

-- **Program / Academic Area Performance Indicator # for the associated SO #**

(e.g.: **CE 4-1** refers to **Civil Eng. Student Outcome (SO) 4-Performance Indicator #1**)

c) Column 3 - **Source Data Collection**

Course(s) that are used as a source for data collection. The description of these courses (code, name, etc.) is documented in Appendix **Table 2** (starting at row 37)

d) Column 4 - **No. Students**

Number of students evaluated

e) Columns 5, 6, 7, 8 - **Percentage**

%4 - percent of students at rubric level 4

%3 - percent of students at rubric level 3

%2 - percent of students at rubric level 2

%1 - percent of students at rubric level 1

## f) Column 9 - %3&amp;4

**DO NOT COMPLETE.** This column is **AUTOMATICALLY** calculated - Contains the percent of students in rubric levels 3&4

## g) Column 10 - Threshold

Goal to determine if the performance indicator was met.

## h) Column 11 - Met ?

Use a checkmark to identify if the performance indicator was met (it is at or above the **threshold**)

3) **IMPORTANT - Findings and Recommendations:**

Based on the data analysis in **Table 1**, and the corresponding chart in sheet "03 Chart for Period", document the findings and recommendations for improvement from this period results.

### Sheet "02 Data for Period" - APPENDIX - Table 2

4) **Table 2** in the Appendix contains supporting information for **Table 1**, column 3. For each course (or source) of data collection, record the following information (insert more rows if needed for **Table 2**):

- |  |  |
|--|--|
| a) Source of Data Collection                             | <i>(If a course, include the official course code - course name, and course section(s) evaluated)</i>  |
| b) Term(s) Collected                                     | <i>(Identification of the academic term the data was collected. e.g. FA22)</i>   |
| c) Professor(s)  | <i>(Name of professor(s) that offered the course, e.g. Prof. Alfredo Martínez)</i>   |
| d) Method(s) of Assessment                               | <i>(Method of assessment used, e.g. exam question(s) #, lab. report, project section, survey)</i>  |
| e) Skill Level*  | <i>(The level the skill is expected to be attained in the course: I-Introduced, R-Reinforced, M-Mastered)</i>  |
| f) Course Yr.  | <i>(Course year in the academic curriculum, e.g. 1st, 2nd, 3rd or 4th)</i>   |
| g) Impacted Academic Programs+ (R-Required   E-Elective) | <i>(The academic program(s) impacted by this course. Indicate, for each program, if this course is Required (R) or Elective (E). Include a legend, if necessary to understand this column information)</i> |

### Sheet "02 Data for Period" - APPENDIX - Table 3

5) **Table 3** in the Appendix contains supporting information for **Table 1**, column 2. It establishes the relationship between the Institutional Learning Goal/Outcome (ILO) Performance Indicators and the Program/Academic Area Student Outcomes (SO) Performance Indicators. Include a footnote legend with a list of the SOs in place when this report is performed.

## a) Column 1 - ILO Performance Indicator

**DO NOT MODIFY THIS COLUMN.** It already contains the performance indicators for the **ILO 2**, as these appear in the **ILO 2** rubric

b) Column 2 - **Unit SO# - Perf. Indicator #**

This information is the same that will appear in **Table 1**, column 2

- Unit = Academic Program / Area Identification (e.g. CE for Civil Eng., EE for Electrical Eng.)
- SO # = Program / Academic Area Student Outcome #
- Program / Academic Area Performance Indicator # for the associated SO #

(e.g.: CE 4-1 refers to Civil Eng. Student Outcome (SO) 4-Performance Indicator #1)

c) Column 3 - (Include description of the associated Program SO Performance Indicator/Criterion)

d) Table 3 footnote - Reference - (Program/Academic Area Official Name) Student Outcomes (SO):

(List here the Program/Academic Area student outcomes in place at the time of this report).

### Sheet "02 Data for Period" - Table 4 (right side)

- 6) **Table 3** is **AUTOMATICALLY** generated from **Table 1**, to create the chart on the next sheet ("03").  
**DO NOT MODIFY THIS TABLE OR ITS TITLES.**

### Sheet "03 Chart for Period"

- 1) Contains a chart that is **AUTOMATICALLY** generated from the data in sheet "02", **Table 4**.  
**DO NOT MODIFY** this chart. Only adjust the **threshold red line**, if necessary.

### Sheet "04 ILO 2 All Periods"

- 1) **Manually copy** the information from **Table 1**, column 9 (%3&4) in sheet "02" (percent of students that attained the performance indicator for the ILO). Include in the copy the weighted average value for the column.
- 2) Document the academic year in the copied column heading.
- 3) Bring the same information from the Excel workbooks of this ILO previous evaluations to make a comparison over time. Each column in this table must contain the academic year for the data of the column.
- '4) **IMPORTANT** - Document the section Comparison with previous findings – Results of actions **to close the loop**.

### Sheet "05 ILO 2 Chart All Periods"

- 1) Contains two charts that are **AUTOMATICALLY** generated from the data in sheet "04". **DO NOT MODIFY THESE CHARTS**. Only adjust the **threshold red line** in the graphs, if necessary.

**ILO 2 - Scientific and Quantitative Reasoning:**

*Apply scientific and mathematical reasoning to the solution of problems.*

<b>ILO 2. Scientific and Quantitative Reasoning Rubric – Feb 2021</b>				
	<b>Capstone 4</b>	<b>Milestones</b>		<b>Benchmark 1</b>
		<b>3</b>	<b>2</b>	
<b>1. Problem Statement</b>	Demonstrates the ability to construct a clear and insightful problem statement with evidence of all relevant contextual factors.	Demonstrates the ability to construct a problem statement with evidence of the most relevant contextual factors, and the problem statement is adequately detailed.	Demonstrates the ability to construct a problem statement with evidence of relevant contextual factors, but the problem statement is superficial.	Demonstrates a limited ability in identifying a problem statement or related contextual factors.
<b>2. Problem Formulation / Representation</b> <i>Ability to convert relevant information, considering constraints/contextual factors, into various mathematical forms (e.g., equations, graphs, diagrams, tables, words)</i>	Skillfully converts relevant information into an insightful mathematical portrayal in a way that contributes to a further or deeper understanding.	Competently converts relevant information into an appropriate and desired mathematical portrayal.	Completes the conversion of information but the resulting mathematical portrayal is only partially appropriate or accurate.	Completes the conversion of information but the resulting mathematical portrayal is inappropriate or inaccurate.
<b>3. Calculation</b> <i>Solve problems using quantitative tools/methods</i>	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem. Calculations are also presented elegantly (clearly, concisely, etc.)	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem.	Calculations attempted are either unsuccessful or represent only a portion of the calculations required to comprehensively solve the problem.	Calculations are attempted but are both unsuccessful and are not comprehensive.
<b>4. Analysis and Conclusion</b> <i>Ability to make judgments and draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis</i>	Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for ordinary judgments, drawing plausible conclusions from this work.	Uses the quantitative analysis of data as the basis for tentative, limited judgments, although is hesitant or uncertain about drawing conclusions from this work.

Institutional Learning Goal/Outcome:	<i>ILO 2. Scientific and Quantitative Reasoning</i>
Department:	
Academic Program / Area:	
Assessment Coordinator:	
Academic Year:	2019-2020

Table 1.										
ILO Performance Indicator	Unit SO# - Perf. Indicator #	Source Data Collection	No. Students	Percentage				Analysis		
				4. Capstone	3. Milestone	2. Milestone	1. Benchmark	%3&4	Threshold	Met ?
				%4	%3	%2	%1			
1. Problem statement								0	≥70%	
2. Problem formulation / representation								0	≥70%	
3. Calculation								0	≥70%	
4. Analysis and conclusion								0	≥70%	
								ILO Weighted AVG Percent:	#####	≥70%

Unit = Academic Program / Area  
 SO = Student Outcome #  
 Performance Indicator #

Findings and Recommendations:

**APPENDIX for Table 1.**

Table 2. Sources of Data Collection								
Source Data Collection	Term(s) Collected	Professor(s)	Method(s) of Assessment	Skill Level*	Course Yr.	Impacted Academic Programs+ (R-Required   E-Elective)		

e.g.:  
 --Exam Question  
 --Project (Conclusion)  
 --Capstone Rubric  
 --Lab Report  
 --Survey

\*Skill Level:  
 I-Introduced  
 R-Reinforced  
 M-Master

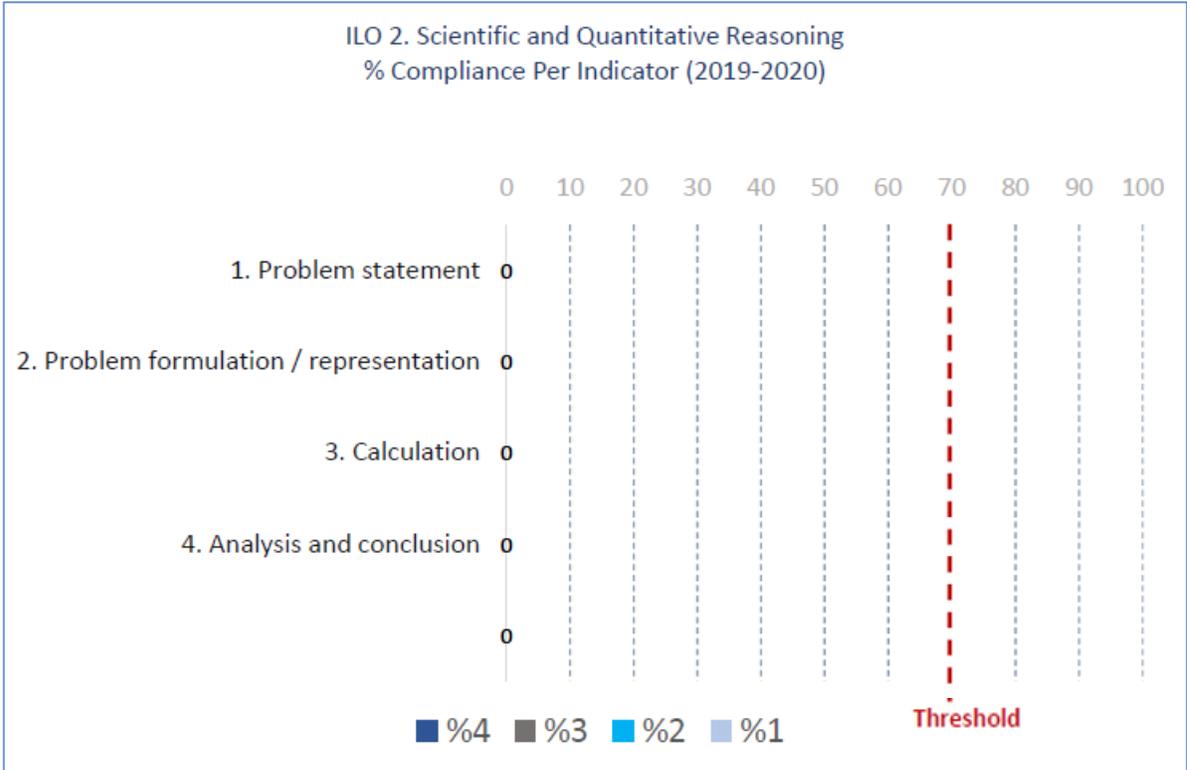
+CE-Civil Engineering

**Table 3. Relationship Between Institutional Learning Goal/Outcome (ILO) Indicators and Program Student Outcomes (SO) Indicators**

ILO Performance Indicator	Unit SO# - Perf. Indicator #	
1. Problem statement		(Include description of SO Performance Indicator/Criterion)
2. Problem formulation / representation		(Include description of SO Performance Indicator/Criterion)
3. Calculation		(Include description of SO Performance Indicator/Criterion)
4. Analysis and conclusion		(Include description of SO Performance Indicator/Criterion)

**Table 3. Reference - Program/Area XX Student Outcomes (SO):**

This area is intentionally left blank for reference
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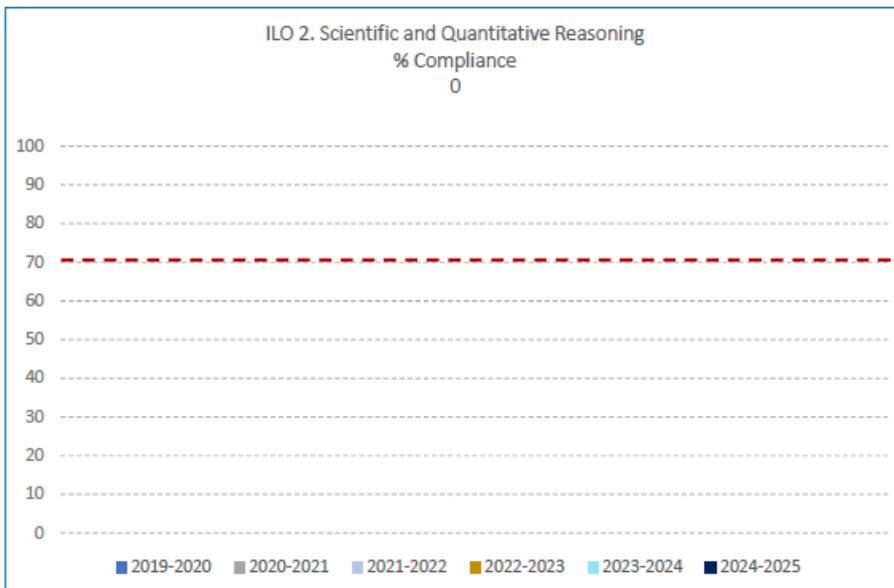
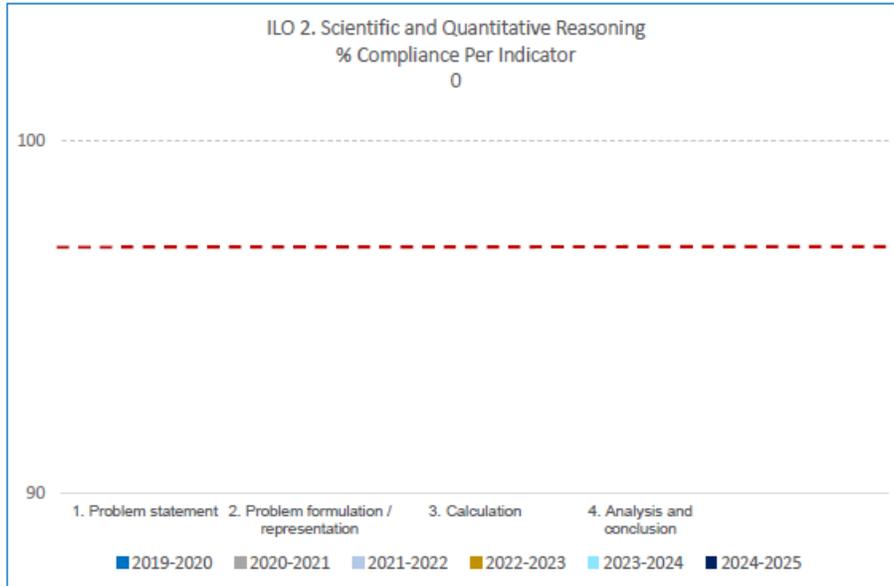


Comparison with previous cycles results for the same goal (ILO)

Institutional Learning Goal/Outcome:	ILO 2. Scientific and Quantitative Reasoning
Department:	0
Academic Program / Area:	0
Assessment Coordinator:	0

Comparison Between Different Evaluation Periods:							
MANUALLY COPY the columns information from sheet "02". EACH COLUMN IS AN EVALUATION PERIOD (Year in the column heading)							
ILO Performance Criteria	%3&4	%3&4	%3&4	%3&4	%3&4	%3&4	Threshold
	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	
1. Problem statement							≥70%
2. Problem formulation / representation							≥70%
3. Calculation							≥70%
4. Analysis and conclusion							≥70%
ILO Weighted AVG:							

Comparison with previous findings – Results of actions:



## References

Middle States Commission on Higher Education (2009). *Characteristics of excellence in higher education*. Retrieved from [www.MSCHE.org](http://www.MSCHE.org).

Levine, J. (March 4th, 2014). MSCHE Seminar “Understanding and Using Student Learning Assessment Results”. New York City.

## Appendices

### **Appendix A. 2023 Published PUPR Mission, Vision, Goals, Strategic Goals, and Institutional Student Learning Assessment Goals**

**Polytechnic University of Puerto Rico**  
**Mission, Vision, Values and Strategic Goals 2023 - Webpage**  
(<https://www.pupr.edu/about/mission/>)

## Mission

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

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

## Vision

The Polytechnic University of Puerto Rico will be recognized as a regional 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.

## Values

- ❖ **Excellence:** We provide high-quality services to the university’s community by incorporating the best practices of higher education into our processes.
- ❖ **Integrity:** We conduct ourselves with honesty, respect, and truthfulness in our thoughts, words, and actions within the institutional framework.
- ❖ **Social Responsibility:** We assume the commitment to pursue the development of a fair and equitable society and the duty to protect the environment.
- ❖ **Innovation:** We cultivate an attitude of continuous improvement in all our constituents to offer innovative solutions to the challenges faced by our society.

- ❖ **Diversity:** We embrace the inclusion of people of different cultures, genders, races, preferences, and opinions that add different perspectives to our community.
- ❖ **Service:** We promote a permanent attitude of collaboration and support towards every representative of the university environment.
- ❖ **Sustainability:** We adopt practices that simultaneously promote quality of life, the conservation of natural resources, and the prosperity of our operations.

## Strategic Goals

1. Developing a learner-centered culture that fosters student success (**Academia**).
2. Encouraging Creativity, Innovation, Research, and Entrepreneurial ecosystem (**Infrastructure**).
3. Advancing an institutional comprehensive internationalization agenda (**Globalization**).
4. Expanding our community, industry, and government relations (**Social Responsibility**).
5. Strengthening our financial position, sustainability, and stewardship (**Finance**).

## Institutional Learning Goals

By the time of graduation, PUPR 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 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.

## Appendix B. Institutional Learning Goals/Outcomes (ILOs)

### Appendix B.1. 2023 Institutional Learning Goals/Outcomes (ILOs), Ratification Process, and President's Letter

#### INSTITUTIONAL LEARNING GOALS/OUTCOMES (ILOs)

(As recertified by the Institutional Student Learning Assessment Committee on 01/20/2023)

By the time of graduation, PUPR graduates are expected to attain the following eight competencies:

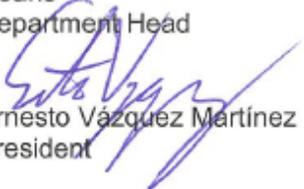
1. **Effective Communication.**  
*Express ideas in oral, written, and graphic modes.*
2. **Scientific and Quantitative Reasoning.**  
*Apply scientific and mathematical reasoning to the solution of problems.*
3. **Critical Thinking.**  
*Interpret and question evidence, statements, and graphics, to 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.*



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March 31, 2023

Deans  
 Department Head

  
 Ernesto Vázquez Martínez  
 President

### **INSTITUTIONAL LEARNING GOALS**

According to Middle States Commission on Higher Education, and as recertified by the Institutional Student Learning Assessment Committee on 01/20/2023, by the time of graduation, Universidad Politécnica de Puerto Rico 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

All our academic programs are aligned with these goals.

rma

10 de marzo del 2023

Dr. Miguel Riestra  
VP Académico

REF.: Recertificación de las Metas Institucionales de Aprendizaje | Estándar V

Estimado Dr. Riestra:

Espero que al recibir este documento se encuentre bien. La presente es para informarle el resultado de la consulta realizada a los miembros del Comité de Avalúo del Aprendizaje Institucional (Estándar V) sobre las metas de aprendizaje oficializadas por el pasado presidente Ernesto Vázquez Barquet el 27 de agosto del 2014. Los miembros del Comité representan todas las áreas académicas de la Institución. Durante la reunión efectuada, en modalidad presencial y, a través de una encuesta, los miembros del Comité recertificaron las metas institucionales de aprendizaje.

Se tomó en consideración que el estándar III de la MSCHE en la sección 5 a y b indica que la institución debe ofrecer una educación en la cual el currículo sea diseñado para que el estudiante adquiera y demuestre destrezas esenciales pertinentes a la educación superior. Además, en la parte 5a se desglosan estas destrezas (en idioma inglés): *oral and written communication, scientific and quantitative reasoning, critical analysis and reasoning, technological competency, and information literacy*. En la parte 5b, se expresa: “... the general education program also includes the study of values, ethics, and diverse perspectives”. Por otro lado, la sección 5b señala que estas metas deben ser consistentes con la misión de la institución.

### Metodología Aplicada

Se efectuó una reunión del Comité el 20 de enero del 2023 (formato presencial), con el fin de recertificar las metas institucionales de aprendizaje. Para esos fines se administró, en esta reunión, un instrumento electrónico usando *Microsoft Forms*. Este instrumento luego fue compartido por correo electrónico a todos los miembros y se le puso fecha límite del 27 de enero del 2023 para recibir el insumo. Se dio seguimiento a los miembros que a dicha fecha no habían contestado. Los resultados de dicha encuesta, al día de hoy, se muestran en la tabla 1.

Tabla 1. Miembros que aprobaron

Rafel Matos	Agrimensura	De acuerdo	De acuerdo	De acuerdo	De acuerdo				
Jose O Roblano	Ingeniería Eléctrica, Con	De acuerdo	De acuerdo	De acuerdo	De acuerdo				
Alex Velez-Cruz	Ingeniería Biomédica	De acuerdo	De acuerdo	De acuerdo	De acuerdo				
Diana Rivera Rivera	Arquitectura	De acuerdo	De acuerdo	De acuerdo	De acuerdo				
José Romprens	Ingeniería Ambiental	De acuerdo	De acuerdo	De acuerdo	De acuerdo				
Ana Alicia	Estudios Socio humanit	De acuerdo	De acuerdo	De acuerdo	De acuerdo				
Jose A Martínez	ing Civil	De acuerdo	De acuerdo	De acuerdo	De acuerdo				
Adriano Panto	Engineering Orlando Ca	De acuerdo	De acuerdo	De acuerdo	De acuerdo				
Fredes Rodriguez Galan	Departamento de Cienci	De acuerdo	De acuerdo	De acuerdo	De acuerdo				
Blanca Talley	ing Eléctrica	De acuerdo	De acuerdo	De acuerdo	De acuerdo				
Ella S. Herrera Infantes	Ingeniería Química	De acuerdo	De acuerdo	De acuerdo	De acuerdo				
Glafire García Vidal	Biblioteca	De acuerdo	De acuerdo	De acuerdo	De acuerdo				
Marta García Sandoval	Ingeniería Industrial	De acuerdo	De acuerdo	De acuerdo	De acuerdo				
Dalmark Torres	Escuela Graduad	De acuerdo	De acuerdo	De acuerdo	De acuerdo				
Enrique Muñoz Gil	Administración de Empr	De acuerdo	De acuerdo	De acuerdo	De acuerdo				
Eduardo Cabrera	Mecánica	De acuerdo	De acuerdo	De acuerdo	De acuerdo	No de acuerdo	De acuerdo	De acuerdo	De acuerdo

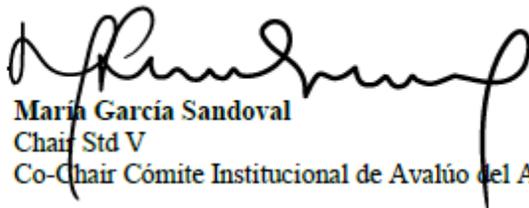
A la fecha, aún se está a la espera del insumo de los representantes de los programas de Diseño de Interiores (Minette Morales), Ciencias de Computadoras (Zayira Jordán), Miami (Mercedes Arias). La representante de Miami fue sustituida recientemente por Migdalia Roldán.

Del instrumento administrado se desprende que la versión actual de las metas institucionales de aprendizaje fue aprobada, con un par de sugerencias relacionadas a la descripción de las metas de (1) *technological competence*; (2) *information literacy* y (3) *lifelong learning*. Estas recomendaciones serán trabajadas en el próximo ciclo de mejora del proceso de avalúo de las metas institucionales.

Considerando este informe le solicito que se emita un comunicado oficial similar al del 2014 (ver anexo) donde el Presiente Ernesto Vázquez Martínez recertifique las metas institucionales de aprendizaje.

Se adjunta la imagen de la carta original divulgada por el pasado presidente Vázquez Barquet e imágenes del instrumento utilizado para registrar las respuestas.

Sin otro particular, recibe un cordial saludo,



**María García Sandoval**  
Chair Std V  
Co-Chair Comité Institucional de Avalúo del Aprendizaje

### Imágenes anexas.

#### Imagen 1. Carta de Aprobación de las metas institucionales en 2014

August 27, 2014

Deans  
Department Head

Emesly Vázquez Barquet  
President

#### **INSTITUTIONAL LEARNING GOALS**

According to Middle States Commission on Higher Education, by the time of graduation, PUPR graduates are expected to attain the following eight competencies:

1. **Effective Communication**  
Express ideas in oral, written, and graphic mode.
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, in order to draw justified, educated, reasonable and truthful conclusions.
4. **Technological Competence**  
Use technology and tools to gather, process and analyze 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.

All of our academic programs are aligned with these goals.

rma



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Imágenes 2-4. Instrumento en Microsoft Forms.  
Enlace: <https://forms.office.com/r/X2xxmWau5G>

## Re-Certificación de las Metas Institucionales de Aprendizaje

Este instrumento de evaluación tiene como propósito que cada representante del Comité Institucional de Avalúo del Aprendizaje Estudiantil (junto con su Director(a) y Decano(a)) evalúe si está de acuerdo o no con las metas de aprendizaje aprobadas el 25 de abril del 2014. El estándar III de la MSCHE en la sección 5 a y b sostiene que la institución debe ofrecer una educación en donde el currículo sea diseñado para que el estudiante adquiera y demuestre destrezas esenciales. En la parte 5a desglosa estas destrezas (en inglés): *oral and written communication, scientific and quantitative reasoning, critical analysis and reasoning, technological competency, and information literacy*. En la parte 5b, exprese: *...the general education program also includes the study of values, ethics, and diverse perspectives*. Por otro lado, la sección 5b expresa que estas metas deben ser consistentes con la misión de la institución.

La **misión oficial y actualizada** de la Universidad es la siguiente:

La Universidad Politécnica de Puerto Rico brinda oportunidades a personas de diversos trasfondos para cultivar su potencial de *liderazgo, productividad y competitividad*, con el objetivo de *contribuir a la sociedad*.

UPPR materializa su misión sirviendo a personas de diferentes contextos: académicos, económicos, geográficos y étnicos; a través de la exposición de los avances intelectuales, científicos, humanísticos y tecnológicos, e implementando métodos de enseñanza innovadores.

Como parte del proceso de re-acreditación de la Universidad por la MSCHE se hace necesario que los miembros del Comité Institucional evalúen las metas de aprendizaje actuales y determinen si las mismas siguen siendo pertinentes para la institución.

### Instrucciones:

1. Para cada meta de aprendizaje indique si está de acuerdo o si no está de acuerdo que se mantenga esta meta.
2. Si no está de acuerdo, será necesario que documente su justificación y exprese sus sugerencias de manera concreta en el espacio de comentarios.
3. La sección de comentarios podrá utilizarse para documentar sugerencias y opiniones sobre las metas de aprendizajes.

Section 1

...

### Información Demográfica del Miembro del Comité

1. Escriba su nombre y Apellido \*

Enter your answer

2. Escriba el área académica que usted representa \*

Enter your answer

### Evaluación de las metas de aprendizajes institucional

#### Instrucciones:

1. Para cada meta de aprendizaje indique si está de acuerdo o si no está de acuerdo que se mantenga esta meta.
2. Si no está de acuerdo, será necesario que documente su justificación y exprese sus sugerencias de manera concretas en el espacio de comentarios.
3. La sección de comentarios podrá utilizarse para documentar sugerencias y opiniones sobre las metas de aprendizajes.

#### 3. Meta 1: **Effective Communication**

*Express ideas in oral, written, and graphic mode.*

x

- De acuerdo
- No de acuerdo

#### 4. Meta 2: **Scientific and Quantitative Reasoning**

*Apply scientific and mathematical reasoning to the solution of problems.*

x

- De acuerdo
- No de acuerdo

#### 5. Meta 3: **Critical Thinking**

*Interpret and question evidence, statements, and graphics, in order to draw justified, educated, reasonable and truthful conclusions.*

x

- De acuerdo
- No de acuerdo

#### 6. Meta 4: **Technological Competence**

*Use technology and tools to gather, process and analyze information required to solve problems in the field of study.*

x

- De acuerdo
- No de acuerdo



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Hato Rey, PR 00918  
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7. Meta 5: **Information Literacy**

*Acknowledge, locate, and evaluate the information needed to accomplish a specific purpose.*

- De acuerdo
- No de acuerdo

8. Meta 6: **Lifelong Learning**

*Recognize the need to engage in lifelong learning.*

- De acuerdo
- No de acuerdo

9. Meta 7: **Ethical and Social Responsibility**

*Be aware of ethical, professional, and social responsibilities.*

- De acuerdo
- No de acuerdo

10. Meta 8: **Teamwork**

*Contribute to achieve team goals*

- De acuerdo
- No de acuerdo

11. Comentarios sobre las metas de aprendizaje. Si en alguna meta usted no estuvo de acuerdo justifique su decisión y presente sugerencias.

Enter your answer

## Appendix B.2. 2014 Institutional Learning Goals/Outcomes, and President's Letter - Historic Information

### INSTITUTIONAL LEARNING GOALS

(As approved by the Institutional Student Learning Assessment Committee on  
April 25, 2014)

By the time of graduation, PUPR graduates are expected to attain the following eight competencies:

1. **Effective Communication.**  
*Express ideas in oral, written, and graphic mode.*
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, in order to draw justified, educated, reasonable and truthful conclusions.*
4. **Technological Competence.**  
*Use technology and tools to gather, process and analyze 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.*

August 27, 2014

Deans  
Department Head



Ernest Vizcarra Barquet  
President

### **INSTITUTIONAL LEARNING GOALS**

According to Middle States Commission on Higher Education, by the time of graduation, PUPR graduates are expected to attain the following eight competencies:

1. **Effective Communication**  
Express ideas in oral, written, and graphic mode.
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, in order to draw justified, educated, reasonable and truthful conclusions.
4. **Technological Competence**  
Use technology and tools to gather, process and analyze 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.
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Be aware of ethical, professional and social responsibilities.
8. **Teamwork**  
Contribute to achieve team goals.

All of our academic programs are aligned with these goals.

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**Appendix C. Templates 2022. Program Student Learning Assessment Plan for Undergraduate Programs and for Graduate School.**

**Appendix C.1. Template 2022. Program Student Learning Assessment Plan for Undergraduate Programs.**

## PUPR INSTITUTIONAL MISSION

“The Polytechnic University of Puerto Rico provides opportunities to individuals from diverse backgrounds to cultivate their potential for leadership, productivity, and competitiveness with the aim of contributing to society. PUPR achieves its mission by serving individuals from different academic, economic, geographical, and ethnic contexts through exposure to intellectual, scientific, humanistic, and technological advancement, and by applying innovative methods of delivery.”

[\(https://www.pupr.edu/about/mission/\)](https://www.pupr.edu/about/mission/)

## PUPR INSTITUTIONAL LEARNING GOALS /OUTCOMES

There are 8 (eight) Student Learning Goals/Outcomes (ILOs) or core competencies that have been defined at PUPR, aligned with the Institutional Mission, and Appropriate for Higher Education. By the time of graduation, PUPR 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.*

**Polytechnic University of Puerto Rico**  
**Program Name Student Learning Assessment Process and Plan**  
**Mission Statement, Learning Outcomes, & Assessment Opportunities**

The purpose of this document is to describe the process of student learning assessment (SLA) for a program/academic unit whose name appears in the title of the document. Also presents guidelines for reporting the results of the collected measurements.

Department/Program or Academic Unit	<i>Include department name here</i> <i>Include program name here, if applicable</i>
Assessment Coordinator for this Program or Academic Unit	<i>Include assessment coordinator name here</i>
Department Chair Name and Signature	<i>Include department head name here</i>
Date Updated / Date Submitted	<i>Include date this document was updated here</i>

Complete the following information with the current official version (submit future updates, when applicable):

**Deanship/School Mission Statement.**

*Include Deanship mission statement here*

**Department/Program or Academic Unit Mission Statement.** Be sure the department's mission is aligned with the institutional mission.

*Include Department/Program or Academic Unit Mission statement here, aligned with the institutional mission*

**Program Educational Objectives (PEOs).** Make sure that program objectives are aligned with the mission of the institution.

*Include the Program Educational Objectives here, aligned with the institutional mission.*

**Reference:**

*“Program educational objectives are broad statements that describe what graduates are expected to attain within a few years after graduation. Program educational objectives are based on the needs of the program’s constituencies.” (ABET, 2022)*

**Program Student Learning Outcomes (SOs).** List the program or academic unit student outcomes. Make sure that program SOs are aligned with the Program Educational Objectives (PEOs).

*Include Department/Program or Academic Unit student outcomes (SOs), aligned with the institutional mission.*

**Reference:**

*“Student outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills, and behaviors that students acquire as they progress through the program.” (ABET, 2022)*

**Relationship Matrix between Program Educational Objectives (PEOs) and Student Outcomes (SOs).** Include a table indicating the relationship between the Program Educational Objectives (PEOs) and the Student Outcomes (SOs). Adapt table to the number of PEOs and SOs in your program/academic unit. Please, make sure to list the PEOs and SOs using a legend so that the table is self-explanatory.

*Adapt the following table for the number of PEOs and SOs in your Department/Program or Academic Unit.*

Program Educational Objectives (PEOs)	Student Outcomes (SOs)						
	S01	S02	S03	S04	S05	S06	S07
PEO1							
PEO2							
PEO3							
PEO4							

Legend:

<p><b>Program Educational Objectives (PEOs)</b></p> <p><i>List PEOs here</i></p>	<p><b>Student Outcomes (SOs)</b></p> <p><i>List SOs here</i></p>
--	--

**Relationship Matrix between the Institutional Learning Goals/Outcomes (ILOs) and the Student Outcomes (SOs).** Include a table indicating the relationship between the Institutional Learning Goals/Outcomes (ILOs) and the Program/Academic Unit Student Outcomes (SOs).

*Adapt the following table for the number of SOs in your Department/Program or Academic Unit.*

Institutional Learning Goals/Outcomes (ILOs)	Program/Academic Unit Student Outcomes (SOs)						
	SO1	SO2	SO3	SO4	SO5	SO6	SO7
ILO1. Effective Communication							
ILO2. Scientific and Quantitative Reasoning							
ILO3. Critical Thinking							
ILO4. Technological Competence							
ILO5. Information Literacy							
ILO6. Lifelong Learning							
ILO7. Ethical and Social Responsibility							
ILO8. Teamwork							

Institutional Learning Goals (ILOs) – REFERENCE:	Student Outcomes (SOs)
<p><b>ILO1. Effective Communication.</b> <i>Express ideas in oral, written, and graphic modes.</i></p> <p><b>ILO2. Scientific and Quantitative Reasoning.</b> <i>Apply scientific and mathematical reasoning to the solution of problems.</i></p> <p><b>ILO3. Critical Thinking.</b> <i>Interpret and question evidence, statements, and graphics, to draw justified, educated, reasonable, and truthful conclusions.</i></p> <p><b>ILO4. Technological Competence.</b> <i>Use technology and tools to gather, process, and analyze the information required to solve problems in the field of study.</i></p> <p><b>ILO5. Information Literacy.</b> <i>Acknowledge, locate, and evaluate the information needed to accomplish a specific purpose.</i></p> <p><b>ILO6. Lifelong Learning.</b> <i>Recognize the need to engage in lifelong learning.</i></p> <p><b>ILO7. Ethical and Social Responsibility.</b> <i>Be aware of ethical, professional, and social responsibilities.</i></p> <p><b>ILO8. Teamwork.</b> <i>Contribute to achieving team goals.</i></p>	<p><i>List SOs here</i></p>

**Student Learning Assessment Process.** Explain, using narrative and/or diagrams, the process followed by your program/academic unit to measure, analyze, evaluate, and improve student learning.

**Include:**

-Assessment strategies and instruments

-A list of performance criteria/indicators used to evaluate each outcome, if your area uses this approach. If not, describe the alternate approach for the assessment of the student outcomes (SOs)

*Describe the assessment process here. Include assessment strategies and instruments. Include the performance criteria/indicators used to evaluate the student outcomes, or an alternate approach if you use another method.*

**Reference:**

*“Assessment is one or more processes that identify, collect, and prepare data to evaluate the attainment of student outcomes. Effective assessment uses relevant direct, indirect, quantitative and qualitative measures as appropriate to the outcome being measured. Appropriate sampling methods may be used as part of an assessment process.” (ABET, 2022)*

**Reference:**

*“Evaluation is one or more processes for interpreting the data and evidence accumulated through assessment processes. Evaluation determines the extent to which student outcomes are being attained. Evaluation results in decisions and actions regarding program improvement.” (ABET, 2022)*

### Curriculum Map.

- Insert here the matrix or table that **relates student learning outcomes (SOs) and program/academic unit courses**.
- Highlight all courses that **strongly** support one or more of the program/academic unit student outcomes (SOs), even if you don't use all these courses to assess the outcome.
- **Identify strategic courses that will be used to assess each student's outcome (SO), as per the assessment plan.**
- **Identify strategic courses that will be used to assess each Institutional Learning Goal/Outcome (ILO), as per the assessment plan.** It is recommended to use I (Introduced), R (Reinforced), or M (Mastered) to indicate the level at which the skill is worked in a course.
- **If a course serves several academic programs, such as math and sciences or socio-humanistic courses, identify which academic programs the course impacts.**
- **Identify each course in the curriculum map as Required or Elective (for each program, if several programs are impacted).**
- **For the outcome related to communication skills, identify if: Oral, Written, or Other (Graphic) (based on what is relevant to your program).**

*Make sure to include in this section all components listed under the "Curriculum Map" title. Use a legend, if necessary, to identify the sections of your table.*

*Reference – **Example** of Introduction to this section information:*

*The highlighted gray cells in the curriculum map indicate which student outcomes (blue) or Institutional Learning Goal/Outcome (yellow) a course supports. All SOs and ILOs are listed at the end of the table. The **assessment calendar** for SOs and ILOs is done using this map. Strategic courses are selected from a pool of courses supporting a given outcome.*

*Legend:*

**I/R/M** – Level of a course identified as an **educational strategy (strategic courses)**, from which assessment data for SOs (and ILOs) will be collected, as per schedule.

**I** - Level I course - **Introduced**: Students are introduced to the skill in this course.

**R** - Level II course - **Reinforced**: The skill is further developed/practiced.

**M** - Level III course - **Mastered**: The outcome is expected to be attained by the end of this course.

**Student Outcomes: Tools and Threshold.** Insert here a table that relates student outcomes (SOs) and Institutional Learning Goals/Outcomes (ILOs) with the tools used to measure these and the threshold established in your program/academic unit. If you already documented part of this information in previous sections, please include a reference to the section.

*Identify the assessment tools/instruments used to assess the SOs and the ILOs, and the threshold used to evaluate their attainment*

**Data Collection Plan.** Insert here the **student outcomes (SOs)** and **Institutional Learning Goals/Outcomes (ILOs)** data collection calendar/itinerary for the next 5 years.

*Include the data collection calendar/itinerary for the SOs and the ILOs for the next 5 years.*

**Distribution and Communication.** Identify the methods to distribute or publish each of these items presented in the next table (use X to mark all that apply). Use a legend, if necessary.

ITEM	Communication Plan							
	PUPR Catalog (provide section title)	Website (provide URL)	Program Annual Reports	Course Syllabi	Bulletin board	Department meeting	Audiences impact (Dean, Faculty, Administrator, Employers, student, etc)	Other audiences or place: (please describe, e.g. advising session)
Program Mission								
Program Educational Objectives (PEO)								
Program/Academic Unit Student Outcomes								
Curriculum Map								
Learning Assessment Results								

\*Program Mission, Program Educational Objectives and Student Outcomes URL: *Include URL here*

\*\*Catalog URL (Pages *XXX-XXX*):

<https://www.pupr.edu/wp-content/uploads/2021/08/UNDERGRADUATE-CATALOG-2020-2025-San-Juan-Campus-Revised-AUGUST-2021-revmp.pdf>

## Polytechnic University of Puerto Rico

### Use of Student Learning Assessment Results for Continuous Improvement **Suggested Template** (Program/Academic Unit Name)

Department/Program or Academic Unit	<i>Include the department name here</i> <i>Include the program name here, if applicable</i>
Assessment Coordinator for this Program or Academic Unit	<i>Include the assessment coordinator name here</i>
Department Chair Name and Signature	<i>Include the department head name here</i>
Date Updated / Date Submitted	<i>Include the date this document was updated here</i>

**Use of assessment results for improvement. Summary of Actions Based on Assessment Results. Suggested Template.** Insert here the summarized results for the analysis of each student outcome for the evaluation period/cycle. Additionally, please provide the Student Outcomes report that supports these findings. The assessment results can be presented in a different format, but for institutional purposes, the report must follow the guidelines discussed in the SLA Committee.

Student Learning Outcome	Direct and indirect measures used	Summary of Results	Possible reason or hypothesis	Action taken to improve

**Appendix C.2. Template 2022. Student Learning Assessment Plan for Graduate School.**

## PUPR INSTITUTIONAL MISSION

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[\(https://www.pupr.edu/about/mission/\)](https://www.pupr.edu/about/mission/)

## PUPR INSTITUTIONAL LEARNING GOALS /OUTCOMES

**There are 8 (eight) Student Learning Goals/Outcomes (ILOs) or core competencies that have been defined at PUPR, aligned with the Institutional Mission, and Appropriate for Higher Education. By the time of graduation, PUPR 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.*

**Polytechnic University of Puerto Rico**  
**Graduate School Student Learning Assessment Process and Plan**  
**Mission Statement, Learning Outcomes, & Assessment Opportunities**

The purpose of this document is to describe the process of student learning assessment (SLA) for a program/academic unit whose name appears in the title of the document. Also presents guidelines for reporting the results of the collected measurements.

Department/Program or Academic Unit	Graduate School
Assessment Coordinator for this Program or Academic Unit	Daimarik Torres Cruz
Department Chair Name and Signature	Miriam Pabon, Ph.D., P.E.
Date Updated / Date Submitted	<i>February 10, 2023</i>

Complete the following information with the current official version (submit future updates, when applicable):

**Deanship/School Mission Statement.**

The Graduate School (GS) promotes and encourages excellence in graduate education for the students. The School values integrity, collaboration, efficiency, innovation, and inclusiveness. These values are central to its role in encouraging a creative environment for scholarship and research, teaching, and learning. The GS develops new concepts and best practices for graduate education and supports other schools within the Institution in their graduate initiatives and emerging programs. It aims to guarantee that all graduate students, regardless of their characteristics, achieve their full potential as professionals.

**Department/Program or Academic Unit Mission Statement.** Be sure the department's mission is aligned with the institutional mission.

The Graduate School has no Academic Department or Academic Units.

**Program Educational Objectives (PEOs).** Make sure that program objectives are aligned with the mission of the institution.

Graduate students of the master's and Ph.D. programs will be able to fulfill most of the following educational objectives:

1. Demonstrate the professional practice skills and in-depth knowledge needed to be successful in professional practice while fostering professional growth, leadership, and career advancement within the field of study.
2. Being aware of the complexity and advances in science and technology that will enable contributions towards the body of knowledge within the related fields.
3. Contribute to achieving team goals while being aware of ethical, professional, and social responsibilities in the decision-making process.

**Program Student Learning Outcomes (SOs).** List the program or academic unit student outcomes. Make sure that program SOs are aligned with the Program Educational Objectives (PEOs).

Upon graduation, graduates of the master's and Ph.D. programs will be able to demonstrate the following program outcomes:

1. An ability to communicate effectively, in written, oral, and graphic modes, the research ideas, plans, and results while acknowledging and using the information needed and available in the field of study.
2. An ability to apply scientific and mathematical reasoning and related technology tools to the solutions of problems.
3. An ability to apply fundamental principles and conduct research in the field of study.
4. Being aware of the importance of ethical, professional, and social responsibilities.
5. Use self-development and recognize the need to engage in lifelong learning for personal and professional improvement in the field of study and contribute to its future advancement and innovation.

**Relationship Matrix between Program Educational Objectives (PEOs) and Student Outcomes (SOs).** Include a table indicating the relationship between the Program Educational Objectives (PEOs) and the Student Outcomes (SOs). Adapt the table to the number of PEOs and SOs in your program/academic unit. Please, make sure to list the PEOs and SOs using a legend so that the table is self-explanatory.

Program Educational Objectives (PEOs)	Student Outcomes (SOs)				
	SO1	SO2	SO3	SO4	SO5
PEO1	X	X	X		X
PEO2	X	X	X		X
PEO3				X	X

Legend:

Program Educational Objectives (PEOs)	Student Outcomes (SOs)
<ol style="list-style-type: none"> <li>Demonstrate the professional practice skills and in-depth knowledge needed to be successful in professional practice while fostering professional growth, leadership, and career advancement within the field of study.</li> <li>Being aware of the complexity and advances in science and technology that will enable contributions towards the body of knowledge within the related fields.</li> <li>Contribute to achieving team goals while being aware of ethical, professional, and social responsibilities in the decision-making process.</li> </ol>	<ol style="list-style-type: none"> <li>An ability to communicate effectively, in written, oral, and graphic modes, the research ideas, plans, and results while acknowledging and using the information needed and available in the field of study.</li> <li>An ability to apply scientific and mathematical reasoning and related technology tools to the solutions of problems.</li> <li>An ability to apply fundamental principles and conduct research in the field of study.</li> <li>Being aware of the importance of ethical, professional, and social responsibilities.</li> <li>Use self-development and recognize the need to engage in lifelong learning for personal and professional improvement in the field of study and contribute to its future advancement and innovation.</li> </ol>

**Relationship Matrix between the Institutional Learning Goals/Outcomes (ILOs) and the Student Outcomes (SOs).** Include a table indicating the relationship between the Institutional Learning Goals/Outcomes (ILOs) and the Program/Academic Unit Student Outcomes (SOs).

Institutional Learning Goals/Outcomes (ILOs)	Program/Academic Unit Student Outcomes (SOs)				
	SO1	SO2	SO3	SO4	SO5
ILO1. Effective Communication	X				
ILO2. Scientific and Quantitative Reasoning		X	X		
ILO3. Critical Thinking	X	X			
ILO4. Technological Competence		X			
ILO5. Information Literacy	X		X		
ILO6. Lifelong Learning					X
ILO7. Ethical and Social Responsibility			X	X	
ILO8. Teamwork	X		X		

**Institutional Learning Goals (ILOs) – REFERENCE:**

**ILO1. Effective Communication:**

*To clearly express ideas in oral, written, and graphic modes.*

**ILO2. Scientific and Quantitative Reasoning:**

*Apply scientific and mathematical reasoning to the solution of problems.*

**ILO3. Critical Thinking:**

*To accurately interpret evidence, statements, graphics, and questions to draw justified, educated, reasonable, and truthful conclusions.*

**ILO4. Technological Competence:**

*Use technology and tools to gather, process, and analyze information required to solve problems in the field of study.*

**ILO5. Information Literacy:**

*Acknowledge, locate, and evaluate the information needed to accomplish a specific purpose.*

**ILO6. Lifelong Learning:**

*Recognize the need to engage in lifelong learning.*

**ILO7. Ethical and Social Responsibility:**

*Be aware of ethical, professional, and social responsibilities.*

**ILO8. Teamwork:**

*Contribute to achieving team goals.*

**Student Outcomes (SOs)**

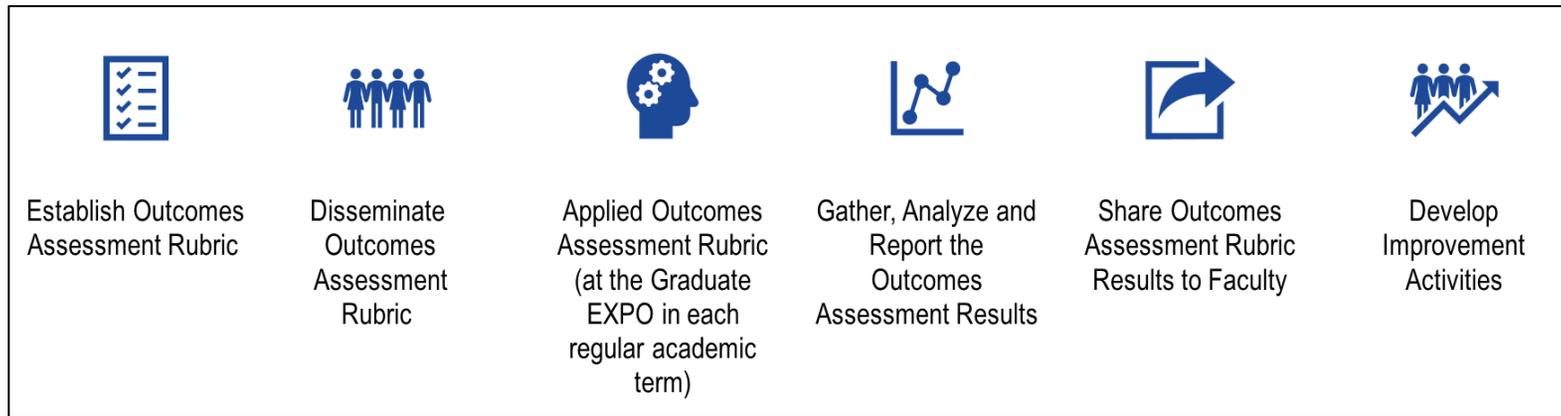
1. An ability to communicate effectively, in written, oral, and graphic modes, the research ideas, plans, and results while acknowledging and using the information needed and available in the field of study.
2. An ability to apply scientific and mathematical reasoning and related technology tools to the solutions of problems.
3. An ability to apply fundamental principles and conduct research in the field of study.
4. Being aware of the importance of ethical, professional, and social responsibilities.
5. Use self-development and recognize the need to engage in lifelong learning for personal and professional improvement in the field of study and contribute to its future advancement and innovation.

**Student Learning Assessment Process.** Explain, using narrative and/or diagrams, the process followed by your program/academic unit to measure, analyze, evaluate, and improve student learning.

**Include:**

- Assessment strategies and instruments
- A list of performance criteria/indicators used to evaluate each outcome if your area uses this approach. If not, describe the alternate approach for the assessment of the student outcomes (SOs)

The following general process will be pursued to measure, analyze, and improve student learning outcomes within the graduate programs.



**Figure 1.** Graduate School Student Learning Assessment Process

**Curriculum Map.**

- Insert here the matrix or table that **relates student learning outcomes (SOs) and program/academic unit courses**.
- Highlight all courses that **strongly** support one or more of the program/academic unit student outcomes (SOs), even if you don't use all these courses to assess the outcome.
- **Identify strategic courses that will be used to assess each student's outcome (SO), as per the assessment plan.**
- **Identify strategic courses that will be used to assess each Institutional Learning Goal/Outcome (ILO), as per the assessment plan.** It is recommended to use I (Introduced), R (Reinforced), or M (Mastered) to indicate the level at which the skill is worked in a course.
- **If a course serves several academic programs, such as math and sciences or socio-humanistic courses, identify which academic programs the course impacts.**
- **Identify each course in the curriculum map as Required or Elective (for each program, if several programs are impacted).**
- **For the outcome related to communication skills, identify if: Oral, Written, or Other (Graphic) (based on what is relevant to your program).**

The Graduate School does not have Curriculum Maps for its programs.

**Student Outcomes: Tools and Threshold.** Insert here a table that relates student outcomes (SOs) and Institutional Learning Goals/Outcomes (ILOs) with the tools used to measure these and the threshold established in your program/academic unit. If you already documented part of this information in previous sections, please include a reference to the section.

Two assessment tools (Graduate Project Evaluation Rubric & Student Learning Outcomes Exit Survey) have been developed and used to evaluate student performance in two levels; course level and program level. For the course level, the Graduate School uses the EXPO rubric that assesses the presentation of the graduate students in their required research work. For the program level, the Graduate School uses the Student Learning Outcomes Exit Survey to identify the topics to be improved.

Assessment Tools	Student Outcome (SO) Supported					Data Analysis	Data Evaluation	Threshold
	1	2	3	4	5			
<b>Graduate Project Evaluation Rubric</b> (Graduate Project EXPO)  (Peer Review Evaluation Performed by a Faculty Member that is not the Student's Instructor/Advisor)	X	X	X	X	X	Direct Measurement Tool for Course Level  An EXPO rubric was developed to correlate EXPO presentation to established student learning outcomes criteria.  Data will be collected quarterly.	<ul style="list-style-type: none"> <li>After the Spring term, the data is analyzed every year by the Graduate School, and results are presented to the faculty.</li> </ul>	% levels 3 & 4 in rubric $\geq$ 80%
<b>Student Learning Outcomes Exit Survey</b>  (Evaluation via the Institutional Research Office; Performed by Graduate Students)	X	X	X	X	X	Indirect Measurement Tool for Program Level	<ul style="list-style-type: none"> <li>Data is collected by the Institutional Research Office at the end of the program as part of the certification process for graduation (GS Form, identified with a number)</li> <li>After the Spring term, the data is analyzed every year, and results are presented to Departments for further use in the continuous improvement process.</li> </ul>	Depends on the criteria

**Additional qualitative/quantitative measurements assessed:**

- 1) Research/project implementation rates (target or goal: At least 50% of the projects are implemented in the Industry)
- 2) List of student research that has been published (i.e., via peer-reviewed journals) or presented at Professional Conferences (target or goal: at least 5 students).

**Data Collection Plan.** Insert here the **student outcomes (SOs)** and **Institutional Learning Goals/Outcomes (ILOs)** data collection calendar/itinerary for the next 5 years.

Assessment Tools	Data Collection Plan															Frequency during the next 5 years	
	SO#1			SO#2			SO#3			SO#4			SO#5				
	FA	WI	SP	FA	WI	SP	FA	WI	SP	FA	WI	SP	FA	WI	SP		
<b>Graduate Project Evaluation Rubric</b> (Graduate Project EXPO)  (Peer Review Evaluation Performed by a Faculty Member that is not the Student's Instructor/Advisor)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Yearly
<b>Student Learning Outcomes Exit Survey</b>  (Evaluation via the Institutional Research Office; Performed by Graduate Students)			X			X			X			X			X		Yearly

Legend:

**Student Outcomes (SOs)**

1. An ability to communicate effectively, in written, oral, and graphic modes, the research ideas, plans, and results while acknowledging and using the information needed and available in the field of study.
2. An ability to apply scientific and mathematical reasoning and related technology tools to the solutions of problems.
3. An ability to apply fundamental principles and conduct research in the field of study.
4. Being aware of the importance of ethical, professional, and social responsibilities.
5. Use self-development and recognize the need to engage in lifelong learning for personal and professional improvement in the field of study and contribute to its future advancement and innovation.

**Distribution and Communication.** Identify the methods to distribute or publish each of these items presented in the next table (use X to mark all that apply). Use a legend if necessary.

ITEM	Communication Plan							
	PUPR Catalog (provide section title)	Website (provide URL)	Program Annual Reports	Course Syllabi	Bulletin board	Department meeting	Audiences impact (Dean, Faculty, Administrator, Employers, student, etc)	Other audiences or places: (please describe, e.g. advising session)
Program Mission	X**	X*						
Program Educational Objectives (PEO)		X*						
Program/Academic Unit Student Outcomes		X*						
Curriculum Map								
Learning Assessment Results			Assessment Reports			X	Faculty, Dean	Outcomes Assessment Committee

\*Program Mission, Program Educational Objectives, and Student Outcomes URL: <https://www.pupr.edu/graduateschool/>.

\*\*Catalog URL (Pages 1-129): <https://www.pupr.edu/wp-content/uploads/2023/08/GRADUATE-CATALOG-2022-23-2023-24-rev-FA23.pdf>.

## Addendum. Graduate School Assessment Plan Template

### Documentation of Changes Implemented to the Graduate School Assessment Process

Department/Program or Academic Unit	Graduate School
Assessment Coordinator for this Program or Academic Unit	Daimarik Torres Cruz
Department Chair Name and Signature	Miriam Pabon, Ph.D., P.E.
Date Updated / Date Submitted	February 10, 2023

#### Continuous Improvement

The student outcome assessment process has been implemented throughout the graduate programs' curricula, and its results have been used to formulate and implement strategies to improve student performance. As part of the continuous improvement process, the Design Project Expo has been redesigned to have on-campus and online students presenting their research outcomes at the same event. Previously, online students did not have the opportunity to present in a real-time scenario and concurrently with the on-campus community.

To make an inclusive event, we invited the students enrolled in the management graduate programs and, thus, changed the event's name to Graduate Project Expo. In this manner, all graduate students have the same opportunity to apply their skills and abilities acquired in the courses while presenting a final project of their master's program.

The traditional Graduate Project Expo evaluation process was converted to be performed on the Blackboard platform. This included converting the Graduate Project Expo rubric into a virtual assessment process. This action facilitates the assessment process performed by the event's judges. Also, to make the graduate school community more active in this important event, all faculty, students, and judges are invited to the Expo Awards ceremony. All the Expo results are gathered and analyzed using an Excel instrument. This facilitates the Graduate School Assessment Coordinator tasks.

# Graduate Project Evaluation Rubric Example

Preview Test: Student Engineering 1 - Graduate Project EXPO SP23

**Test Information**

Description: **Graduate Project EXPO Project Evaluation Rubric**

Instructions: **Please complete the Graduate Project Rubric for the student evaluated.**

Multiple Attempts: Not allowed. This test can only be taken once.

Force Completion: This test can be saved and resumed later.

Your answers are saved automatically.

Question Completion Status:

---

**QUESTION 1** 0 points Save Answer

Please, provide the name of the student evaluated.

Name  Last Name

---

**QUESTION 2** 4 points Save Answer

Please evaluate the criterion:

**Innovation**: state of being novel, a new method, idea, product, etc.

**Rubric Scale Interpretation**: Select a value of 1, 2, 3, or 4.

1 = **Not satisfactory** = Students did not comply with the criterion.

2 = **Somewhat satisfactory** = Students contributed to some of the requirements of the criterion but below expectations.

3 = **Satisfactory** = Students integrated the criterion concepts.

4 = **Highly satisfactory** = Students exceeded the criterion definition.

1

2

3

4

---

**QUESTION 3** 4 points Save Answer

Please evaluate the criterion:

**Adequate Use of Fundamental Principles in Area of Study**: the application of topics related to the core and specialization courses from the curriculum studied.

**Rubric Scale Interpretation**: Select a value of 1, 2, 3, or 4.

1 = **Not satisfactory** = Students did not comply with the criterion.

2 = **Somewhat satisfactory** = Students contributed to some of the requirements of the criterion but below expectations.

3 = **Satisfactory** = Students integrated the criterion concepts.

4 = **Highly satisfactory** = Students exceeded the criterion definition.

1

2

3

4

---

**QUESTION 4** 4 points Save Answer

Please evaluate the criterion:

**Communication Skills & Organization**: the process of structuring, transmitting, and sharing ideas, facts, results, and conclusions during the research or project development.

**Rubric Scale Interpretation**: Select a value of 1, 2, 3, or 4.

1 = **Not satisfactory** = Students did not comply with the criterion.

2 = **Somewhat satisfactory** = Students contributed to some of the requirements of the criterion but below expectations.

3 = **Satisfactory** = Students integrated the criterion concepts.

4 = **Highly satisfactory** = Students exceeded the criterion definition.

1

2

3

4

---

**QUESTION 5** 4 points Save Answer

Please evaluate the criterion:

**Analytical Thinking & Research, Problem Solving Ability**: the methodical step-by-step rational approach that permits breaking down a complex problem into single and manageable components that can be explained.

**Rubric Scale Interpretation**: Select a value of 1, 2, 3, or 4.

1 = **Not satisfactory** = Students did not comply with the criterion.

2 = **Somewhat satisfactory** = Students contributed to some of the requirements of the criterion but below expectations.

3 = **Satisfactory** = Students integrated the criterion concepts.

4 = **Highly satisfactory** = Students exceeded the criterion definition.

1

2

3

4

## QUESTION 6

4 points Save Answer

Please evaluate the criterion:

**Engaged in Contemporary Issues, Life-long Learning Ability:** the process of identifying information, making a correct integration to real-time scenarios, and/or projecting it to future settings for the benefit of the community

**Rubric Scale Interpretation:** Select a value of 1, 2, 3, or 4.

1 = **Not satisfactory** = Students did not comply with the criterion.

2 = **Somewhat satisfactory** = Students contributed to some of the requirements of the criterion but below expectations.

3 = **Satisfactory** = Students integrated the criterion concepts

4 = **Highly satisfactory** = Students exceeded the criterion definition.

- 1  
 2  
 3  
 4

## QUESTION 7

0 points Save Answer

Was this graduate project implemented/applied in a real work environment?

- Yes  
 No  
 N/A

## QUESTION 8

0 points Save Answer

Indicate the industry where this graduate project was or will be implemented.

- Manufacturing  
 Service  
 Construction  
 Other

## QUESTION 9

0 points Save Answer

Indicate the sector where this graduate project was or will be implemented.

- Private  
 Public  
 Both

## QUESTION 10

0 points Save Answer

Indicate any Financial Benefits, if applicable, obtained, or that are expected to be obtained as a result of this graduate project.

Please, provide the approximate amount in dollars.

## QUESTION 11

0 points Save Answer

General Comments:

Click Save and Submit to save and submit. Click Save All Answers to save all answers.

Save All Answers Save and Submit

Word version of the Graduate School Project Expo Rubric



# GRADUATE PROJECT EXPO

Judge: \_\_\_\_\_

## Graduate Project Evaluation Rubric

Project No.	Title	Student Name	Advisor

RUBRIC SCALE: 1 = NOT SATISFACTORY 2 = SOMEWHAT SATISFACTORY 3 = SATISFACTORY 4 = HIGHLY SATISFACTORY

RUBRIC	Outcomes Assessment Direct Measurement Evaluation Criteria				
	Innovation	Adequate Use of Fundamental Principles in Area of Study	Communication Skills & Organization (Article & Poster) (Verbal/Written)	Analytical Thinking & Research, Problem Solving Ability	Engaged in Contemporary Issues, Life-long Learning Ability
1. Was this graduate project implemented/applied in real work environment? _____ Yes _____ No					
2. Indicate the industry/sector where this graduate project was or will be implemented: _____ Manufacturing _____ Service _____ Construction _____ Other: _____ / _____ Private Sector _____ Public Sector					
3. Indicate any Financial Benefits obtained or that are expected to be obtained as a result of this graduate project: \$ _____					
General Comments:					

## Criterion Definitions

---

**Innovation:** state of being novel, a new method, idea, product, etc.

**Adequate Use of Fundamental Principles in Area of Study:** the application of topics related to the core and specialization courses from the curriculum studied.

**Communication Skills & Organization:** the process of structuring, transmitting, and sharing ideas, facts, results, and conclusions during the research or project development. This criterion also considers written/oral skills plus bilingual (English/Spanish) competence.

**Analytical Thinking & Research, Problem Solving Ability:** the methodical step-by-step rational approach that permits breaking down a complex problem into single and manageable components that can be explained.

**Engaged in Contemporary Issues, Life-long Learning Ability:** the process of identifying information, making a correct integration to real-time scenarios, and/or projecting it to future settings for the benefit of the community.

## Rubric Scale Interpretation

---

1 = Students did not comply with the criterion = **Not satisfactory**

2 = Students contributed to some of the requirements of the criterion but below expectations = **Somewhat satisfactory**

3 = Students integrated the criterion concepts = **Satisfactory**

4 = Students exceeded the criterion definition = **Highly satisfactory**

## **Appendix D. Examples of Summarized Assessment Reports to Identify Attainment of the Institutional Learning Goals (ILOs)**

*Appendix D* presents examples of historic summarized reports evaluating the level of attainment of the institutional learning goals (ILOs), based on the information provided by the academic areas. There are three types of reports:

- 1) Level of attainment of the program-level learning outcomes per program (2013).
- 2) 2016-2018 ILOs level of attainment using rubrics (pilot report while implementing rubrics for the first four institutional learning goals/outcomes (ILOs))
- 3) A summary based on the 2019 ABET self-study reports.

Changes are expected in the format of the institutional report due to the newly implemented standardized Excel Worksheets for the ILOs developed in 2022.

### Appendix D.1. Level of attainment of the program-level learning outcomes per program (2013).

A summarized student learning assessment report was prepared at the Institutional level for evaluating the attainment of the institutional goals/outcomes. This is presented in *Table D.2* and *Table D.3*. These tables are based on the assessment data submitted by the academic areas for the 2013 assessment cycle. *Table D.2* provides an example of initiatives to improve aspects identified as current priorities as related to the corresponding institutional learning goal/outcome, while *Table D.3* illustrates a summary of the level of achievement of the program outcomes for the undergraduate programs at PUPR at the time.

Based on the analysis performed, the strongest learning outcomes are those related to teamwork, lifelong learning interest, oral communication, technological competence, and understanding of ethical and professional responsibilities, the latter including the discussion of ethics, and global and contemporary issues. The practical application of problem-solving skills in the professional field is also presented as a strong ability in many programs, as evidenced in the Exit Course (Capstone or Final Project).

*Table D.2. Examples of Initiatives to Strengthen the Attainment of the Institutional Learning Goals/Outcomes Identified as current priorities, based on the 2013 cycle*

<b>Institutional Learning Outcome</b>	<b>Finding</b>	<b>Action taken to improve</b>
<p><b>Effective Communication.</b> <i>Express ideas in oral, written, and graphic modes.</i></p>	<p>Capstone / final project presentation reveal: - Written communication skills could improve in terms of grammar and expression. - Oral communication skills are strong, and a high level of professionalism is evidenced.</p>	<ul style="list-style-type: none"> <li>• Written communication: Spanish and English courses in the curricula changed (2012 bachelor's programs curricular review). Second language course redesigned.</li> <li>• Evaluation criteria in courses offered at the Socio-Humanistic Studies Department changed to incorporate additional elements in the evaluation of language skills. Also, the number of courses demanding oral presentations and written reports increased. This includes the Preparatory Spanish course which now requires the preparation of an essay.</li> </ul>
<p><b>Scientific and Quantitative Reasoning.</b> <i>Apply scientific and mathematical reasoning to the solution of problems.</i></p>	<p>Freshman students show math deficiencies and difficulties. When entering concentration courses, Faculty still accentuates the need to improve the background math</p>	<ul style="list-style-type: none"> <li>• Mathematics and Sciences Department notified.</li> <li>• 2012 curricula and syllabi review incorporated changes in this component.</li> <li>• The main purpose of Mathematics courses in the Developmental Component is to improve high school-level math skills for students in need. Also, the CPU (University Progress Center) and the PSE (Educational Services Program) offer</li> </ul>

<b>Institutional Learning Outcome</b>	<b>Finding</b>	<b>Action taken to improve</b>
	knowledge learned in previous courses.	tutoring in courses deemed necessary, such as math courses. <ul style="list-style-type: none"> <li>• A pilot two-week summer workshop for freshman students was implemented in 2013 in order to strengthen developmental mathematics course topics in which students typically show more difficulties.</li> <li>• Math-related PechaKucha night's activity was implemented.</li> <li>• At concentration courses, many faculty members either explain background knowledge in which students seem to have difficulties or provide handouts as an aid.</li> </ul>
<b>Critical Thinking.</b> <i>Interpret and question evidence, statements, and graphics, in order to draw justified, educated, reasonable and truthful conclusions.</i>	The development of critical thinking skills is an integral part of the General Education component, and results are satisfactory. However, an opportunity to improve in the following aspect has been identified: analyze and draw conclusions from experiment results.	<ul style="list-style-type: none"> <li>• Faculty teaching laboratory courses are emphasizing the importance of performing educated conclusions from experiments, and more time has been devoted to developing this ability.</li> </ul>
<b>Information Literacy.</b> <i>Acknowledge, locate, and evaluate the information needed to accomplish a specific purpose.</i>	This ability is within limits, but some programs show interest in strengthening opportunities in the curriculum to formally develop this skill, and to evaluate its attainment, together with lifelong learning initiatives.	<ul style="list-style-type: none"> <li>• The Library personnel has initiated a more aggressive campaign in order to incorporate at least three courses per curriculum in the information literacy program led by the Library's Information Literacy Program.</li> <li>• Presentation of the plan and the services that the Library offers to each department's faculty members during the first faculty meeting of the FA14 Term. The purpose is to disseminate ways of working jointly with library personnel and faculty in information literacy skills.</li> </ul>

Table D.3. Level of Attainment of the Program-Level Learning Outcomes per Program, based on the 2013 cycle

<b>Compliance with Learning Outcomes Criteria (Most Recent Cycle - 2013)</b>											
✓: Criterion met   *: Criterion near compliance   **: Criterion below compliance											
<b>School of Engineering and Geomatic Sciences</b>											
<b>BS Program</b>	a (1)	b (2)	c (3)	d (4)	e (5)	f (6)	g (7)	h (8)	i (9)	j (10)	k (11)
Civil	**	✓	✓	✓	*	✓	✓	*	✓	✓	*
Chemical	**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Computer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Electrical	*	✓	✓	✓	*	✓	✓	✓	✓	✓	✓
Environmental	**	✓	*	✓	✓	*	✓	✓	✓	✓	*
Industrial	✓	✓	✓	✓	✓	✓	✓	✓	**	✓	✓
Mechanical	**	**	**	✓	✓	✓	✓	✓	✓	✓	*
Land Surveying	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>School of Architecture</b>											
<b>BS Program</b>	A1-11		B1-12		C1-9						
Architecture	✓		*		*						
<b>School of Management and Entrepreneurship</b>											
<b>BS Program</b>	A	B	C	D	E	F	G	H			
Business Admin.	*	✓	*	*	-	-	*				
<b>School of Engineering-Orlando</b>											
<b>BS Program</b>	a	b	c	d	e	f	g	h	i	j	k
Civil	✓	*	✓	✓	✓	✓	✓	✓	✓	✓	✓
Computer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Electrical	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>School of Management-Florida Campuses</b>											
<b>BS Program</b>	A	B	C	D	E	F	G	H			
Business Admin.	✓	✓	✓	✓	**	✓	✓	✓			

## Legend for table: Program-Level Learning Outcomes:

### *Engineering Learning Outcomes (San Juan and Orlando)*

- (a) Ability to apply knowledge of mathematics, science, and engineering
- (b) Ability to design and conduct experiments, as well as to analyze and interpret data
- (c) Ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability.
- (d) Ability to function on multidisciplinary teams
- (e) Ability to identify, formulate, and solve engineering problems
- (f) Understanding of professional and ethical responsibility
- (g) Ability to communicate effectively
- (h) Broad education necessary to understand impact of engineering solutions in a global, economic, environmental and societal context.
- (i) Recognition of need for and ability to engage in life-long learning
- (j) Knowledge of Contemporary Issues
- (k) Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

### *Business Administration Learning Outcomes (Orlando and Miami)*

- (a) Demonstrate ability to gather and analyze information related to the functional areas of accounting, marketing, finance, and management for research and creative problem solving
- (b) Demonstrate ability to evaluate business situation under a legal, social and economical perspective
- (c) Develop the ability to manage technological change and understand its role in the global business environment.
- (d) Demonstrate ability to evaluate oneself, modify behavior and understand the relevance of business ethic and social responsibility
- (e) Develop the ability to integrate and apply the knowledge of various business disciplines to improve the decision making process
- (f) Utilize effective communication skills in ways appropriate for a variety of business situations and daily work environment.
- (g) Acquire the ability to conceptualize, plan, develop and apply the integration of the necessary business concepts for an effective engagement in an entrepreneurial endeavor.
- (h) Acquire ability to utilize leadership skills, influence and support others to perform complex and ambiguous tasks as part of a team.

### *Business Administration Learning Outcomes (San Juan)*

- (A) Demonstrate ability to gather and analyze information for research and creative problem solving
- (B) Employ effective communication skills in a variety of business situations and daily work environments
- (C) Acquire the ability to utilize leadership skills, to influence and support others in the performance of their tasks
- (D) Demonstrate ability to work effectively as a team member and team leader
- (E) Develop the ability to manage technological change and understand its role in the global business environment.
- (F) Demonstrate ability for self-evaluation, and behavior modification; and evidence comprehension of business ethics and social responsibilities
- (G) Develop the ability to integrate and apply the knowledge of the various business disciplines, in conjunction with the selected specialization, to improve the decision making process
- (H) Acquire the ability to conceptualize, plan, develop and apply the necessary skills to engage in an entrepreneurial endeavor.

### *Architecture Realms*

*Realm A: Critical Thinking and Representation*

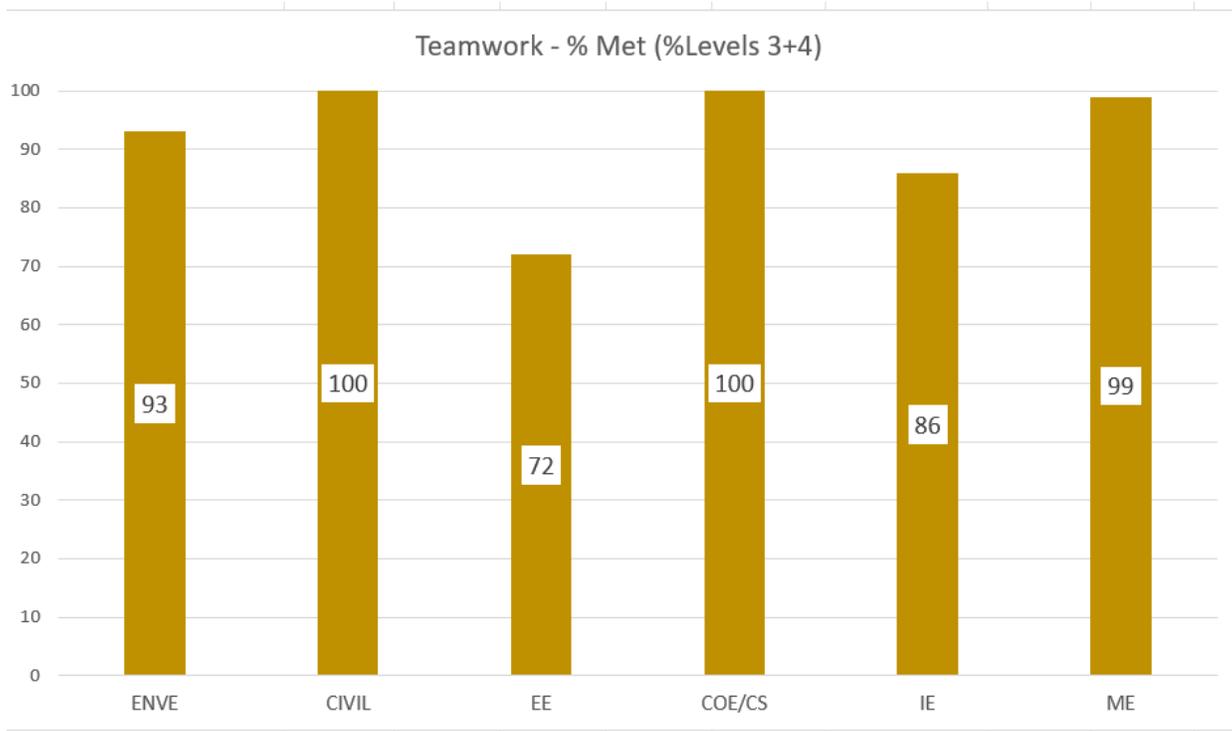
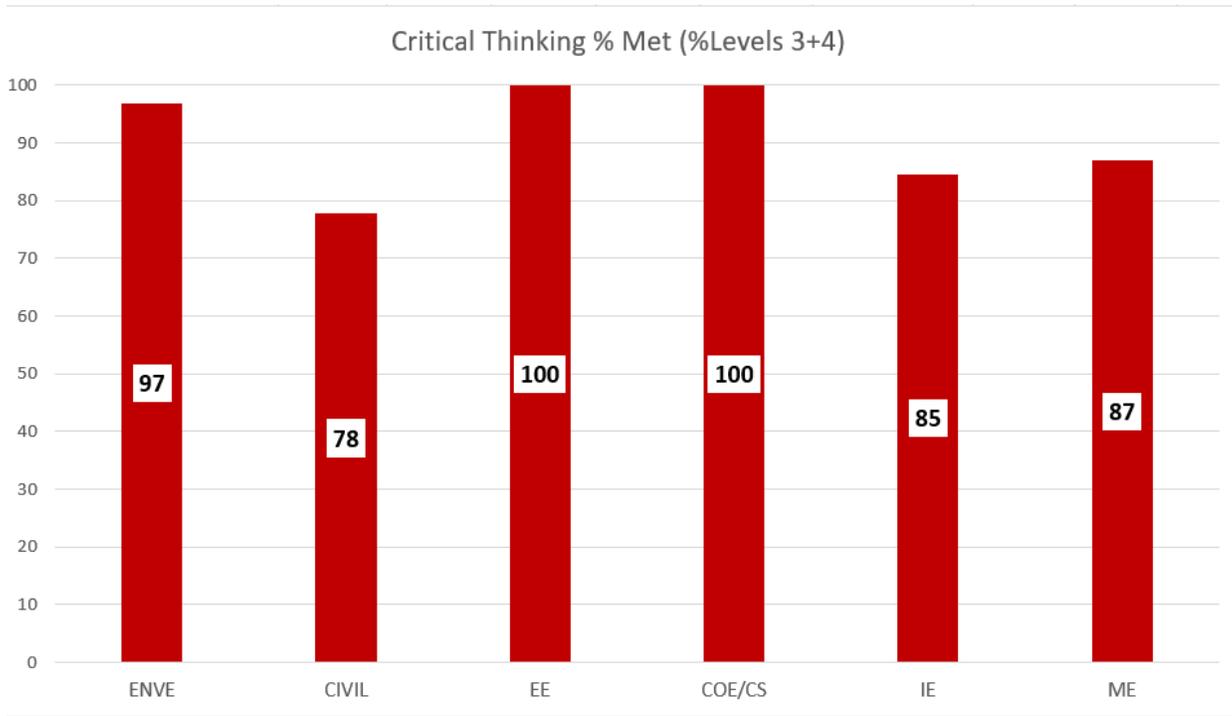
*Realm B: Building Practices, Technical Skills, and Knowledge*

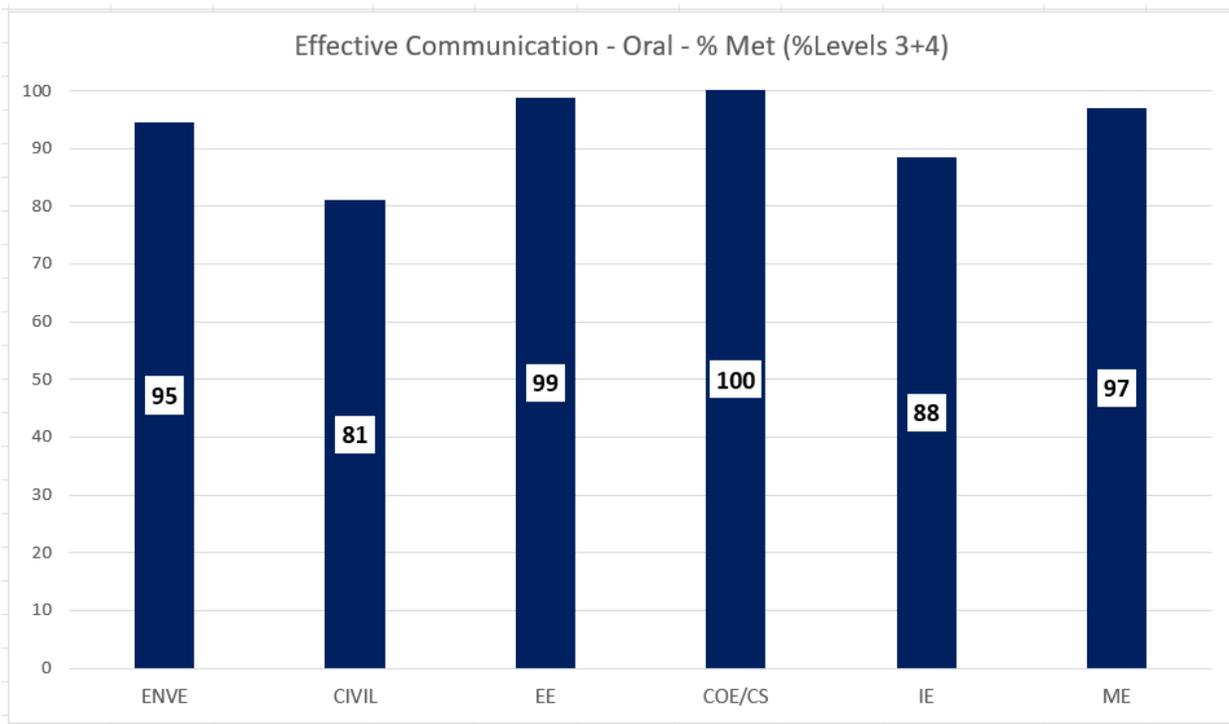
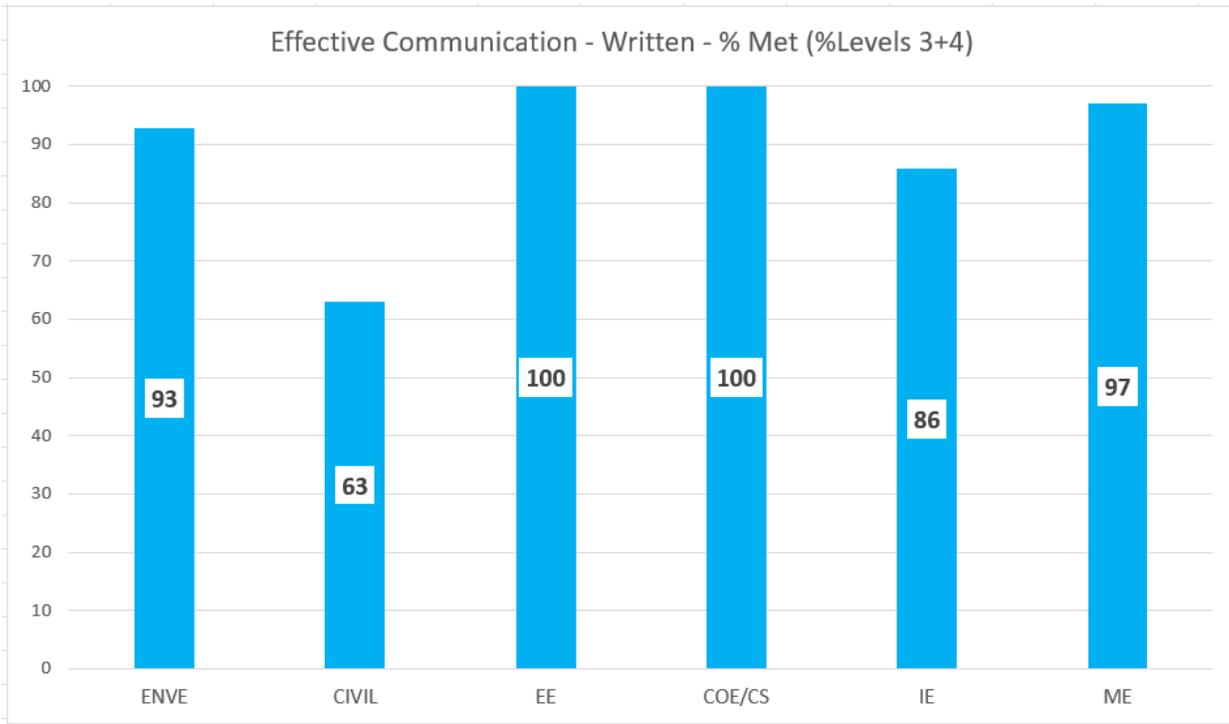
*Realm C: Integrated Architectural Solutions*

*Realm D: Professional Practice*

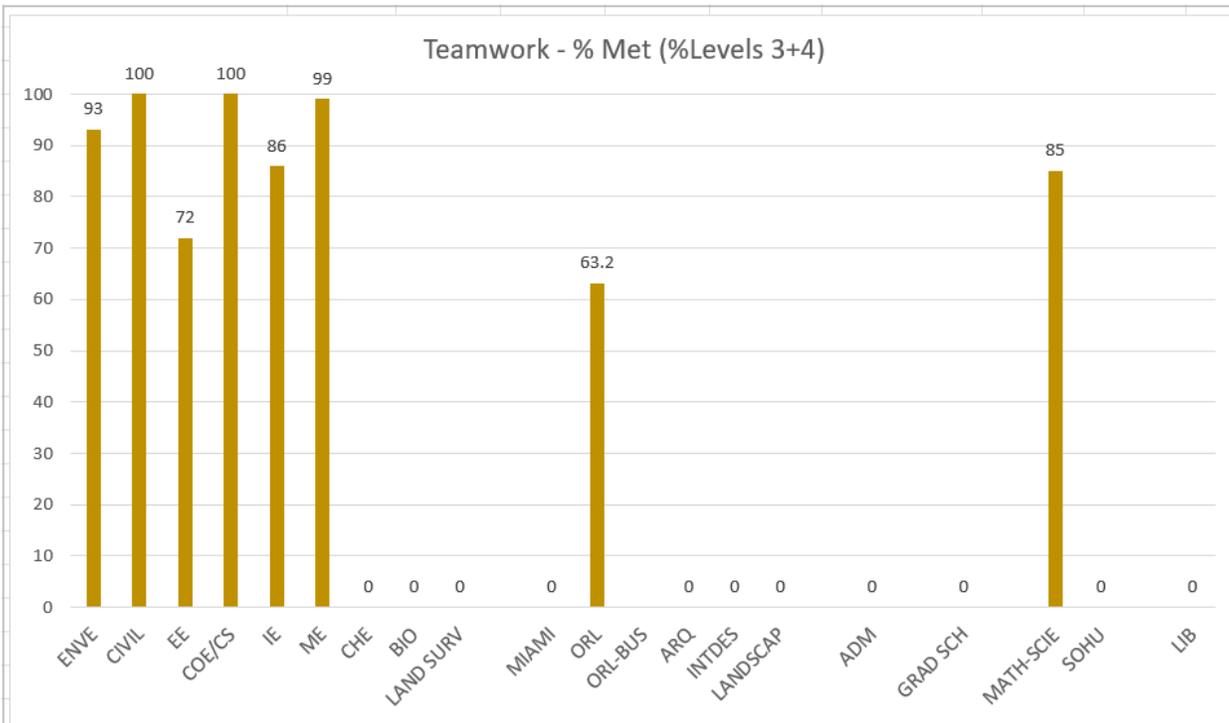
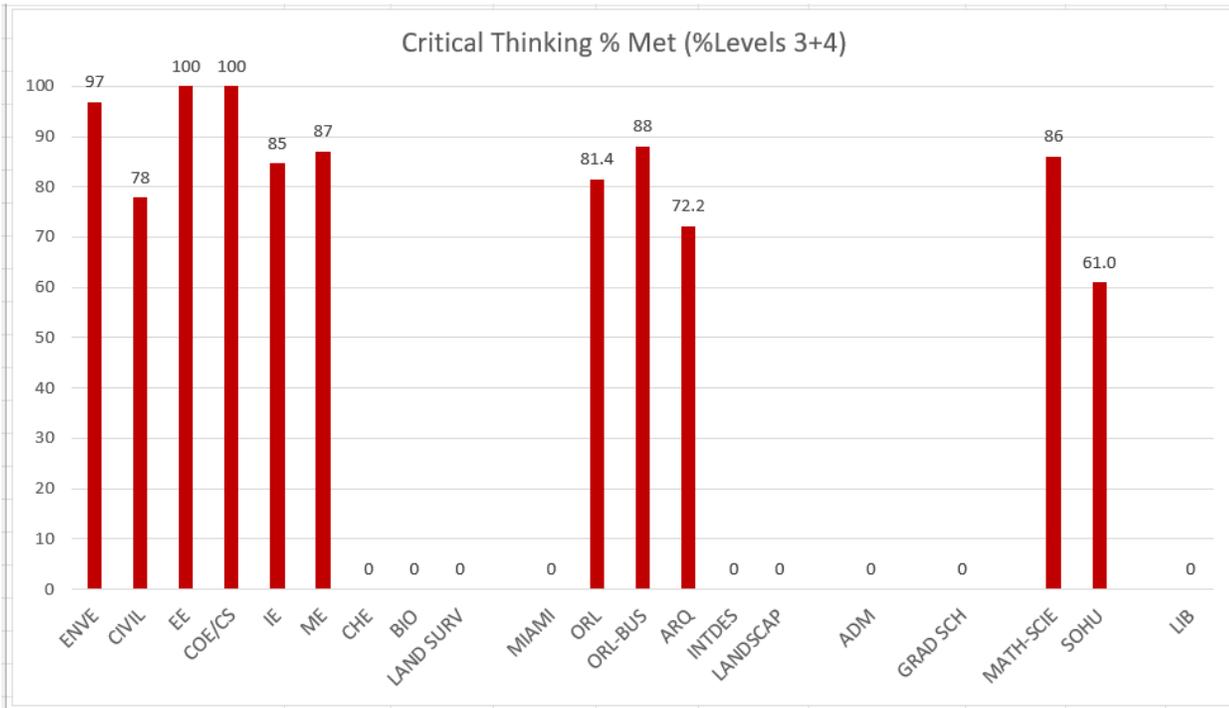
**Appendix D.2. 2016-2018 ILOs Level of Attainment using Rubrics (pilot report).**

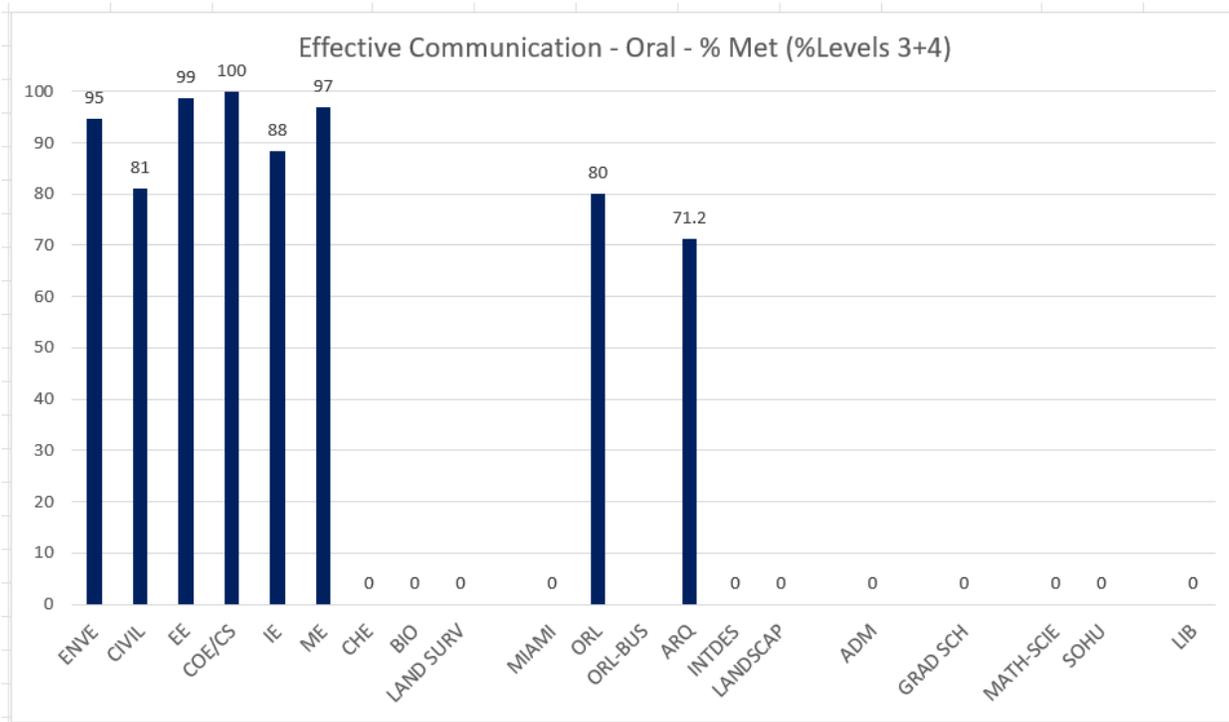
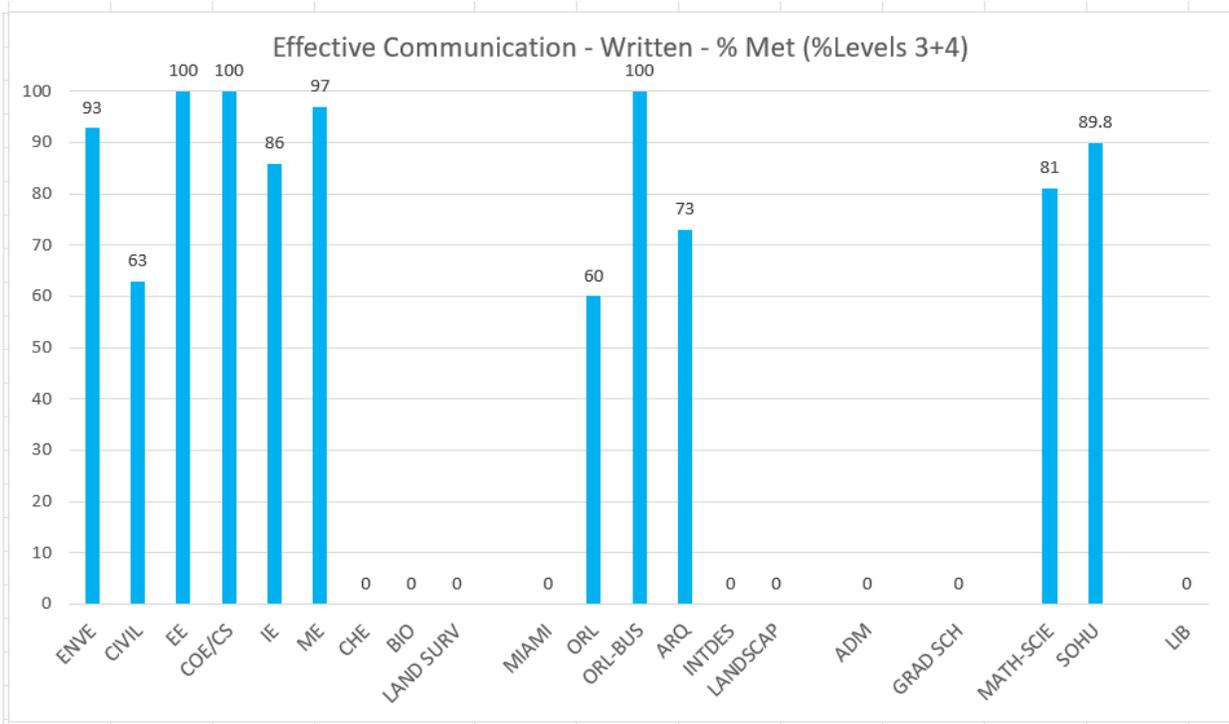
**2016-2018 ILOs level of attainment using rubric - Engineering programs only**





2016-2018 ILOs level of attainment using rubric - All programs





**Appendix D.3. Summary for Engineering based on the 2019 ABET Self-Study Reports.**

See a separate document with the following name:

“Continuous Improvement from 2019 ABET Self Study Reports Apr 2023.pdf”

Table of contents of this report

**Continuous Improvement from 2019 ABET Self Study Reports  
for PUPR ILOs with Lower Attainment Levels  
PUPR SLA Committee - April 2023**

PUPR ILOs Attainment Level Chart ..... 1

ABET Student Outcomes Associated to Vulnerable PUPR ILOs ..... 1

ABET Student Outcome a/1 - Keywords: Math and Science ..... 3

ENVE

BME (Not divided by SO):

ChE (Not divided by SO):

CE

CpE (Not divided by SO):

CS (Not divided by SO):

EE

IE

ABET Student Outcome b/2 – Keywords: Laboratory ..... 13

ENVE

CE

EE

IE

ABET Student Outcome c/3 - Keywords: Design..... 15

ENVE

CE

EE

IE

ABET Student Outcome e/5 - Keywords: Solve Engineering Problems ..... 21

ENVE

CE

EE

IE

## Appendix E. Adapted MSCHE Rubric for Evaluating Institutional Student Learning Assessment Processes

### Rubric for Evaluating Institutional Student Learning Assessment Processes

The original MSCHE document has been modified to adjust it to an individual program, department or academic unit

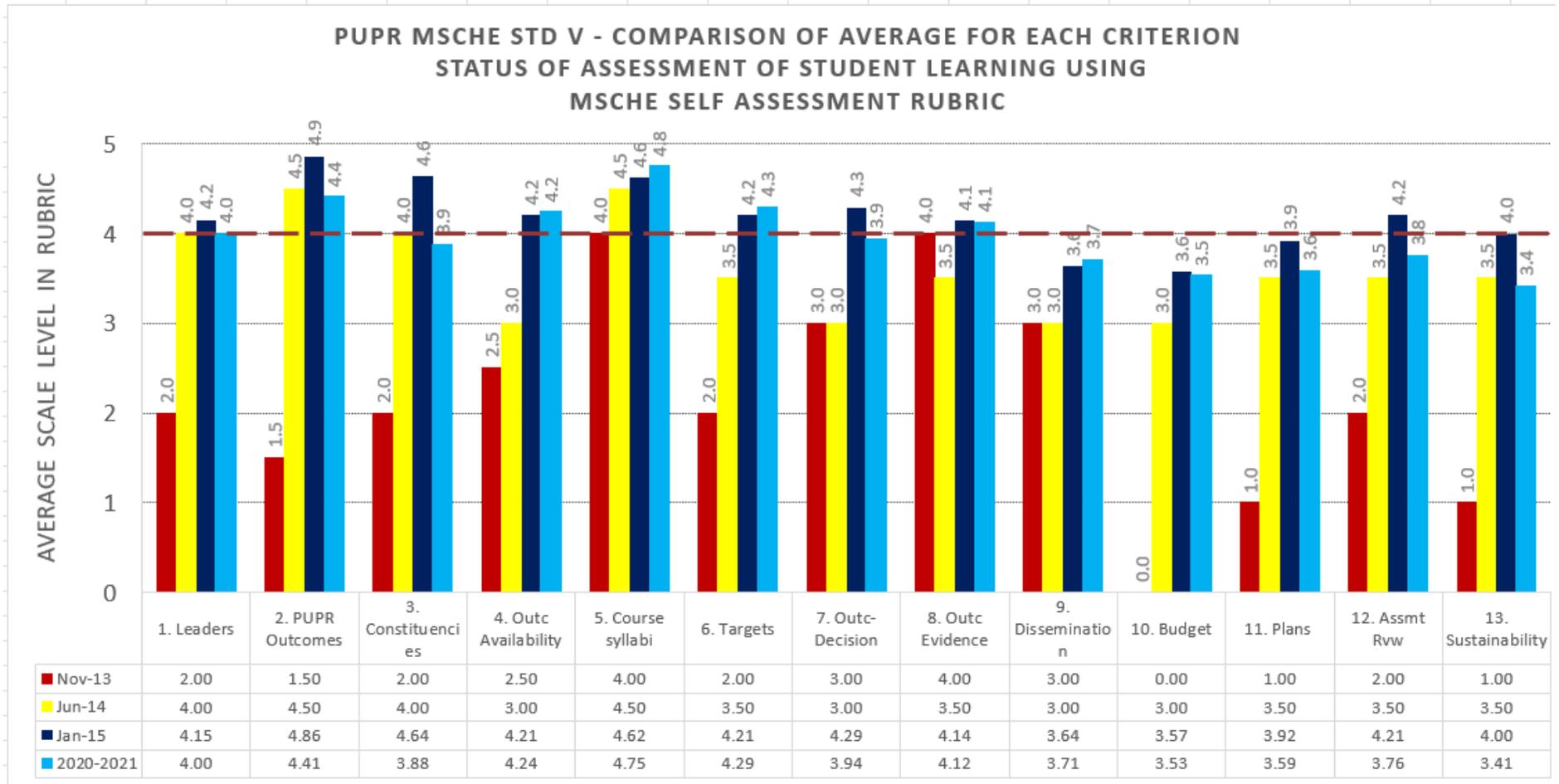
To be filled out from the perspective of the program, department or unit you represent

This is intended for institutions to use as a tool to help them assess the status of their current assessment efforts in terms of Middle States' accreditation standards and expectations. This tool is **not** intended to be used by any evaluators or to prescribe specific Commission actions regarding the institution.

- No plans** = No documented evidence that my department, program or unit has plans to do this.
- No evidence** = My department, program or unit appears to be aware that it should do this, but there is **no documented evidence that this is happening.**
- A few areas** = My department, program or unit has **documented evidence** that this is happening in **just a few areas**
- Some areas** = My department, program or unit has **documented evidence**—not just assurances—that this is happening in **some but not most areas** (for example, in a number of academic programs but not yet in general education)
- Most areas** = My department, program or unit has **documented evidence**—not just assurances—that this is happening in **most but not all areas.**
- Everywhere** = My department, program or unit has **documented evidence**—not just assurances—that this is happening **everywhere.**

	<i>For academic programs, the general education curriculum, and institutional goals articulated in the mission statement, vision statement, or elsewhere:</i>	No plans	No evidence	A few areas	Some areas	Most areas	Everywhere
1	Institutional leaders (VP, Dean, Directors) demonstrate sustained—not just one-time or periodic—support for promoting an ongoing culture of assessment and for efforts to improve teaching. <b>(Institutional level)</b>						
2	Clear statements of expected learning outcomes at the <b>program</b> and course levels have been developed and have appropriate interrelationships among them, and with the institutional learning outcomes. <b>(Program level)</b>						
3	Those with a vested interest in the learning outcomes of the <b>program</b> or curriculum are involved in developing, articulating, and assessing them. <b>(Program level)</b>						
4	Statements of <b>program</b> -level expected learning outcomes are made available to current and prospective students. <b>(Program level)</b>						
5	Course syllabi include statements of expected learning outcomes. <b>(Program level)</b>						
6	Targets, threshold, or benchmarks for determining whether student learning outcomes have been achieved have been established and justified; the justifications demonstrate that the targets are of appropriate college-level rigor and are appropriate given the institution's mission. <b>(Program level)</b>						
7	Multiple measures of student learning, including direct evidence, have been collected and are of sufficient quality that they can be used with confidence to make appropriate decisions. <b>(Program level)</b>						
8	The evidence of student learning that has been collected is clearly linked to expect learning outcomes. <b>(Program level)</b>						
9	Student learning assessment results have been shared in useful forms and discussed with appropriate constituents, including those who can effect change. <b>(Program level)</b>						
10	Student learning assessment results have been used to improve teaching and by institutional leaders to inform planning and budgeting decisions. <b>(Program level)</b>						
11	In any areas in which the above are not yet happening, concrete, feasible, and timely plans are in place. <b>(Program level)</b>						
12	Assessment processes have been reviewed and changes have been made to improve their effectiveness and/or efficiency, as appropriate. <b>(Program level)</b>						
13	There is sufficient engagement, momentum, and simplicity in current assessment practices to provide assurance that assessment processes will be sustained indefinitely. <b>(Program level)</b>						

**Appendix E.1. Historic Results of the Self-Evaluation of the PUPR Student Learning Assessment Processes using the Adapted Version of the MSCHE Rubric for this Purpose**



**Analysis of the two last data points in the previous graph:**

Some indexes show a slight reversal in trend in the last two data points. It can be expected given the many challenges faced by PR in the last years and documented in the 2023 MSCHE self-study. These indicators are predicted to improve by the time of the next evaluation (scheduled for 2024-2025). Of the thirteen (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.

Answer: This indicator is expected to improve with the implementation of the new strategic plan (2022-2027).

- 2) Item 13 - There is sufficient engagement, momentum, and simplicity in current assessment practices to ensure that assessment processes will be sustained indefinitely.

Answer: The assessment processes and practices have been established in 2000 and evolved since then. There are academic programs with more mature and sustained processes than others. Through the *Institutional Student Learning Assessment Committee*, ongoing 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 also expected to improve.

## Appendix F. Program Assessment Coordinator Tasks and Responsibilities

### INTRODUCTION

The **Program Assessment Coordinator** manages the development, implementation, and documentation of a comprehensive assessment process to support the continuous improvement of the **program**, in accordance with the institutional mission, the accreditation requirements, and the Program Constituencies' needs, providing backup from the academic standpoint to the institutional effectiveness process.

The Assessment Coordinator must closely interact with:

- The faculty of the academic program (responsible for the assessment of the student learning at the course level and responsible for creating assessment reports for the outcomes to be used for program outcomes assessment),
- the Curriculum Coordinator,
- the Department Head, Associate Department Head, and Department Administrative Assistant,
- other Assessment Coordinators and Administrative Personnel, and
- the Program Constituencies

to develop effective strategies for the assessment of student learning outcomes at the **program level**, and to support this process at the **institutional level**.

The Assessment Coordinator provides **ongoing** support to the department head and faculty in all tasks associated with the assessment of student learning for the **program** outcomes. Some are:

- develop/update the assessment process and the assessment plan/schedule,
- develop/update assessment instruments,
- prepare the documentation and analysis of assessment results at program level,
- assist in the definition and implementation of the program improvement measures, and
- report the assessment results to internal and external stakeholders, among others.

The Assessment Coordinator collects, evaluates, and disseminates the assessment results. This is an iterative process.

### DETAIL OF THE TASKS AT EACH STAGE OF THE ASSESSMENT AND CONTINUOUS IMPROVEMENT PROCESSES

The assessment and continuous improvement processes have been divided into six steps that are presented next (in **orange**). The tasks performed by the Assessment Coordinator to support each stage are listed after each **orange** title:

#### 1. *Review student outcomes:*

Continuously research changes in educational trends, assessment procedures, and accreditation requirements to propose the updating of the student outcomes and the assessment process accordingly.

#### 2. *Identify learning opportunities:*

With the support of the Curricular Coordinator, the faculty, and in coordination with other Department Program Assessment Coordinators:

- a) Analyze the curriculum to ensure that there is balanced support for each student outcome. This requires the preparation, distribution, and processing of a Faculty survey and the elaboration of a matrix with the courses' contribution to the student outcomes.
- b) Identify the strategic courses to demonstrate a gradual development of the skill represented by each student outcome. Classify courses in **Introductory (Level I)**, **Reinforcement (Level II)**, and **Mastery (Level III)** for assessment and analysis purposes.
- c) Review course syllabi, particularly the section on the course contribution to the student outcomes.

### 3. *Define assessment plan, schedule, and strategy:*

- a) Develop/update the assessment plan and schedule at the **program level**. This includes:
  - Identify the direct and indirect methods to use for assessment,
  - The frequency to apply each instrument/tool/method,
  - The frequency to evaluate the accumulated evidence,
  - The responsible entity for data collection, and
  - The responsible entity for the evaluation/analysis of the accumulated evidence at the end of each evaluation cycle
- b) **Guide the development/update of the strategies/instruments to identify, collect, and prepare the assessment data** for evaluation using **direct methods of assessment**.
  - Guide the faculty in the development/update of the rubrics and performance criteria/indicators used to collect assessment data in strategic courses to feed the program-level assessment process.
  - Develop/update the spreadsheets used by the faculty of the strategic courses to collect the assessment data.
  - Develop automated spreadsheets for summarization and graphing of the assessment data for the program, collected at different assessment points and over time, to identify tendencies.
  - Define the structure of the interim assessment and continuous improvement reports. Define ways to summarize the data and findings to facilitate analysis.
- c) Participate in the development/update of surveys and other indirect methods of assessment (e.g. Exit Survey). For instruments administered by other Offices/Departments, provide feedback to the responsible entity, when applicable.

### 4. *Collect assessment information as per the pre-defined schedule/calendar:*

- a) **Coordinate with Faculty the collection of assessment information in strategic courses using the student outcomes rubrics and performance criteria/indicators (direct method of assessment).**
- b) With the support of the Department Head, follow up with the faculty in the delivery of the assessment reports for the strategic courses, as per schedule.
- c) Train Faculty in the preparation of the assessment reports and share best practices. Also, support the **program Faculty in the use of the spreadsheets**, and in the inter-relationship between the course evaluation tools and the outcome assessment.
- d) Respond to one-to-one questions to Faculty in assessment matters and in the application of assessment methods to their courses.
- e) Coordinate with Capstone professors the collection of assessment data with direct methods. The Capstone courses, as a culminating design experience, require special attention in program assessment.
- f) **Support the Department Secretary and Capstone Professors in the administration of the Exit Survey to the Capstone students (indirect method).**
- g) Collect assessment information from other Offices/Departments (indirect methods), as appropriate:
  - Exit Interview and COOP Supervisor Evaluation from the Career and Internship Services Office and the Planning Office

- FE Exam Results from the Dean
  - Other departments (e.g. General Education areas, and ENGI courses) to collect assessment data in the courses offered, when these courses impact the outcomes of the program.
- h) Organize the assessment reports in files and prepare these files for summative processing.

**5. *Evaluation of the assessment data:***

- a) Prepare summative reports summarizing the assessment data collected, analyzing and interpreting the accumulated evidence in order to determine how well student outcomes have been attained.
- b) Document findings, recommendations, and proposed actions for improvement. This is done at the end of each evaluation cycle to identify opportunities for program improvement.
- c) Coordinate, through the Department Head or designee, Faculty meetings to share and discuss the summarized assessment results, and to discuss the proposed program/curriculum changes based on these results. Compile faculty agreements.

**6. *Use of assessment results to improve the program:***

- a) Support the implementation of the proposed actions derived from the assessment process to improve the program (“close the loop”).

Note: Since assessment and program evaluation are dynamic processes, additional special reports could be requested to follow up on implemented actions. Also, adjustments in the plan, schedule, or strategies could result. Meetings one on one, by component (faculty of related courses), and of the whole faculty are scheduled as needed for this purpose.

**OTHER TASKS OF THE ASSESSMENT COORDINATOR**

**Other tasks/responsibilities of the Assessment Coordinator to support the Institutional Efforts and Accreditation Visits are:**

***1. Collect and Process input from Constituencies to support the process of reviewing and approving the Program Educational Objectives (PEOs)***

- a) Plan the strategy, and develop/update the instruments to collect information from Constituencies:
  - Alumni,
  - Industry Representatives and Employers,
  - Senior Students
  - Faculty
- b) With the Department Head and Administrative Assistant support, plan and coordinate Industry Representatives Meetings and Focus Groups led by Faculty. Instruct Faculty.
- c) Compile focus group minutes. Process all information gathered from Constituencies and prepare a document with a summary of findings.
- d) With the Department Head, coordinate a Faculty meeting to discuss findings, and define actions for improvement based on the input received.
- e) Update the Constituencies Information Records.

***2. Prepare Displays and Self-Study Documentation for Accrediting Agencies prior to Scheduled Reaccreditation Visits***

- a) Plan and coordinate the strategy and logistics of the display of materials and evidence for the program evaluators.

- b) Develop the Self-Study sections related to the assessment process (Chapters 2, 3, and 4, and provide support in the preparation of Chapter 5 as it relates to the student outcomes)
- c) Support the Department Head in the documentation of the students' record analysis required by the program evaluator prior to the visit.
- d) Review the PEOs and Student Outcomes information on the webpage prior to the accreditation visit. Support the Curricular Coordinator in the updating of the graduation information and other documentation that the accrediting agency requires is made public.
- e) Meet with the program evaluator during the visit to explain the assessment process, criteria used in the organization of the evidence, and to respond to other assessment-related questions.
- f) Support the Department Head in responding to Program Evaluator questions related to assessment and continuous improvement, pre and post-visit.

### ***3. Interaction with Orlando and Other Engineering Department Coordinators:***

- a) Interaction with Orlando campus Faculty and Assessment Coordinator.
- b) Communication with other engineering department assessment coordinators to share experiences or to respond to special requests from the Dean related to assessment.

### ***4. Alignment with the Institutional Guidelines and Assess the Institutional Learning Goals from the program perspective. Participation in the Institutional Student Learning Committee as an active member:***

- a) The Assessment Coordinator is an active member of the Institutional Student Learning Assessment Committee. This forum provides general guidelines for the assessment of student learning across all academic areas, aligning and facilitating the integration of student learning assessment efforts institution-wide, and among the General Education areas and the academic programs.
- b) At the Institutional level, the Assessment Coordinator provides insight into the development of assessment instruments for the data collection and evaluation of the Institutional Student Learning Goals.
- c) At the institutional level, the Assessment Coordinator prepares reports of the program contribution to the attainment of the **Institutional Learning Goals**, and supports the MSCHE Self Study and visit preparation.

**Appendix G. Program/Areas Student Learning Assessment Plans Addendum - Separate Document(s)**

## **APPENDIX 5.3.2**

## **ACADEMIC PROGRAM REVIEW POLICY**

The review of academic programs is initiated at the academic department level with active participation of relevant standing committees.

1. These revisions are submitted to the Academic Council by the department directors and the corresponding academic deans.
2. The Academic Council submits the documentation associated with the review of academic programs to the Academic Affairs Committee for evaluation and recommendations.
3. The final recommendations of the Academic Affairs Committee are submitted to the Plenary Session of the Academic Council for analysis and consideration.
4. The Plenary Session of the Academic Council passes judgment on the final recommendations of the Academic Affairs Committee, then makes an official certification with the academic program changes approved by the Academic Council.
5. A copy of the certification with curriculum changes approved by the Academic Council is forwarded to the Registrar's Office, in charge of inserting modifications in the Master Catalog of Courses.
6. The Office of the Vice President for Academic Affairs coordinates the addition of the corresponding curriculum changes, approved by the Academic Council, into the Undergraduate and Graduate Catalogs.
7. The Office of the Vice President for Academic Affairs, Deans, and Academic Program Directors are responsible for disseminating the changes among the student body.



## **APPENDIX 5.4.1: FACULTY / STAFF RESUMES**



**Name:** María Mercè Martínez

**Courses Taught:**

- ARCH 2020: Design Fundamentals II
- ARCH 4010: Advanced Design I
- ARCH 5020: Capstone Design II
- ARCH 5030: Capstone Design III

**Educational Credentials:**

- BA and Master in Architecture, Polytechnic University of Cataluña, Barcelona, Spain  
September 1996 – July 2003
- Illinois Institute of Technology, Crown Hall College of Architecture, Chicago, IL  
Visiting exchange student  
August 2002 – June 2003

**Teaching Experience:**

- Instructor at the School of Architecture of the University of Puerto Rico, Río Piedras, 2020 -2023
- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2009 – present

**Professional Experience:**

- Principal at MAPA Arquitectos LLC, San Juan, Puerto Rico, 2009 – present
- Architect at Fuster Architect, San Juan, Puerto Rico, 2009 – 2010
- Architect at Albisu Pradel Arquitectes, Barcelona, Spain, 2004 – 2007
- Principal at Mercè Martínez Arquitecta, Spain, 2004 – 2008
- Intern at Gensler Architecture, Chicago, Illinois, 2002 – 2003
- Intern at Cuixart Goday arquitectes, Spain, 2000 – 2003

**Licenses/Registration:**

- Título Oficial de Arquitecta 2003
- Colegio Oficial de Arquitectos de Cataluña, Lic. # 43845-6

**Selected Publications and Recent Research:**

- none

**Professional Memberships:**

- Col.legi Oficial de Arquitectes de Catalunya (COAC)
- American Institute of Architects (AIA)



**Name:** Romualdo Martínez

**Courses Taught:**

- ARCH 2020: Design Fundamentals II
- ARCH 4010: Advanced Design I
- ARCH 4030: Advanced Design III
- ARCH 5020: Capstone Design II
- ARCH 5030: Capstone Design III
- ARCC 1010: Architectural Representation I
- ARPP 5020: Construction Documents

**Educational Credentials:**

- Professional Bachelor Degree in Architecture, Polytechnic University Of Puerto Rico, San Juan, Puerto Rico – Honor American Institute of Architecture Puerto Rico – AIA Henry Adams Award PUPR – Architecture student highest score in design, 1995 – 2003
- Draftsman – Thomas C. Ongay Vocational School, Bayamon, PR – Honor, 1991 – 1992
- Engineering – University of Puerto Rico, Bayamon, PR, 1987 – 1989

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2018 -present, 2023 full time.
- Invited architecture juror UPR and PUPPR

**Professional Experience:**

- Architecture Consultant  
Misla Enterprises, LLC, Ponce, PR – 2018 / Arco Caribe, PSC, San Juan, PR – 2018 / Angel Nuñez, PSC, Aibonito, PR – 2018 – present / Smart Design Group, PSC, Hatillo, PR – 2003-2018
- Disaster Assessment Consultant at 3F Quality Assessment & Engineering. Guaynabo, PR, 2018
- Disaster Housing Assessment Consultant at Carrera Architects, Guaynabo, PR, 2017 – present
- Construction Drawings Design Consultant at Sarch Architects, San Juan, PR, 2017 – present
- Shop Drawing Consultant at Home Team Skylights, Toa Baja, PR, 2015 – present
- Shop Drawing Consultant at Skylight Technologies, Toa Baja, PR, 2012 – present
- Construction Drawings Design Consultant at Fuster Partners, San Juan, PR, 2011

**Licenses/Registration:**

- CAAPPR Member – Inactive for educational purposes

**Selected Publications and Recent Research:**

- Honor Award Miami Bienal VIII DLIHPR / Bronze Medal
- Casa Bortech Bienal 2008 AIA PR Chapter / Honor Award
- Homosapiens vs Landscape Photography Competition AIA St. Louis Chapter / Award
- Casa Bortech and DLIHPR at contemporary architecture of PR 2000-2010 / Published

**Professional Memberships:**

- Autodesk Member
- Freehand Sketching (@ROMUALDO.PR) Instagram



**Name:** Cecile Molina

**Courses Taught:**

- ARCC 0315: Ceramics
- ARHH 0440: Special topics in History (History of landscape architecture)

**Educational Credentials:**

- Polytechnic University of Puerto Rico, Hato Rey, PR. Diploma: Master of Landscape Architecture, 2014
- University of Wales Institute, Cardiff (UWIC) of University of Wales, UK (now known as Cardiff Metropolitan University), Diploma: Master of Fine Art (Concentration: Ceramics), 2000
- Studio Arts Center International (SACI); Florence, Italy. Diploma: Post Baccalaureate in Ceramics, 1999
- Boston University, College of Communications; Boston, MA. Diploma: Bachelor of Science in Journalism, 1997

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2023 – present
- Landscape Design, Department of Interior Design (DINT), University of Puerto Rico, Carolina Campus. 2019 – 2021
- Art Professor, Fine Arts Department of Humanities Faculty, University of Puerto Rico, Río Piedras Campus, Puerto Rico, 2017 – 2022
- Art Professor, La Liga de Arte de PR, Old San Juan, PR, 2015
- Adjunct Professor, Sculpture Department, Escuela de Artes Plásticas de PR, San Juan, PR, 2011 – 2014, 2008 – 2009, 2001 – 2006
- Held a slide lecture of my artwork and a 1 week Wheelthrowing seminar/ workshop: 'Sculptural Processes with Wheelthrown Forms' at Penland School of Art and Craft, Penland, North Carolina, 2005
- Adjunct Professor, Fine Arts of Humanities Department, University of Puerto Rico, Río Piedras, PR, 2005
- Ceramic Wheel Throwing professor; Toni Hambleton's Studio, Cayey, PR, 2001 – 2002

**Professional Experience:**

- Director Academic Programs of Design; Department of Design and Architecture at University of Ana G. Méndez, Gurabo Campus, Puerto Rico, 2022 – 2023

**Selected Publications and Recent Research:**

- Landscape Architecture Magazine (LAM), Pages 80-91, February 2023.
- Architectural Digest España (AD España), February 2018.
- Page COVER launching my design series FOTO: ARTE Designs. Puerto Rico.
- IDEAT: Contemporary Life Art and Design, Vol. 114, March-April 2015, page 70. Paris, France.
- Modo de Vida Magazine: Diseño, Decoración, Arquitectura, Noviembre 2014, pag. 60-64. Puerto Rico.
- Caras; Febrero 2010, Pag.78-82. Puerto Rico.

**Professional Memberships:**

- None



**Name:** Edilberto Ocasio

**Courses Taught:**

- ARCH 2030: Design Fundamentals III
- ARCH 3020: Intermediate Design II
- ARCH 4010: Advanced Design I
- ARCH 4030: Advanced Design III
- ARHH 1011: History of Architecture Laboratory
- ARHH 2010: History of Modern Architecture
- ARHH 2011: History of Modern Architecture Laboratory
- ARHH 3010: Neo Avant-Garde and the Architectural Contemporary Scene
- ARCC 2010: Architectural Representation II - Basic CAD
- ARTE 3010: Site Planning
- ARPP 5020: Construction Document

**Educational Credentials:**

- Bachelor in Environmental, Design School of Architecture, Universidad de Puerto Rico, 1988
- Master in Architecture, School of Architecture, Universidad de Puerto Rico, 1991

**Teaching Experience:**

- Professor at the School of Architecture, the Civil, Environmental Engineering Department and Graduate Management School of the Polytechnic University of Puerto Rico, 1994 – present
- Professor of the drafting and engineering technology courses of the Caribbean University of Puerto Rico, 1993 – 1994

**Professional Experience:**

- Architect at Carlos E. Betancourt Llambías Arquitectos CSP, 2018 – Present
- Architect at Edilberto Ocasio Master in Architecture, 2005 – Present
- Architect at Ocasio + Rivera Arquitectos CSP, 1999 – 2005
- Architect at Agrait Betancourt Arquitectos, 1998 – 1999
- Architect at Team International Architects, 1991 – 1993
- Architect at Rivera & Alejandro Architects – Engineers, 1988 – 1989

**Licenses/Registration:**

- 14058 AIT (Inactive for educational purposes)

**Selected Publications and Recent Research:**

- Frente Portuario: Puerto Real, Fajardo Puerto Rico. Thesis for master's degree in architecture. Universidad de Puerto Rico 1991

**Professional Memberships:**

- AutoDesk Community Member
- Trimble (Sketchup) Member



**Name:** Amy L. Pérez Poueymirou

**Courses Taught:**

- ARCH 1010: Basic Design I
- ARCH 1020: Basic Design II
- ARCH 1030: Basic Design II
- ARCC 2010: Architectural Representation II

**Educational Credentials:**

- Master in Architecture, UPR, 2005
- Bach. Degree in Environmental Design, UPR, 2001

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2021 – 2023
- History of Architecture Teacher Assistant at School of Architecture, UPR, 2000 – 2002

**Professional Experience:**

- UPPR, ARQPoli Director of Academic Affairs, 2023
- UPPR, ARQPoli Design Professor, 2021 – 2023
- ENTECH PR, Project Manager and Design Team Director (AIT), 2016 – 2021
- ENTECH DPM, Architect in Training, 2010 – 2016
- *fournier-arquitectura* CSP, Architect in Training, 2004 – 2010
- Julio Wright Associates, LLC, Intern, 2002 – 2003

**Licenses/Registration:**

- Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR) # 20024-AIT
- American Institute of Architects (AIA) Member # 38174284

**Selected Publications and Recent Research:**

- none

**Professional Memberships:**

- none



**Name:** Roberto Pérez

**Courses Taught:**

- ARCH 1010: Basic Design I
- ARCH 1020: Basic Design II
- ARCH 1030: Basic Design III
- ARTE 1010: Introduction to Technology
- ARTE 0400A: Construction Details
- ARTE 2010: Materials & Methods
- ARHH 1011: History of Architecture Space

**Educational Credentials:**

- B.A. Fine Arts, Fine Arts School, San Juan Puerto Rico, 1987
- B.A. Architecture, Polytechnic University of Puerto Rico, 2005

**Teaching Experience:**

- Associate Professor, School of Architecture, Polytechnic University of Puerto Rico, 2005 – present
- Materials Laboratory Director, 2005 – present

**Professional Experience:**

- none

**Licenses/Registration:**

- none

**Selected Publications and Recent Research:**

- none

**Professional Memberships:**

- none



**Name:** Diana Rivera

**Courses Taught:**

- ARCC 1010: Architectural Representation
- ARCH 1010: Basic Design I
- ARCH 1020: Basic Design II
- ARCH 1030: Basic Design III
- ARCH 1120: Analyzing Architecture
- ARCT 1010: Introduction to Architectural Theory
- ARCT 1011: Introduction to Architectural Theory Recitation

**Educational Credentials:**

- Bachelor of Environmental Design, University of Puerto Rico, 1992
- Master of Architecture, Syracuse University, 1995

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2022 – present
- Associate Professor, School of Architecture, Polytechnic University of Puerto Rico, 2012 – 2022
- Auxiliary professor, School of Architecture, Polytechnic University of Puerto Rico, 2010 – 2012
- Instructor, School of Architecture, Polytechnic University of Puerto Rico, 1995 – 2010
- Instructor and Coordinator, Architecture Summer Workshop, School of Architecture, Polytechnic University of Puerto Rico, 2002 – present
- Teaching Assistant, Syracuse University, 1993 – 1994

**Professional Experience:**

- Dean, School of Architecture, Polytechnic University of Puerto Rico, 2022 – present
- Interim Dean, School of Architecture, Polytechnic University of Puerto Rico, 2020 – 2022
- Associate Dean, School of Architecture, Polytechnic University of Puerto Rico, 2012 – 2020
- Coordinator, Design and Representation -First Year, School of Architecture, Polytechnic University of Puerto Rico, 2006 – 2012
- Rebeca Portuondo Díaz and Associates, San Juan, PR, 1998 – 2003

**Licenses/Registration:**

- none

**Selected Publications and Recent Research:**

- “Drawing the City: Old San Juan”, collaboration on the publication “San Juan de Puerto Rico”, 2013
- An Architectural Guide to Patios of Old San Juan, New School of Architecture, 2002
- Nomination to the National Register for Historic Places: Architectural Work of Francisco Roldán, A State Historic Preservation Office Grant, 1996

**Professional Memberships:**

- Faculty Counselor- Association of Collegiate Schools of Architecture (ACSA)



**Name:** Eduardo Rolón

**Courses Taught:**

- ARCH 4030: Advanced Design III
- ARCC 0130: Photoshop & Digital Imaging
- ARCC 0403: Computer Aided Design II
- ARCC 2010: Architectural Representation II
- ARPP 5020: Construction Document

**Educational Credentials:**

- Bachelor of Environmental Design, University of Puerto Rico, 1992
- Master of Architecture, University of Puerto Rico, 1996

**Teaching Experience:**

- Instructor, School of Architecture, Polytechnic University of Puerto Rico, 1997 - 2004
- Auxiliary Professor, School of Architecture, Polytechnic University of Puerto Rico, 2004 - present

**Professional Experience:**

- Principal, Eduardo Rolón, Arquitectos, 2010 – present
- GDCP Graphisoft Development Consultation Program member, 2012 – present
- Archicad Beta Testing Program, 2008 – present

**Licenses/Registration:**

- CAAPPR 16966
- FI AR97718

**Selected Publications and Recent Research:**

- ARCHINTENSIVE 2023: A Simple Template for students and beginners
- ARCHINTENSIVE 2021: Using Properties as a Key Note system
- Building Together Digital Event 2021 Roundtable: Educating architects - Panelist

**Professional Memberships:**

- Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
- American Institute of Architects (AIA)
- National Council of Architectural Registration Board (NCARB)



**Name:** Wilma L. Torres Gavino

**Courses Taught:**

- ARCH 3030: Intermediate Design III
- ARCH 5010: Capstone Design I
- ARHH 1010: History of Architecture
- ARHH 2010: History of Modern Architecture
- ARHH 2011: History of Modern Architecture Laboratory

**Educational Credentials:**

- Bachelor in Environmental Design, School of Architecture, Universidad de Puerto Rico, 1990
- Master in Architecture, School of Architecture, Universidad de Puerto Rico, 1993

**Teaching Experience:**

- Professor at the School of Architecture, the Civil, Environmental Engineering Department of the Polytechnic University of Puerto Rico, 1993 – present
- Professor of the drafting and engineering technology courses of the Caribbean University of Puerto Rico, 2013 – 2016

**Professional Experience:**

- Architect at Ocasio + Rivera Arquitectos CSP, 1999 – 2005
- Architect at Licencia Poética, 1997 – 2000
- Architect at Junta de Planificación, 1993 – 1995
- Architect at Antonio Attolini Lack, Architect, 1991– 1992
- Architect at Montilla y Latimer Architect, 1989 – 1991

**Licenses/Registration:**

- (Inactive for educational purposes)

**Selected Publications and Recent Research:**

- Cuentos de Valentina Isabel, (Novel in Progress)
- Necrópolis, La ciudad dormida, Thesis for master's degree in architecture. Universidad de Puerto Rico 1993
- El Mall, El centro de todo, Essay, Ateneo de Puerto Rico (February 2006)
- El Politécnico, (Articles 1995- 2005)
- Arquitectura y Arquitectos en Ciudad México, Reserch for El Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico and School of Architecture, Universidad de Puerto Rico (1991-1995)

**Professional Memberships:**

- none



**Name:** Juan Carlos Velázquez

**Courses Taught:**

- ARCC 0100: Spatial Visualization
- ARCC 0170: Perspective
- ARCC 0202: Sketching
- ARCC 0315: Ceramics
- ARCC 1010: Architectural Representation I
- ARCH 0203: Design Seminar
- ARIN 2310: Color theory and Psychology

**Educational Credentials:**

- Licenciatura en Bellas Artes (MFA), Sculpture Department, Antigua Academia de San Fernando, Facultad de Bellas Artes, Universidad Complutense de Madrid, Spain. (Sculpture Department Scholar, Villa de Ayllón, Segovia), 1988
- Bachelor in Sculpture (BFA), Escuela de Artes Plásticas y Diseño de Puerto Rico, San Juan, (Magna Cum Laude), 1985

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico, 1997 – present
- Professor, School of Interior Design, Polytechnic University of Puerto Rico, 2016 - present
- Professor, School of Landscape Architecture (Graduate Program), Polytechnic University of Puerto Rico, 2006 – present
- Professor, Architectural Conservation and Rehabilitation (Graduate Program), Polytechnic University of Puerto Rico, 2018 – present
- Academic mentor and registration assistant, School of Architecture, Polytechnic University of Puerto Rico, 2001 - present
- Professor, Extension Program, Escuela de Artes Plásticas de Puerto Rico, 2015- 2016
- Professor, Extension Program, Escuela de Artes Plásticas de Puerto Rico, 2013 – 2014

**Professional Experience:**

- Sculpture studio and workshop, Toa Alta, Puerto Rico. 1990 – present
- Sculpture consultancy, Gypsum and Plaster ceiling damage report, Escuela de Artes Visuales, Old Central High in Santurce, P.R. Carlos E. Betancourt, Architect, 2023
- Sculpture consultancy, Gypsum and Plaster damage report, Palacio de Sta. Catalina "La Fortaleza", Conservation Laboratory of the School of Architecture, Polytechnic University of Puerto Rico. 2014
- Conservation workshop, Gypsum and Plaster conservation and mold construction, "Casa de las Cariátides" Head office of the "Instituto de Cultura Puertorriqueña", Ponce, Puerto Rico. 1990
- Conservation workshop, Gypsum and Plaster conservation and mold construction, "Casa Monasillios" Building, Río Piedras, Puerto Rico. 1990

**Professional Memberships:**

- National Art Education Association, member ID #66376



**Name:** Luis Raúl Albaladejo

**Courses Taught:**

- ARCC 0403A: Revit
- ARCC 0410: Digital Fabrication
- ARCC 0420: Parametric Design and Fabrication

**Educational Credentials:**

- Bachelor's in Environmental Design, University of Puerto Rico, 2009 (Magna Cum Laude)
- Master's in Architecture, University of Puerto Rico, 2013 (Magna Cum Laude)

**Teaching Experience:**

- 2 years as teaching assistance at the School of Architecture, University of Puerto Rico, 2010-2012
- 4 years as course lecturer at the School of Architecture, Polytechnic University of Puerto Rico

**Professional Experience:**

- Junior Architect at Fuster + Architects PSC, 2013 – 2019
- Architectural Designer at Integra Design Group, 2019-2023
- Project Architect II at Integra Design Group, 2023 – present

**Licenses/Registration:**

- Licensed Architect in Puerto Rico, Lic. #21664

**Selected Publications and Recent Research:**

- Master's thesis: Simbiosis Urbana: Un centro interpretativo para la cuenca urbana de Rio Piedras. School of Architecture, University of Puerto Rico, 2013
- El Blok Hotel: Project collaborator. Featured in: Archdaily, Plataforma Arquitectura, Travel & Leisure, Surface Magazine, Architectural Digest, Design Boom, Area Magazine, Wallpaper Magazine, Phaidon Atlas of Brutalist Architecture.
- Piscinas Terapeuticas La Esperanza: Project collaborator. Featured in: Archdaily, Plataforma Arquitectura.

**Professional Memberships:**

- Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)



**Name:** Carlos Alvarado, Ph.D., P.E.

**Courses Taught:**

- ARTE 4020: Environmental and Mechanical Systems

**Educational Credentials:**

- Ph.D. Biomedical Engineering; Graduation, The University of Connecticut; Storrs, CT, Summer 2005
- Masters of Science in Mechanical Engineering, Specialty Area in Design and Manufacturing, Graduation, 1997
- Bachelor of Science in Mechanical Engineering, University of Puerto Rico, Mayagüez Campus, Mayagüez, PR, Graduation, 1995

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico
- Professor, Department of Mechanical Engineering, PUPR, 2003 – present
- Capstone Coordinator, Mechanical Engineering, PUPR, 2004 – present
- Adjoin Professor, Department of Biomedical Engineering, PUPR, 2016 – present
- Coordinator & Developer of Biomedical Engineering, PUPR, 2016 – 2018
- Department Head Mechanical Engineering, PUPR, 2007 – 2012
- Coordinator for Outcome Assessment in ME Dept., PUPR, 2004 – 2007
- Teaching Assistant, University of Connecticut; Storrs, CT, 2000 – 2003
- Professor, University of Puerto Rico, Mayagüez, PR, 1999 – 2000

**Professional Experience:**

- Novel Enterprises Corp; San Juan, PR, President and Owner, 2006 - present
- General Electric; Juana Díaz, PR, Plastic and Metal Tooling and Process Specialist, 1997 – 1999
- Engineering Research Center / Net Shape Manufacturing; Columbus, OH, Graduate Research Associate, 1995 – 1997
- Timberland Co: The Outdoor Footwear Company; Isabela, PR, Process / Project Engineer, COOP, 1994 – 1994

**Licenses/Registration:**

- Professional Engineering License 15598

**Selected Publications and Recent Research:**

- Alvarado, Carlos and Alvarado, Gilberto (2018) “3D Orthopedic Drill Guide” United States Patent 10,123,812 B1.
- Alvarado, Carlos and Alvarado, Gilberto (2017) “3D Orthopedic Drill Guide” United States Patent 9,848,895 B1 B1.
- Alvarado, Carlos (2015) “2015 NASA Mining Competition Paper PUPR Using Systems Engineering”
- Miller, Michele; Gershenson, John; Rincón, Amicar; Rojas, Jose; Alvarado, Carlos (June 2012) Implementation of a Multidisciplinary Systems Engineering Capstone Design Course at Three Puerto Rican Universities 2012 ASEE Annual Conference Exposition

**Professional Memberships:**

- Colegio de Ingenieros y Agrimensores de Puerto Rico



**Name:** Olga Angueira

**Courses Taught:**

- ARCH 2020: Design Fundamentals II

**Educational Credentials:**

- Master of Landscape Architecture, Harvard Graduate School of Design Cambridge, MA, 2004
- Bachelor of Architecture, University of Miami, School of Architecture Coral Gables, FL, 2001

**Teaching Experience:**

- Associate Professor, Polytechnic University Graduate School of Landscape Architecture, San Juan, PR, 2008 – 2022
- Design Professor, Polytechnic University Graduate School of Landscape Architecture, San Juan, PR, 2006 – 2008

**Professional Experience:**

- Executive Director, Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico, San Juan, PR, 2013 – present
- Landscape consultant, Manuel Bermúdez Arquitectos San Juan, PR, 2012 – 2014
- Associate Professor, Polytechnic University Graduate School of Landscape Architecture, San Juan, PR, 2008 – 2022
- Architect in Training, Soltero Muñoz & Associates San Juan, PR, 2007- 2008
- Architect in Training, Evelio Pina & Associates San Juan, PR, 2005 – 2006
- Architect in Training, Soltero Muñoz & Associates San Juan, PR, 2004 – 2005
- Assistant in Instruction, Graduate School of Design at Harvard University
- Landscape Technology (Professor Niall Kirkwood), Spring 2004

**Licenses/Registration:**

- none

**Selected Publications and Recent Research:**

- Honorary Mention at the XII Bienal de Arquitectura y Arquitectura Paisajista de Puerto Rico for the Investigation and Documentation of the Casa Blanca Gardens in Old San Juan a study done with the students through an elective course at the Polytechnic University.
- Participated in the First Landscape Architects Exhibition held on April 27, 2006 at the CAAPPR
- First Prize winner for the 2001 Student Specification Competition (Miami Chapter)
- Study abroad in Rome during spring 2000

**Professional Memberships:**

- Associate Member of the American Society of Landscape Architects. (ASLA)
- Landscape architect in training certification #36 in San Juan, PR
- Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR), Architect in training certification #19282



**Name:** Héctor Berdecía

**Courses Taught:**

- ARTE 0410: Preservation Technology

**Educational Credentials:**

- Master of Science in Historic Preservation (M.S.HP), Concentration - Architectural Materials Conservation Preservation Policy emphasis, University of Pennsylvania, Philadelphia, PA, 2020
- Joint Summer Institute - Conservation Sciences courses within Georgetown University and the Università degli Studi de Firenze/University of Florence, Georgetown University, Washington, DC, summer 2019
- B. Environmental Design - Architecture (B.EnvD.), Double Major - B.A. in History; emphasis in History of the Americas, Post-Bachelor Certificate in Urban Studies, Magna Cum Laude, University of Puerto Rico, Río Piedras Campus, Río Piedras, PR, 2018

**Teaching Experience:**

- Lecturer, Undergraduate Architecture Program, School of Architecture, Polytechnic University of Puerto Rico
- Adjunct Professor, Graduate Program in Architectural Conservation and Rehabilitation, School of Architecture Polytechnic University of Puerto Rico

**Professional Experience:**

- Founding Director-General, Centro de Conservación y Restauración de Puerto Rico (CENCOR). San Juan, PR, 2020 – Present
- Materials conservation assistant, National Center for Preservation Technology and Training, NPS, Natchitoches, LA, 2020 – 2020
- Graduate research & teaching assistant, Graduate Program in Historic Preservation, University of Pennsylvania, School of Design, 2018 – 2020
- Editorial assistant, Change Over Time: An International Journal of Conservation and the Built Environment, University of Pennsylvania Press, 2019 – 2020
- Architect + Preservation Intern, Quinn Evans Architects | Washington, D.C, 2019 – 2019

**Licenses/Registration:**

- none

**Selected Publications and Recent Research:**

- Berdecía-Hernández, Héctor J. "Heritage Preservation in Spanish Fortified Caribbean Cities: Legal, Social and Governance Framework" in E. Rojas, ed. Balancing Growth and Conservation: The Case of Cartagena de Indias. University of Pennsylvania, Stuart Weitzman School of Design, November 2020.
- Berdecía-Hernández, Héctor, Camarcho García, N. & Pérez Caro, M., Eds. – A Citizen's Guide for the Preservation of Architectural Heritage in Puerto Rico Puerto Rico State Historic Preservation Office (PRSHPO), Institute of Puerto Rican Culture (ICP) & UPR School of Architecture Student Council. February 2020.

**Professional Memberships:**

- American Institute for Conservation (AIC) - Program Chair and Chair-Elect of the Architecture Specialty Group (ASG) - Member
- International Institute for Conservation of Historic and Artistic Works (IIC)
- The Association for Preservation Technology International (APT)
- ICOMOS – International Council of Monuments and Sites
- International Network for Traditional Building, Architecture & Urbanism (INTBAU)
- National Trust for Historic Preservation | Preservation Leadership Forum



**Name:** Javier Burgos

**Courses Taught:**

- ARCH 1010: Basic Design I
- ARCC 1010: Architectural Representation I

**Educational Credentials:**

- Bachelor's degree in environmental design, University of Puerto Rico (UPR), School Of Architecture, 1997 – 2002
- Master of Architecture and Urbanism, Polytechnic University Of Catalunya (UPC), Technical Superior School Of Architecture Of Barcelona (ETSAB), 2003 – 2004

**Teaching Experience:**

- University of Puerto Rico (UPR),\_Technology and Engineering Department and Department of Design, Graphic Arts, Interior Design and Commercial Advertising, 2022 – 2023
- Interamerican University of Puerto Rico (UIPR), Science and Technology Department and Business Administration Department, 2015 – 2022
- Turabo University (SUAGM), School of Engineering, 2006 – 2015
- Metropolitan University (SUAGM), School of Technical Studies, 2002 – 2006
- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2002 – 2003

**Professional Experience:**

- Burgos Mundo Enterprises, 2006 – Present
- Lord Electrics, 2018 – 2018
- 4D Engineering, 2017 – 2018
- P & S Consultants, 2016 – J2017
- Architect SF (Remote at San Francisco, California), 2015 – 2015
- Valentino & Associates, 2011 – 2015
- Cocero- Cordero Architects, 2011 – 2011
- Advanced Steel Services, 2006 – 2010
- Olabarrieta RD Architecture, AIA, 2005 – 2006
- Underwood Architects, 2001 – 2001
- ELS Architecture, 2000 – 2000
- Evelio Pina & Associates, 1999 – 1999

**Licenses/Registration:**

- Project management professional (PMP): April – 2021: PMP Number: 2996264.
- Citizen developer business architect: PMP CERTIFIED: In progress.
- Agile accreditation: Project Management Institute.
- Waterfall accreditation: Project Management Institute.

**Selected Publications and Recent Research:**

- 2003: Master Plan of L'Agro Nocerinno Sarnese (Salerno, Italy). 2002: Master Plan of Oporto.

**Professional Memberships:**

- Project Management Institute Member (PMI): November – 2020: ID Number: 6786161.



**Name:** Josué Camaño-Dones

**Courses Taught:**

- HIST 2010: History of Puerto Rico in the Caribbean Context
- HIST 3510: Historiography

**Educational Credentials:**

- Certificate in Diplomacy and International Relations. Diplomatic School "Dr. Arturo Morales Carrión" of the Department of State of the Commonwealth of Puerto Rico; Institute of Higher Education in Diplomatic and Consular Training "Dr. Eduardo La Torre Rodríguez" of the Dominican Republic; and the Center for Advanced Studies of Puerto Rico and the Caribbean, 2014
- Diploma in Documentation and Writing: Paleography, Diplomacy and Archivistcs, Complutense Summer School, Complutense University of Madrid, Spain, 2007
- DEA-PhD. Doctoral Program, Department of History of America I (State and Society in America), Faculty of Geography and History, Universidad Complutense de Madrid, Spain, 2006
- M.A. History, Graduate Program in History, Department of History, University of Puerto Rico, Río Piedras Campus, 2006
- B.A. European History, Department of History, University of Puerto Rico, Río Piedras Campus, 1997

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico
- Department of History of the School of Humanities and Department of Humanities of the School of General Studies, University of Puerto Rico, Río Piedras Campus, 2006 – present
- Center for Advanced Studies of Puerto Rico and the Caribbean, Old San Juan, 2007 – 2021
- Center for Multidisciplinary Studies of Puerto Rico, Metropolitan Campus, 2011 – 2013

**Professional Experience:**

- Research Associate and Paleographer, Center for Historical Research, School of Humanities, Department of History, University of Puerto Rico, Río Piedras Campus, 2013 – present
- Associate Dean of Academic Affairs, Center for Advanced Studies of Puerto Rico and the Caribbean, San Juan, Puerto Rico, 2018 – 2021

**Licenses/Registration:**

- none

**Selected Publications and Recent Research:**

- Memoria sobre la administración de la isla de Puerto Rico, redactada por el intendente que fue de Puerto Rico don Manuel Núñez, 1852. Río Piedras, Puerto Rico: Ediciones Tapianas y Centro de Investigaciones Históricas de la UPR, 2022, 167 pp. [Transcripción de Josué Caamaño-Dones y Prefacio de Roberto Ramos-Perea], 2022

**Professional Memberships:**

- Asociación de Historia Económica del Caribe (AHEC). 2013 – present
- Asociación Puertorriqueña de Historiadores (APH), 2010 – present
- Asociación de Historiadores del Caribe (AHC), 2010 – present
- Red de Archivos de Puerto Rico (ArchiRED), 2019 – present



**Name:** Edmundo Colón

**Courses Taught:**

- ARCH 4020: Advanced Design II
- ARTE 3010: Site Planning

**Educational Credentials:**

- B. Arch, Polytechnic University of Puerto Rico, 2004
- MIA, Harvard University, 2006

**Teaching Experience:**

- Lecturer, Polytechnic University of Puerto Rico, San Juan, 2005 – 2007
- Lecturer II, Polytechnic University of Puerto Rico, San Juan, 2011 – present

**Professional Experience:**

- Designer, CDQ+Assoc., San Juan PR, 2001 – 2005
- Designer, Jorge Rigau – FAIA Architects, San Juan PR, 2002 – 2004
- Graphic Designer, Builder, and Cook, Casagrande+Rintala, Echigo Tsumari Art Triennale, Japan 2003
- Senior Designer, Administrator, Eco, San Juan PR, 2005 – present

**Licenses/Registration:**

- Landscape Architect, Puerto Rico

**Selected Publications and Recent Research:**

- Techo del Cuartel de Ballajá, mas que verde, Entorno #20, Sube el Telón, 2012

**Professional Memberships:**

- American Society of Landscape Architects



**Name:** Nicole Colón

**Courses Taught:**

- ARCC 1010: Architectural Representation I
- ARCT 1011: Architectural Theory Recitation
- ARTE 0440: Architecture & Light
- ARIN 2020: Design Fundamentals II

**Educational Credentials:**

- Postgraduate Degree in Theatrical Lighting, IED, Istituto Europeo di Design S.L, 2019
- Master's degree in Interior Design, IED, Istituto Europeo di Design S.L, 2018
- B. Arch, Polytechnic University of Puerto Rico, 2015

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico

**Professional Experience:**

- Intern Architect, Colón Alonso Architectural Projects, 2015 – present
- Intern Architect, EBP Design Group, 2016
- Store Visual Designer, Michael Kors, 2009 – 2012

**Licenses/Registration:**

- None

**Selected Publications and Recent Research:**

- none

**Professional Memberships:**

- Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
- American Institute of Architects (AIA)



**Name:** Melisa Díaz Delgado

**Courses Taught:**

- ARST 3010: Structural Concepts I
- ARST 3020: Structural Concepts II
- ARST 4010: Structure III: Steel
- ARST 4020: Structure IV: Concrete
- ARTE 1010: Introduction to technology
- ARTE 2010: Materials & Methods

**Educational Credentials:**

- BARCH, School of Architecture, Polytechnic University of Puerto Rico
- MECE, PhD candidate

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico

**Professional Experience:**

- ArchWorks as main architect/engineer and permit professional.

**Licenses/Registration:**

- Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR) #20269

**Selected Publications and Recent Research:**

- PhD Candidate Doctoral Thesis in Geotechnical Engineering

**Professional Memberships:**

- Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)



**Name:** Alejandro Excia

**Courses Taught:**

- ARCC 0240: Introduction to Industrial Design
- ARPD 1020: Product Design I

**Educational Credentials:**

- BArch, School of Architecture, Polytechnic University of Puerto Rico
- Industrial and Product Design, Domus Academy, Milan Italy

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2023 – present
- Adjunct Professor, Industrial Design Faculty, School of Fine Arts & Design of Puerto Rico, 2016 – 2023
- Adjunct Professor, School of Architecture & Design Faculty, Pontifical Catholic University of Puerto Rico, 2011 - 2016

**Professional Experience:**

- Chief Creative Officer, terraFirma LLC, 2020 – Present
- Product Design & Product Development Partner, DoodleKnob LLC, 2016 – Present
- Founder & Product Designer, Warren? Short Film Direct- ed By Juan Linares Story Board Illustrator a.excia|Studio, 2019
- Project Architect & Senior Exhibit Designer, Space Haus LLC, 2017 – 2020
- Founder & Product Designer, a.excia|Studio, 2013 - 2017
- Senior Designer & FabLab Director, Neeuko Collaborative Innovation, University of SagradoCorazón. PR 2016 – 2017
- Co-Founder, and Product Designer, postData.Design, Puerto Rico (DesignStudio), 2011 – 2016
- Product Designer: Internship, Philippe Bestenheider Studio, Milano, Italy, 2010 – 2011
- Intern Architectural Designer, in-Formation Studio, Puerto Rico (Architecture Studio) 2005 – 2009
- Adjunct Professor, Industrial Design Faculty, School of Fine Arts & Design of Puerto Rico, 2016 – 2023

**Licenses/Registration:**

- none

**Selected Publications and Recent Research:**

- El Nuevo Dia, Programa de Preaceleración pre18 Gradua a 40 empresas Boricuas., jueves, 18 de febrero de 2021 - 3:18 p.m <https://www.elnuevodia.com/negocios/empresas-comercios/notas/programa-de-preaceleracion-pre18-gradua-a-40-empresas-boricuas/>
- Faculty Best Practices: Cross-Campus Arts Integration Mixing Innovation and Entrepreneurship for Unique Venture Development. CEO Conference 2012. Chicago IL.
- Publication: Domus Academy Group project “NUCLEUS”, published on the Illyworkds Magazine, 2010 part #28 issue Conviviality. pp. 30,32.

**Professional Memberships:**

- None



**Name:** Doel Fresse

**Courses Taught:**

- ARCC 0330: Installations
- ARCH 2010: Design Fundamentals I
- ARCH 3020: Intermediate Design II

**Educational Credentials:**

- B.EnvD, Bachelor of Environmental Design. School of Architecture at University of Puerto Rico, Rio Piedras, PR, 1995 – 2000
- M.Arch, Master of Architecture. Parsons School of Design, New York, NY, USA, 2001 – 2003.

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2019 – Present.
- Escuela de Artes Plasticas y Diseño de Puerto Rico, Industrial Design Department, San Juan, PR, 2014 – Present.
- School of Architecture, University of Puerto Rico, San Juan, PR, 2018 – Present

**Professional Experience:**

- Doel Fresse Design Studio, San Juan, PR. Owner/Designer, 2011 – Present
- Tropical Works, LLC, San Juan, PR. Co-Owner/Designer. Design-Build Industrial Design Company, 2014 – 2019
- Marvel Architects, San Juan, PR. Senior Architectural Designer, 2018 – 2019
- Tiguer Corp, San Juan, PR. Design Consultant. Design Studio, 2012 – 2018
- Spaces Architects, San Juan, PR. Architectural Designer, 2012 – 2013
- Luis Gutierrez Architects, San Juan PR. Architectural Designer, 2010 – 2011

**Licenses/Registration:**

- none

**Selected Publications and Recent Research:**

- none

**Professional Memberships:**

- none



**Name:** Julio Hernández

**Courses Taught:**

- ARTE 4010: Electricity, Acoustics & Telecom

**Educational Credentials:**

- MSEE, University of Puerto Rico, Mayagüez Campus, 1995
- BSEE, Polytechnic University of Puerto Rico, 1991
- Certificates in cybersecurity at the graduate level: Graduate Certificate in Information Assurance and Security (GCIAS) from PUPR in 2018; Graduate Certificate in Database Security and Secure Operations (GCDASSO) from PUPR in 2021; Graduate Certificate in Digital Evidence and Auditing (GCDEA) from PUPR.
- Certificate, IEEE Comisioning Conformance Evaluator for DER (Distributed Energy Resources), 2022

**Teaching Experience:**

- Associate Professor & Associate Director, Computer Engineering and Computer Science (ECECS) Department, Polytechnic University of Puerto Rico

**Professional Experience:**

- Associated Professor/Director, ECECS Department UPPR, 2021 – present
- Manager 4G and Wireless network at PREPANET, 2011 – 2013
- JAHL Hardware/Software, Inc.
- Computer Consultant, Wired/Wireless Networks design, installation and management
- PRASA Software developer for Telemetry reading and diagnostic.
- EE Engineer Designer at Erwin Rodriguez & Asociados, P.S.C, 1999
- Consultant at Juan F. García, Inc. (Data and Communication Services)
- Computer Consultant at Estudio de Arquitectura Inc.
- Computer Consultant H2A Engineering, P.S.C.
- Computer Consultant at P.L.E.C. Program Esc. Dr. Julio J. Henna
- WINPR wireless network co-founder, consultant

**Licenses/Registration:**

- CIAPR Licensed Electrical Engineer (Lic. 12859)

**Selected Publications and Recent Research:**

- PUPR-DDEC: "Developing Stackable Credentials in Cybersecurity and Web Development Design Education for the 21st Century Workforce Needs in Puerto Rico.", CO-PI, June 2023.
- "Graduate Cybersecurity Education at Polytechnic University of Puerto Rico (PUPR)", Tapia Panel Presentation, TAPIA 2022.
- "Introduction to Vector Quantization" published in the Polytechnic University of Puerto Rico, magazine, 1996.
- "A survey of Vector Quantization Techniques and The implementation of one technique appropriated for Neural Network approach", Graduate research seminar, University of Puerto Rico CAAM, 1993.

**Professional Memberships:**

- CIAPR



**Name:** Ileana Lara

**Courses Taught:**

- ARPP 5030: Office Management & Finances

**Educational Credentials:**

- BA in Architecture, School of Architecture, Polytechnic University of Puerto Rico, 2004 – 2009
- Master of Engineering in Civil Engineering (M.E.C.E.), Graduate School, Polytechnic University of Puerto Rico, 2011 – 2014

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico

**Professional Experience:**

- Architectural Designer, Curbelo & Rullán Consulting Engineers PSC, Arecibo PR, 2018 – present
- Project Manager/ Senior Cost Estimator, JJE Construction Services Inc., San Lorenzo PR, 2018 – present
- Cost Estimator, Cordex Construction Corp., San Juan PR, 2016 – 2018
- Architectural Designer, DuPont Pioneer, Salinas, PR, 2016 – 2016
- Architectural Designer, ML Engineering Management PSC, Fajardo, PR. 2012 – 2016
- Commercial Real Estate Appraiser Assistant, Efraín Tirado Appraisal Group PSC, San Juan, PR, 2011 – 2012
- Architectural Designer, SQR Architect & Engineers PSC, San Juan, PR, 2010 – 2011
- CAD Designer, NOPE Construction Corp, Guaynabo PR, 2005 – 2010

**Licenses/Registration:**

- Occupational Safety and Health in Construction # 12-600808266
- Disaster Housing Inspector on the FEMA Housing Inspection Service

**Selected Publications and Recent Research:**

- none

**Professional Memberships:**

- none



**Name:** Imandra Martínez

**Courses Taught:**

- ARCH 3010: Intermediate Design I
- ARCH 3030: Mid-Career Research
- ARCH 5010: Capstone Design I
- ARHH 0440: Advanced Topics on History

**Educational Credentials:**

- PhD degree in History (Candidate), Centered for Advanced Studies of Puerto Rico and the Caribbean, 2019
- Master's degree in Archeology, Center for Advanced Studies of Puerto Rico and the Caribbean, 2016
- Architect. Validated as Bachelor of Architecture by an accredited institution in the USA, Polytechnic High Institute José Antonio Echevarría (ISPJAE), Habana, Cuba, 2000

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico and Master in Architectural Conservation and Rehabilitation, Graduate Program, 2017 - present
- Digital File Coordinator (Digital Archive), Polytechnic University of Puerto Rico, 2018 – 2019
- Professor of Design, Atlantic College, Puerto Rico, 2005 – 2006
- Technology Training Center, Santo Domingo, DR, 2003–2004

**Professional Experience:**

- Planner, Whole Community Resilience Planning Program, Municipality of Isabela, Federal Program Office, 2019 – present
- Historic Preservation Specialist (Archaeologist), Puerto Rico State Historic Preservation Office (SHPO), 2019 – present
- Principal Archaeologist, Archaeologist, Professional Services, 2018 – 2019
- Architect, Puerto Rico State Historic Preservation Office, 2018
- Architect, Arleen Pabón Charneco PhD JD, 2016 – 2017
- Architect, Puerto Rico State Historic Preservation Office, 2016 – 2017
- Archaeologist, Puerto Rico State Historic Preservation Office, 2016
- Archaeologist, Centro de Investigaciones Arqueológicas Bieque, 2015 – 2017
- Architect, Arleen Pabón Charneco PhD JD, 2012-2015

**Licenses/Registration:**

- none

**Selected Publications and Recent Research:**

- Article: *The Puerto Rico State Historic Preservation Office: collaborations as a facilitator in the island's recovery*. Imandra Martínez Castañeda, Inventory Project Manager (ESHPPF-HIM) and Gloria Milagros Ortiz, Deputy, Puerto Rico State Historic Preservation Office. UFR Bulletin. July-September 2021.

**Professional Memberships:**

- Polytechnic University of Puerto Rico representative of the Scientific Committee of Ibero-American Historical and Cultural Heritage (Red PHI).
- Historic Sites and Areas Advisory Committee Member. Puerto Rico Planning Board. 2022
- Included in the Qualified Archaeologist Official List of Instituto de Cultura Puertorriqueña (ICP).



**Name:** Minette Morales

**Courses Taught:**

- ARTE 0400B: Architecture & Interior Design
- ARIN 2010: Design Fundamentals I
- ARIN 2030: Design Fundamentals III
- ARIN 3020: Interior Capstone I
- ARIN 3030: Interior Capstone II
- ARCC 0191: Visual Communication in Architecture
- ARCH 1120: Analyzing Architecture

**Educational Credentials:**

- BA Natural Science University of PR RIO Piedras, 2002
- Diploma in Interior Design San Juan School of Interior Design, 2008
- Master of Science in Interior Design Pratt Institute, 2014

**Teaching Experience:**

- Teacher's Assistant, Colegio San Antonio, 2006 – 2011
- Professor, San Juan School of Interior Design, 2009
- Professor, EDP University, 2015 – 2017
- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2017 – present

**Professional Experience:**

- Interior design professor, since 2014
- Interior Design Program Coordinator UPPR, 2017 – present
- Lead Designer, MM Design, 2008 – present

**Licenses/Registration:**

- Interior Design License, since 2008

**Selected Publications and Recent Research:**

- none

**Professional Memberships:**

- Colegio de Diseñadores y Decoradores de Puerto Rico (CODDI), since 2008



**Name:** Andrés F. Ocampo

**Courses Taught:**

- ARST 3020: Structural Concepts II
- ARST 4010: Structure III: Steel
- ARST 4020: Structures IV Concrete

**Educational Credentials:**

- PhD in civil structural engineering, University of Puerto Rico, Mayagüez Campus, 2019
- BS in Civil Engineer, University of Valle, Cali Colombia, 2005
- MS in Civil Engineer, University of Valle, Cali Colombia, 2009

**Teaching Experience:**

- Teaching Assistant (TA), University of Puerto Rico at Mayaguez, 2018 – 2019
- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2019 – present

**Professional Experience:**

- Structural Engineer, ENGINEERED ADVANTAGE, PSC, 2019 – present
- Structural Engineer, ESTRUMETAL S.A. (Cali-Colombia), 2010 – 2014

**Licenses/Registration:**

- EIT 28674

**Selected Publications and Recent Research:**

- Ocampo-Escobar Andres F. and Vidot-Vega, Aidcer L. “Effects of Concrete Parameters in the Lateral Stiffness of Reinforced Concrete Squat Walls” DOI 10.1007/s40091-019-0233-5 International Journal of Advanced Structural. (<http://link.springer.com/article/10.1007/s40091-019-0233-5>)

**Professional Memberships:**

- American Society of Civil Engineers (ASCE)



**Name:** Maribel Ortíz

**Courses Taught:**

- ARCH 1010: Basic Design I
- ARCH 1020: Basic Design II
- ARCH 1030: Basic Design III
- ARCH 2010: Design Fundamentals I
- ARCH 5010: Capstone Design I

**Educational Credentials:**

- B.Arch. School of Architecture, University of Puerto Rico, 1991
- M.Arch. School of Architecture, University of Puerto Rico, 1994

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2010 – present

**Professional Experience:**

- Archivos de Arquitectura y Construcción de la Universidad de Puerto Rico 1988
- Marvel, Flores, Cobían 1990
- Andrés Mignucci Arquitectos, 1995-present

**Licenses/Registration:**

- none

**Selected Publications and Recent Research:**

- 2014, “La Ventana al Mar” in 30-60 No. 41, Inés Moisset. Buenos Aires.
- 2009, “Violeta 150” in Miami + Beach Biennale, Nepomechie, Marilys (ed). Ediciones Trama: Quito.
- 2008, “Violeta 150” in Archivos de Arquitectura Antillana, Gustavo Moré (ed). No.30, May 2008, 118-123.
- 1992 “Space Between: A Study of Path and Places”, School of Architecture and Planning Department of Architecture, Massachusetts Institute of Technology
- 1994 Premio de honor: Tesis Plan de Ensanche para Guayama, Segunda Bienal de Arquitectura de Puerto Rico
- 2009 Bronze Medal: Violeta 150 (with Andrés Mignucci), Bienal de Miami + Beach, Miami.

**Professional Memberships:**

- Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)



**Name:** Cristina Parrilla

**Courses Taught:**

- ARCC 1020: Cyberpublications

**Educational Credentials:**

- Parrilla earned a Bachelor of Architecture from the Polytechnic University of Puerto Rico. She was awarded the PUPR Medal for the Highest GPA Score of the Architecture Department, Class 2011

**Teaching Experience:**

- Parrilla is an architectural and graphic designer with more than ten years of experience in both professional practice and the academic community. After graduation, Parrilla continued her passion for design and exploration as a professor and juror for various design studios at the PUPR's School of Architecture. She directed the digital Media Archive LAB and the Graphic Design department until 2017.

**Professional Experience:**

- Parrilla has practiced and collaborated with multiple design firms on the island and overseas as an architect in training and designer. She is currently a senior designer at Plusurbia Design, a firm she joined in late 2016.

Her experience includes architecture, planning and urban design, and mixed-use development at all scales in various cities around the world. She has been deeply involved in project, including the five-time award winner, the Little Havana Revitalization Plan, in partnership with the National Trust and the Wynwood Norte Community Vision Plan, recipient of the APA's 2021 Neighborhood Planning Award of Regenerative Planning and Design Conversion.

Parrilla is the lead Graphic Designer in charge of creative visual communications. She has extensive experience in multimedia platforms, digital software, fabrication mediums, and print (including publication design, branding, and environmental graphics). She is involved in all project phases, from conceptualization to delivery.

**Licenses/Registration:**

- none

**Selected Publications and Recent Research:**

- Collaborated in the research and design of the following: Coconut Grove Vollage: Implementation Plan (2017), Little Havana: Me importa (2019), Moving with Transit: City of Miami (2019), Underline: Special District (2020), Brandom Town Center: Pattern Book (2020), Historic Shenandoah (2020), Wynwood Norte: Community Vision Plan (2021), Historic Silver Bluff (2021), City of Anna Maria Historical Resources Survey (2022), City Terrace: Community Development Corporation (2023), Overtown Revitalization Masterplan (2023), among others.

**Professional Memberships:**

- National Council of Architectural Registration Board (NCARB), American Planning Association APA-Florida Chapter, APA Gold Coast Chapter – Member, volunteering as a Graphic Designer and Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico.



**Name:** Olga Prann

**Courses Taught:**

- ARIN 2210: History of Furniture I
- ARIN 3220: History of Furniture II

**Educational Credentials:**

- Master of Arts in Education with concentration in Art History and Museology, Caribbean University, Bayamon, Puerto Rico, 2017
- Associate's Degree in Interior Design and Decoration, San Juan School of Interior Design, San Juan, Puerto Rico, 2002
- School of Architecture, one year, Universidad Politécnica de Puerto Rico, San Juan, Puerto Rico, 1998
- Bachelor of Arts in Public Communication, University of Puerto Rico, Rio Piedras, Puerto Rico- Concentration in Advertising, Journalism and Photography, Magna Cum Laude, 1992

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2019 – present
- Professor, EDP University, Hato Rey PR, 2016 – 2018

**Professional Experience:**

- Design Department Director, Contract Design Group, Caguas, Puerto Rico, 2015 – 2023
- Interior designer, Independent, 2002 – present
- Interior Designer and Design Department Director, Contract Design Management, Inc. San Juan PR, 2006 – 2010
- Interior Designer and Supervisor of Design Department, Korp Interior Design, Inc., San Juan PR, 2003 – 2006

**Licenses/Registration:**

- State Department, Puerto Rico Government, Lic. 1550

**Selected Publications and Recent Research:**

- Master's thesis: The Phalanstery: The history of its construction, architecture and preservation, May, 2017
- Commercial Magazine: Perspectiva Interior- Co-editor- Official Magazine of Colegio de Diseñadores/Decoradores de Puerto Rico (CODDI) 2010-2011
- Publications in Puerto Rico magazines and newspapers

**Professional Memberships:**

- Colegio de Diseñadores y Decoradores de PR (CODDI)



**Name:** Enrique Ramón

**Courses Taught:**

- ARCH 4010: Advanced Design I

**Educational Credentials:**

- Master in Architecture, Harvard University GSD, 2000
- BA in Architecture, Washington University in St. Louis, 1994

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2010 – present

**Professional Experience:**

- Marvel Marchand Architects, San Juan, PR, 2016-Present;
- de2 Arquitectos, San Juan, PR, 2006 - 2016;
- BETA GROUP, San Juan, PR, 2009 - 2013;
- Construction Management Consultant Group, San Juan, PR, 2003 - 2006;
- TALLERES: muebles, arquitectura, San Juan, PR, 2001 - 2003;
- Ann Beha Associates, Boston, MA, Spring 2000;
- Raúl Martínez y Asociados, San Juan, PR, 1995 - 1996;
- Klitzing Welsch Associates, St. Louis, MO, 1994 – 1995

**Licenses/Registration:**

- Licensed Architect - Puerto Rico CAAPPR Member
- Board of Directors; Project Management Institute (PMI), Puerto Rico Chapter, 2010-2012

**Selected Publications and Recent Research:**

- none

**Professional Memberships:**

- Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
- Project Management Institute (PMI)



**Name:** José A. Rivera

**Courses Taught:**

- ARCH 1030: Basic Design III

**Educational Credentials:**

- Master in Architecture, UPR, 2008
- Bach. Degree in Environmental Design, UPR, 2002

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2023 – present

**Professional Experience:**

- ARQPoli Design Professor, UPPR, 2023
- Senior Project Manager, Jones Lang Lasalle, 2018 – current
- Design Architect, CPH Corp, 2006 – 2018
- Junior Architect, Inter Deign Group. 2002 – 2006

**Licenses/Registration:**

- Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR) # 20228-AIT

**Selected Publications and Recent Research:**

- none

**Professional Memberships:**

- none



**Name:** Raúl Rivera-Ortiz, AIA, NCARB

**Courses Taught:**

- ARPP 3010: Practice Experience
- ARPP 5010: Ethics

**Educational Credentials:**

- B.Arch Cornell University, 1976

**Teaching Experience:**

- School of Architecture Pontific Catholic University of Puerto Rico, Capstone Design Studio, 2011-2018
- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2019 – present

**Professional Experience:**

- CEO Architecture Firm, overseeing design and construction administration for residential, commercial, industrial, and institutional projects, 1978-2010

**Licenses/Registration:**

- PR 8113, NCARB Certificate 72217

**Selected Publications and Recent Research:**

- *Life in Pa/mas* magazine, Architectural Review Board Column, quarterly

**Professional Memberships:**

- Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
- American Institute of Architects (AIA)
- National Council of Architectural Registration Boards (NCARB)



**Name:** Jorge Rodríguez

**Courses Taught:**

- ARCH 2030: Design Fundamentals III
- ARTE 3010: Site Planning

**Educational Credentials:**

- Master of Architecture, Universidad de Puerto Rico, Río Piedras, P.R.
- Bachelors Degree In Environmental Design, Magna Cum Laude, Universidad de Puerto Rico, Río Piedras, P.R.
- Visual Arts School, Escuela Superior Artes Visuales, Architecture Concentration.

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico
- Professor, School of Plastic Arts of San Juan
- Professor, School of Architecture, Universidad de Puerto Rico

**Professional Experience:**

- Project Architect, Penney Design Group, Bethesda, Maryland
- Principal Architect, 8ARQUITECTOS, San Juan, Puerto Rico

**Licenses/Registration:**

- Maryland State - Architect License
- Puerto Rico - Architect License
- California - Cal OES - SAP - California Safety Assessment Program
- OSHA - Certified 14-004709804

**Selected Publications and Recent Research:**

- Universidad de Puerto Rico, School of Architecture, Master Thesis “Centro para el Contacto Cultural”
- Medal of the Association of Architects of Puerto Rico CAAPPR, Best GPA in Design Courses. Dean’s List – Nacional

**Professional Memberships:**

- Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
- American Institute of Architects (AIA)
- National Council of Architecture Registration Board (NCARB Certified)



**Name:** Nayda Romero

**Courses Taught:**

- ARIN 2320: Materials (Textiles)

**Educational Credentials:**

- Bachelor's Degree in Business Administration from Universidad Interamericana de PR.
- Associate Degree in Interior Design from EDP San Juan School of Interior Design.
- Master's Degree in Education with a major in Museology from Caribbean University.

**Teaching Experience:**

- Professor, EDP University, 2017 – present
- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2020 – present.

**Professional Experience:**

- Contributions technician for the Treasury Department, 1992 – 2010
- Self-employed as an interior designer, 2013 – present

**Licenses/Registration:**

- CODDI #1735

**Selected Publications and Recent Research:**

- Article in Modo de Vida magazine April 2023

**Professional Memberships:**

- Colegio de Diseñadores y Decoradores de PR (CODDI)



**Name:** José Rosich

**Courses Taught:**

- ARIN 2020: Design Fundamentals II
- ARIN 2030: Design Fundamentals III
- ARIN 3010: Advanced Design I

**Educational Credentials:**

- Bachelor in Fine Arts Concentration Interior Design, University of Massachusetts AMHERST, 1984-1989
- Polytechnic University of Puerto Rico, San Juan PR, (THESIS PENDING), 1996-2001

**Teaching Experience:**

- San Juan School of Design, Hato Rey PR, 2004-2011
- EDP University, Hato Rey PR, 2012-2017
- Professor, School of Architecture and Interior Design Department, Polytechnic University of Puerto Rico, 2018 – 2023

**Professional Experience:**

- Rosich Interiors, Interior Design firm, 2001 – present
- FEMA Public assistance, Project assistance specialist, 2011 – 2012
- Instudio, interior design consultant, San Juan, PR, 2008 – present
- CLV Architects – Interior design consultant, San Juan, PR, 2012 – present
- Emilio Estefan Enterprises, Junior Designer, Miami, Florida, 1994 – 1996
- Island Outpost, Junior Designer, Miami, Florida, 1991 – 1995

**Licenses/Registration:**

- Interior designer license #1604

**Selected Publications and Recent Research:**

- none

**Professional Memberships:**

- Colegio de Diseñadores y Decoradores de PR (CODDI)



**Name:** Diana G. Serrano

**Courses Taught:**

- ARCH 1010: Basic Design I
- ARCH 1020: Basic Design II
- ARCH 1030: Basic Design II

**Educational Credentials:**

- BA in Architecture, School of Architecture, Polytechnic University of Puerto Rico, 2011 – 2017

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2018 – present

**Professional Experience:**

- Architect, U.S. Army Corps of Engineers Middle East District, remote work, May 2022 – Present
- Architectural Designer, Marvel Architects, San Juan PR, August 2017 - April 2022
- Architect, Council of American Maritime Museum (CAMM), Washington DC, August 2017 – October 2018
- Architect, United States Department of the Interior, Internship with Historic American Buildings Survey (HABS) of the National Park Service, Washington DC  
June 2017 - August 2017 Call Number: HAER Nuclear Ship Savannah, Baltimore, MD  
June 2016 - August 2016 Call Number: HABS No. NY-6086-Y Ellis Island, Contagious Disease Hospital Isolation Ward I, NY  
June 2014 - August 2014 Call Number: HABS NY, 31-ELLIS, 1G Ellis Island, Main Hospital, NY
- Architectural Representation, PluUrbia, Miami US, October 2016 – May 2017
- Design Development, Cocero-Cordero Architects, San Juan PR, October 2016 – January 2017
- Restoration and conservation of the dome of the Palace of Santa Catalina, the Governor's Mansion, DBA Puerto Rico Arts & Graphics, San Juan PR, June 2015 – October 2015

**Licenses/Registration:**

- Drone Pilot, FAA commercial drone license Part 107

**Selected Publications and Recent Research:**

- none

**Professional Memberships:**

- Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
- American Institute of Architects (AIA)



**Name:** Imel Sierra

**Courses Taught:**

- ARCH 2010: Design Fundamentals I
- ARCH 2030: Design Fundamentals III
- ARCH 3020: Intermediate Design II
- ARCH 4020: Advanced Design II
- ARCH 5020: Capstone Design II
- ARCH 5030: Capstone Design III

**Educational Credentials:**

- Masters of Architecture, University of Puerto Rico, School of Architecture, Rio Piedras, Puerto Rico, 1994
- Joint Urban Design Study with Massachusetts Institute of Technology, University of Puerto Rico School of Architecture, Rio Piedras, Puerto Rico, 1993
- Bachelor Degree in Environmental Design, University of Puerto Rico School of Architecture Rio Piedras, Puerto Rico, 1991
- Exchange Student at Universidad Politécnica de Madrid, Spain, 1998

**Teaching Experience:**

- University of Puerto Rico School of Architecture Rio Piedras, Puerto Rico Professor- History of Architecture, 1997- 1996
- Professor, School of Architecture, Polytechnic University of Puerto Rico, 1998- Present

**Professional Experience:**

- Prequalified by Public Works (ASHGAL) for Artscape Elements for Expressways, Qatar, 2015
- ISC PRODUCTS/ Atemporal Art Atelier development of decorative design line, 2009 – Present
- Planning and Facilities Consultant, Interamerican University Metro Campus, San Juan PR, 2008 – 2021
- Sculpture proposals "Blob" and "Aëdes", won a mayor public art competition sponsored by the Proyecto de Arte Público and the Departamento de Transportación y Obras Públicas de Puerto Rico in 2000, 2004- 2006
- Commissioned by the Municipality of Salinas to design and built a group of sculptures for the restoration of the Municipality's Plaza, 2004
- Sculpture proposals, "Paloma" and "Platanal", San Juan in 1998, 1998-1999
- Urban Designer / Architect in Training GMAEC Tren Urbano, Hato Rey Puerto Rico, 1998- 1996

**Licenses/Registration:**

- Retire AIT, Colegio de Arquitectos de Puerto Rico, #17283
- International Sculpture Center, Member since 1998

**Selected Publications and Recent Research:**

- Editorial Team: Ifeng Space China

**Professional Memberships:**

- International Sculpture Center, Member since 1998



**Name:** José Silvestre

**Courses Taught:**

- ARCH 2020: Design Fundamentals II
- ARCH 2030: Design Fundamentals III
- ARCH 3010: Intermediate Design
- ARHH 0440: Advanced Topics on History

**Educational Credentials:**

- Bachelor in Environmental Design, School of Architecture, University of Puerto Rico, Magna Cum Laude, 1992 – 1996
- Master in Architecture, School of Architecture, University of Puerto Rico, 1996 – 1998

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico, Since Winter 2019 Trimester

**Professional Experience:**

- Jorge del Río Arquitectos, CSP, 1998-1999
- Historical Heritage Program, Institute of Puerto Rican Culture, 1999 - present
- Interim Director, Historical Heritage Program, Institute of Puerto Rican Culture, 2008
- Member, Advisory Board for the National Register of Historic Places – State Historic Conservation Office, 2008-2015
- Member, representing the Institute of Puerto Rican Culture, Pro Restoration Committee – San José Church, 2002-2019
- Member, representing the Institute of Puerto Rican Culture, Coalition for the Conservation of the Puerto Rican Heritage, 2017-2019
- Professor, School of Architecture, Polytechnic University, 2019 - present

**Licenses/Registration:**

- Licensed Architect – License 17219

**Selected Publications and Recent Research:**

- Apuntes de Arquitectura, 2003 – Patios del Viejo San Juan
- Las Plazas del Viejo San Juan, 2006 – Colaboración en la preparación de reportaje especial de Las Noticias Univisión.
- El Tejido Urbano Colonial – Artículo: Incentivando la conservación del patrimonio hoy: Las exenciones contributivas como herramienta en la conservación de la Zona Histórica de San Juan, 2010 – Revista Patrimonio, Oficina Estatal de Conservación Histórica, Vol. 1, 2010
- La arquitectura del Viejo San Juan: una vista panorámica a su riqueza, Mayo 2018 – Revista del Instituto de Cultura Puertorriqueña, Tercera Serie, Núm. VIII, – Arquitectura – Artículo:
- Ventana al Paisaje – Artículo: La pérdida de la armonía en el paisaje urbano puertorriqueño, 2019 – Revista Patrimonio, Oficina Estatal de Conservación Histórica, Vol. 8.
- Book publication: Viejo San Juan: Herramientas e Intervenciones, 2021 – Editorial del Instituto de Cultura Puertorriqueña,

**Professional Memberships:**

- Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
- Member of the governing board: 2019-2020 – Secretary / 2021-2022 – Director, Continuing Education Commission.



**Name:** Pedro Urzaiz

**Courses Taught:**

- ARCH 4020: Advanced Design I

**Educational Credentials:**

- Master Architect, School of Architecture of Madrid, Polytechnic University of Madrid (Spain), 1984
- Doctor of Architecture, Escuela Técnica Superior de Arquitectura de Madrid, Polytechnic University of Madrid, Spain.

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico
- Professor of Architectural Projects in the Department of Architectural Protection at the Escuela Técnica Superior de Arquitectura de Madrid of the Polytechnic University of Madrid, Spain, since 1990.
- Courses, conferences, and workshops at: Schools of Architecture in Brazil (Belo Horizonte School of Architecture), Argentina (School of Architecture of the Central University of Buenos Aires), Uruguay (School of Architecture of Montevideo), Chile (School of Architecture at the Alfonso Bello and Finisterrae Universities of Santiago de Chile), in Korea (Songil School of Architecture in Seoul), in the Philippines (Ilo ilo School of Architecture), in Spain (Madrid, Valladolid, Barcelona, Palma de Mallorca) .
- Directed Final Degree Programs in Madrid and Santiago de Chile.
- Supervisor of Doctoral Theses in Madrid.

**Professional Experience:**

- Architect, ETSAM, 1984 – present
- Director, Master "Architecture and Fashion", UPM
- Secretary of the Department of Projects, Higher Technical School of Architecture of Madrid, 2016
- Director, iAM or Architecture Institute, ETSAM-UPM, 2012 – 2016
- Deputy Director, Doctoral Programs of the Department of Architectural Projects, ETSAM, 2012 – 2016.
- Secretary of the Teaching Committee of the Institute of Architecture of Madrid and deputy director of the aforementioned Institute dependent on COAM -Official College of Architects of Madrid, 2012 – 2014

**Licenses/Registration:**

- Colegiado núm.: 7.105 por el Colegio de Arquitectos de Madrid -COAM

**Selected Publications and Recent Research:**

- Participated as a member, 2002-2007, of the Committee on Conferences and Exhibitions of the COAM Foundation dependent on the Official College of Architects of Madrid, in the organization of all kinds of Cultural Events: From the production of Architectural Work Videos to the Assembly of exhibitions, participation and Organization of Conferences and Round Tables or Editing and writing of Publications.

**Professional Memberships:**

- Arquitecto Colegiado num: 7.105 por el Colegio de Arquitectos de Madrid -COAM-.



**Name:** Marién Vélez

**Courses Taught** (Four semesters prior to Spring 2024) (since Winter 2022):

- ARTE 0440: Architecture & Light
- ARCC 0330: Installation

**Educational Credentials:**

- Masters of Fine Arts - Architectural Lighting, Design Parsons School of Design New York City, United States, 2016 – 2018
- Courses and Seminars - Stage Lighting Design, National University Institute of the Arts Buenos Aires, Argentina, 2008 – 2009
- Theoretical and practical courses - Cinematography School of the Syndicate of Cinematographers of Argentina Buenos Aires, Argentina, 2008 – 2009
- Bachelor of Arts - Audiovisual Communication, School of Communications. University of Puerto Rico San Juan, Puerto Rico, 2001 – 2006
- Internship - Color Correction for Film, Paradiso Films, San Juan, Puerto Rico

**Teaching Experience:**

- Professor, School of Architecture, Polytechnic University of Puerto Rico, 2023 – present
- Professor, School of Architecture, University of Puerto Rico, 2022

**Professional Experience:**

- Associate Producer. Technical Director. Lighting Designer, "Tu Nombre Verdadero" Performed by Rita Indiana, 2023
- Lighting Designer, Nella Carnegie Hall, 2023
- Co-Producer. Co-Director, "El arca de Mima", Teatro Sol. San Germán, PR, 2023
- Firm Culture – Panelist, Architectural Lighting Design - MFA Program Parsons School of Design, New York City, NY, 2023
- Thesis Critic, Architectural Lighting Design - MFA Program Parsons School of Design New York City, NY, 2023
- Lighting Designer, Henry Klumb Bridge Hernández Bauzá Architects San Juan, PR, 2022
- Artist collaborator. Technical Director, "Blindfolded", Artist - Awilda Sterling-Duprey Whitney Biennial, Whitney Museum. New York City, NY, 2022
- Lighting Designer, Chocobar Cortés Bronx, Chocolate Cortés - Restaurant and Coffee Shop New York City, NY, 2022

**Licenses/Registration:**

- none

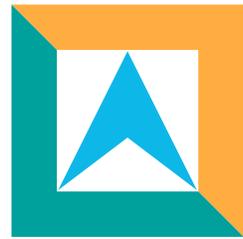
**Selected Publications and Recent Research:**

- Thrillist.com, Article "Simple Lighting Upgrades to Elevate Your Outdoor Hangs, According to a Lighting Designer", <https://www.thrillist.com/shopping/nation/best-outdoor-patio-lighting-to-buy>, 2022
- Entorno Magazine, Architects and Landscape Architects of Puerto Rico Article "Algo sobre la luz", pp 49-51. <https://issuu.com/cestevs/docs/entorno20/5>, 2012

**Professional Memberships:**

- none

## **APPENDIX 5.4.2**



LICENSING  
ADVISORS  
**SUMMIT**

THE NATIONAL COUNCIL OF ARCHITECTURAL REGISTRATION BOARDS

expresses its sincere appreciation to

**Raúl Rivera-Ortiz**

for their valuable contributions to the

**2023 Licensing Advisors Summit**

Harry M. Falconer, Jr., FAIA, NCARB, HonD, Hon. FCARM  
Vice President, Experience + Education



This is to acknowledge that

## **Raúl Rivera-Ortiz**

participated in a  
Structured Educational Activity  
facilitated by the

### **National Council of Architectural Registration Boards**

Provider Number: **J135**

#### **2021 Architect Licensing Advisors Summit**

- Course Number: 2021LAS-100 – 1.25 LUs
- Course Number: 2021LAS-ProgUp – 1.25 LUs
- Course Number: 2021LAS-IPAL – 1 LU
- Course Number: 2021LASEmp– 1.25 LUs
- Course Number: LAS2021-Game– 1.25 LUs
- Course Number: LAS21-Intl– 1.5 LUs
- Course Number: 2021LAS-Raise – 1.25 LUs

August 5-7, 2021  
Miami, Florida

and has been awarded

**8.75 LUs**

Learning Unit Hours.



  
Michael J. Armstrong  
Chief Executive Officer

## **NCARB's Next 100 Years!**

Course Number - 2021LAS-100

Provider Number - J135

Course at a Glance:

- Course Delivery Type: **Live**
- This course is **1.25 LUs**.
- Course Level: This course is **Introductory**

About this Course:

NCARB is moving into the next 100 years. What will NCARB look like? How will licensure standards evolve? Hear from the current president and CEO the latest projects and current plans to pave the road ahead.

## **Diversity Data & Solutioning: Working to Identify Challenges and Opportunities**

Course Number - LAS21-Data

Provider Number - J135

Course at a Glance:

- Course Delivery Type: **Live**
- This course is **1.5 LUs**.
- Course Level: This course is **Introductory**

About this Course:

What is the data telling us about the challenges we must address and opportunities we must capitalize on to address diversity in the architectural profession? We'll dive into data insights from NCARB by the Numbers, the joint NCARB/NOMA Baseline on Belonging survey, and other data sources to illuminate the interplay between firm culture, access to education, and career opportunities. Actively participate throughout the session with your peers to establish desired results and develop recommendations that can create a more diverse, equitable, and inclusive profession.

## **NCARB Program Updates**

Course Number - 2021LAS-ProgUp

Provider Number - J135

Course at a Glance:

- Course Delivery Type: **Live**
- This course is **1.25 LUs**.
- Course Level: This course is **Intermediate**

About this Course:

NCARB staff will guide you through NCARB updates around our programs, requirements for certification, and initiatives to identify future licensure model and requirements.

## **ARE Behind the Scenes: From Development to Delivery**

Course Number - LAS21-ARE

Provider Number - J135

Course at a Glance:

- Course Delivery Type: **Live**
- This course is **1.5 LUs**.
- Course Level: This course is **Introductory**

About this Course:

Have you ever wondered where ARE questions and case studies come from? Or maybe how a division of the ARE is scored? This session will walk through the ARE 5.0's development and maintenance process, from exam inception to delivery in a Prometric test center or online proctored environment. Following this session, you'll be prepared to answer the difficult ARE candidate questions like, "Where does exam content come from?" "Who writes ARE items and cases studies?" "What score is needed to pass an exam?" "What test prep materials are the best?" And, "How do I prepare for an online proctored exam?"

## **Navigating State Options**

Course Number - 2021LAS-Navi

Provider Number - J135

Course at a Glance:

- Course Delivery Type: **Live**
- This course is **1.5 LUs**.
- Course Level: This course is **Introductory**

About this Course:

There are 55 ways to gain a license in the U.S. What are the different requirements outside of the standard path of the NAAB, Architectural Experience Program® (AXP®), and ARE? Even when an advisor is in a state following the standard path to licensure, you may need to know the basics of other options to support candidates' path to licensure and reciprocity.

## **IPAL: The Future of Education?**

Course Number - LAS21-IPAL

Provider Number - J135

Course at a Glance:

- Course Delivery Type: **Live**
- This course is **1 LU**.
- Course Level: This course is **Introductory**

About this Course:

The future of architectural education is dynamic and IPAL is creating an additional pathway for students. This panel discussion/session will explore various topics on the innovative approach to architecture education, including IPAL implementation, AXP integration, and firm involvement.

## **Empowering the Next Generation: Mentorship, Leadership, and Community Engagement**

Course Number - 2021LASEmp

Provider Number - J135

Course at a Glance

- Course Delivery Type: **Live**
- This course is **1.25 LUs**.
- Course Level: This course is **Intermediate**

About this Course:

To maintain its impact, the role of the architect licensing advisor should be shifting from one of reactivity to proactivity in working with licensure candidates. Learn how you can empower emerging professionals to become great contributors to the profession through mentorship, leadership, and community engagement. These attributes make great architects inside and outside the firm, and the licensing advisor can play a pivotal role in this endeavor.

## **The NCARB Gameshow**

Course Number - LAS2021-Game

Provider Number - J135

Course at a Glance:

- Course Delivery Type: **Live**
- This course is **1.25 LUs**.
- Course Level: This course is **Intermediate**

About this Course:

Go into details on NCARB programs and requirements for licensure. This interactive session tests your knowledge and fills in the gaps.

## **Building the Pipeline for the Future of Architecture: Engaging K-12 Students**

Course Number - LAS21-K12

Provider Number - J135

Course at a Glance:

- Course Delivery Type: **Live**
- This course is **1.5 LUs**.
- Course Level: This course is **Introductory**

About this Course:

Advisors can play a pivotal role in engaging primary and secondary school-aged students. From introducing them to architecture to helping them determine the following steps to becoming an architect, advisors can be a great local resource. This session will cover some best practices, tools, and resources available for you to support the pipeline and help students understand NAAB and what to look for in schools.

## **US Bound - Licensure for International Candidates**

Course Number - LAS21-Intl

Provider Number - J135

Course at a Glance

- Course Delivery Type: **Live**
- This course is **1.5 LUs**.
- Course Level: This course is **Intermediate**

About this Course:

Global practice models are affecting architecture more than ever. To this end, the mobility of practice beyond geographical boundaries is a vital piece of this forward-looking puzzle. Based on our now accelerated reality, how can licensing advisors better support international students and professionals seeking licensure in a U.S. jurisdiction? Regardless of one's location, there are a few alternative paths to licensure.

This session offers the opportunity to learn about the licensure alternatives available to international candidates and gain a basic understanding of the current immigration options for non-U.S. citizens interested in continuing their architecture careers in the U.S.

### **Supporting Candidates Toward Success**

Course Number - LAS21-Support

Provider Number - J135

Course at a Glance:

- Course Delivery Type: **Live**
- This course is **1.5 LUs**.
- Course Level: This course is **Intermediate**

About this Course:

Many of us know a candidate for licensure who has not engaged in the licensure process or struggled in passing the Architect Registration Examination® (ARE®). You know they are competent and should be able to become licensed, but how do you support them in valuing licensure, engaging in the process, and convert any failures toward success? This session will review strategies to support candidates from various backgrounds and experiences to help you, as an advisor, empower them.

### **Raising the Bar, Agile Practices for a Sustainable Profession**

Course Number - 2021LAS-Raise

Provider Number - J135

Course at a Glance:

- Course Delivery Type: **Live**
- This course is **1.25 LUs**.
- Course Level: This course is **Introductory**

About this Course:

We find ourselves with a new opportunity in front of us to redefine how we practice. In the blink of an eye, the way firms changed overnight. There's no snapping back, and people's expectations around how and where they work have changed. Many firms are just beginning to navigate and understand what they need to create a more agile and sustainable practice that allows their employees the flexibility they desire while remaining productive and profitable. Now is the time to embrace the moment, reinvent company culture, work with another, and support everyone within the profession.

## **APPENDIX 5.5.2**



UNIVERSIDAD POLITÉCNICA DE PUERTO RICO  
OFFICE OF THE PRESIDENT

GENDER DISCRIMINATION POLICY AND PROCEDURE  
FEDERAL DEPARTMENT OF EDUCATION - TITLE IX

**Purpose Statement**

The Universidad Politécnica de Puerto Rico ("University" or "the Institution") is committed to protecting the rights and providing a safe environment for all individuals who interact with the Institution, whether they are students, employees, contractors, and/or visitors. Given this, this Policy is promulgated to promote an environment of respect for diversity and the rights of the university community members.

This policy and procedure is issued to comply with the **Education Amendments of 1972** on *Title IX and Sex Discrimination* is the Federal law that protects individuals from gender discrimination (pregnancy, sexual orientation, and gender identity) in programs and activities that receive federal funding.

No person in the United States may be excluded or denied services (benefits) based on gender. The Universidad Politécnica de Puerto Rico does not discriminate based on gender, race, age, ethnicity, social status, marital status, disability, religious or political beliefs, and status as veterans of the Armed Forces in its admission, recruitment, educational programs, and institutional activities.

The Office of Human Resources and the Vice Presidency of Student Services are responsible for activating protocols in case of complaints and enforcing the provisions of this policy.

**I. Definitions**

These terms and definitions are outlined in this policy and those annexed by reference.

1. **Title IX** - These are provisions of the amendments to the Federal Higher Education Act that protect against gender discrimination in educational institutions and activities offered by a federally funded educational institution.
2. **Title IX Coordinator** - an officer who is responsible for ensuring compliance with the provisions of these rules (for employees, she is the director of the Human Resources office, and for students, she is the Associate VP for Student Services).
3. **Gender Identity** - It refers to how the person identifies themselves and how they recognize themselves as a sexual being, and the feelings that come with it.
4. **Diversity** - differences between people that can be based on race, ethnicity, gender, sexual orientation, language, culture, religion, mental and physical ability, class, and immigration status.
5. **Fairness** - ensures that there is a concern for fairness so that the education of all students or employees is considered of equal importance.
6. **Inclusion** – a process that helps overcome barriers that limit student or employee presence, participation, and achievement.
7. **Work or study center** - includes any place where the employee or student performs their duties, either inside or outside the institution.
8. **University** - Universidad Politécnica de Puerto Rico and its two campuses in Florida.
9. **Employee** - any person who works for the university on a contract basis, including job applicants.
10. **Student** - any person enrolled in any course or program offered by the university, as well as any applicant for admission.
11. **Emotional distress** - Refers to suffering or distress that may sometimes require professional counseling.
12. **Stalking** – is a pattern of behavior directed at a specific person that has the effect of causing fear for their safety or the safety of others and causing emotional distress.
13. **Sexual harassment** is defined as any conduct of unwanted sexual connotation that occurs within the workplace or academy and affects the person receiving it. Meaning co-workers in your work environment or employment conditions. It includes physical conduct by attempting or making unwanted contact, using electronic means to send or forward messages of sexual or sexist connotation, compliments, jokes, comments, or pranks of a sexual or sexist nature or content, even if they are not directed at a particular person.

14. **Sexual Assault** - Any crime that meets the definition of rape, lewd acts, incest, or technical rape, as defined by the Puerto Rico Police Department's sex crimes unit.
15. **Hostile environment in the workplace or academy** - arises when an environment is created that is charged or influenced by sexual connotations, even if the conduct, comments, gestures, or jokes of this nature are not directed toward a specific person or toward the person who feels uncomfortable. It can also occur when an employee does not receive a more favorable employment status compared to another employee who is or has been consenting to voluntarily submit to a relationship with an immediate supervisor of the Institution.

## **II. Procedure for Filing and Addressing Allegations of Violations of the Title IX Provisions**

### **Initiation of the procedure**

1. Any employee, job candidate, student, or person doing their internship within the facilities of the Institution who understands that he or she is being subjected to a type of discrimination must immediately report it to the director of the Human Resources office, the person designated by the office, or any other official if it is that person who is engaging in such conduct. If the person who is the object of the behavior is a person providing their services to the Institution, they must immediately inform the company with which he works and the Institution through the persons indicated herein.
2. Any employee who acquires knowledge through information provided by a colleague of a situation they are going through, due to a rumor that is taking place in the work area, can also file a complaint.
3. In the case of students, they will file a complaint with the Vice Presidency of Student Services.
4. Any complaint that is filed will be investigated, no matter how simple or less credible it sounds, to ensure that, if it is occurring, it is stopped immediately. Every effort will be made to ensure that it does not happen again.
5. Any information provided will be handled as confidentially as possible. It is reported that it will be or may be shared with the people who participate in the research process. All parties and those who are part of the investigation will be asked not to disclose the information to others to prevent the information from reaching people it should not reach to maintain the purity of the processes. Otherwise, the research could be adversely affected.

6. Acts of retaliation against the person filing the complaint or those participating in the investigation process will not be permitted. Anyone who, for this reason, receives a threat, or any of their conditions of employment or studies are disrupted, must immediately notify the people mentioned previously. The protection offered by the law against retaliation does not cover a person who bases his complaint on false allegations or discloses confidential or privileged information of the Institution.
7. Grievances or concerns should preferably be presented in writing but can also be verbal. If it is presented verbally, it will be requested to be written during the investigation, and the person who files the complaint will be offered help to put it in writing. Complaints filed anonymously will also be welcomed. All complaints must contain the following:
  - a. Name of the person filing the complaint.
  - b. Name of the person concerned, if not the same person who presents the complaint.
  - c. Name of the person against whom the complaint is filed.
  - d. Date the complaint is filed.
  - e. A detailed account of the alleged facts, including details of events, dates, places, and the names of persons who know or may know of the events.
  - f. The person filing the complaint must sign and swear the complaint.
8. You can access the following links to learn more about these policies and procedures:  
[Política en Contra del de Hostigamiento Sexual en la Academia](#) (Policy Against Sexual Harassment in the Academia)  
[Procedimiento para la Radicación de Querellas](#) (Procedure for Filing Complaints)
9. The Institution strongly requests that any complaint be filed as close as possible to the alleged event before the person identified in this policy and following the established protocol so that the Institution has the opportunity to act immediately to stop any situation and prevent it from happening again if it has occurred. But the person allegedly affected can also contact [hostigamientosexual.pr.gov](http://hostigamientosexual.pr.gov) Anti-Discrimination Unit (787-625-3137 ext.3259 / 3232; 787-754-5293 or 787-754-2108); to the EEOC office (1-800-669-4000); the Office of the Women's Advocate (787-722-2977); or go directly to the courts of Puerto Rico.
10. For more information or to file a complaint with OCR, visit the link:  
<https://www2.ed.gov/about/offices/list/ocr/complaintintro.html>

## **APPENDIX 5.5.4**

# POLYTECHNIC UNIVERSITY OF PUERTO RICO AND FLORIDA

## RECRUITMENT, SELECTION AND APPOINTMENT POLICY AND PROCEDURE

It is our commitment to comply with the Institution's recruitment processes in order to provide uniformity, comply with labor laws and improve its effectiveness. The Human Resources Office is responsible for complying with the Institution's recruitment and selection policy and procedure.

This process will clarify the Institution's procedures with respect to recruitment and selection practices.

### **I. RECRUITMENT AND SELECTION PROCESS**

1. The recruitment and selection process begins with a request from the Dean, Director or Supervisor of the department that has a vacancy. They agree to comply with this policy.
2. The application for the position shall be submitted to the Human Resources Office by means of a ***Salary Worksheet which must be*** approved by the Director of Human Resources, Budget Office and Executive Vice President of Administration and Finance and/or President. It must be accompanied by a **Call Request and an Updated Duties Form**. These documents are provided by the Human Resources Office.
3. The Duties Sheet must comply with applicable laws and will be developed by the Department Director and reviewed by a Human Resources representative.
4. If the request is favorably answered, the Human Resources Office will proceed with the creation and publication of the internal and external call for applications. External announcements will be published through the written press (must be approved by the Executive VP of Administration and Finance) and/or electronic media.
5. The University reserves the right to fill a position without prior advertisement if it believes that a particular employee meets the qualifications for the vacant position and, at the same time, there is no other employee who possesses the qualities, experience, and skills required for the position. If there is no clear candidate, the vacant position shall be advertised.
6. The Institution does not use employment placement agencies. However, in cases of searches for hard-to-recruit professionals or management positions, the Human Resources Office may seek the assistance of employment agencies and/or professional recruiters.

## **POLYTECHNIC UNIVERSITY OF PUERTO RICO AND FLORIDA**

7. The Human Resources Office is responsible for receiving and evaluating resumes for the vacant position by the closing date indicated in the announcement. A preliminary evaluation of all resumes will be conducted to identify those that meet the minimum qualifications for the position and forwarded to the requesting department. Subsequently, the department will evaluate and review the resumes to identify candidates to be interviewed.
8. Resumes of candidates who are not selected for interview should be returned to the Human Resources Office with a notation justifying this decision, e.g. Does not meet the requested requirements, overqualified, little experience, already interviewed, etc.
9. Taking into consideration the recommendations of the Human Resources representative, each interviewer will document the interviews conducted by each candidate interviewed through the ***Employment Interview Form***. *This form will be submitted to the Human Resources Office to comply with the Institution's Affirmative Action Plan\**.
10. The Department Director will select the suitable candidate for the position and submit it in writing to the Human Resources Office with all written data to support this determination, i.e. ***Final Interview Evaluation Form***.
11. It is not permitted to receive resumes, interview candidates or carry out the recruitment and selection process mentioned herein without the authorization of the Human Resources Office.
12. Once the candidate is selected, the Human Resources Office and the Dean, Director or Supervisor will determine the start date. After the start date is determined, Human Resources will request from the selected candidate the documents regarding the hiring (*The selected candidate will not be able to start working until all the requested documents have been submitted.*)
13. Initial guidance on Human Resources policies and procedures will be provided by the Human Resources Office. Job description guidance will be the responsibility of the immediate supervisor.
14. According to labor law, the Human Resources Office will keep on file all documents regarding the hiring process for a period of two years.

## **II. PROCEDURE FOR PERSONS APPLYING FOR EMPLOYMENT**

1. All applications for a vacant position must be by submitting a resume. These should be processed through the Human Resources Office. Any resumes submitted to another office should be forwarded to Human Resources for the required procedure.

## POLYTECHNIC UNIVERSITY OF PUERTO RICO AND FLORIDA

2. If you are an employee of the Institution, the procedure consists of sending a written communication indicating your interest in the position and must be accompanied by your updated resume.
3. The Human Resources Office will accept resumes, either via fax, external and internal correspondence and/or e-mail for **vacant positions**. Resumes addressed to "any position" will not be considered. Likewise, resumes that do not meet the minimum requirements of the position will not be considered.
4. Any inquiries regarding a vacant position will be handled through the Human Resources Office.
5. The Human Resources Office will keep on file all documents worked on in this process for a period of two years.

### III. APPOINTMENT

#### 1. APPOINTMENT OF EXTERNAL CANDIDATES

- a. Once the candidate has been selected, they will receive a formal written offer from the Human Resources Office specifying the salary and other conditions of the offer.
- b. If the candidate accepts the offer, the Human Resources representative will contact the candidate and request the required documents for hiring (*See Required Documents for Hiring Employees revised in September 2014*).
- c. All employees will undergo a probationary period of 90 consecutive calendar days in the position and will receive job-specific training. The supervisor will monitor and evaluate progress during the probationary period.
- d. However, in the event that a probationary individual does not make adequate progress during the probationary period, the contract may be terminated before the end of the probationary period.
- e. If the employee, due to a situation beyond his or her control, is unable to perform the work, the probationary period may be extended by requesting approval for a contract extension from the Department of Labor and Human Resources through the Human Resources Office.

#### 2. APPOINTMENT OF INTERNAL CANDIDATES

- a. Once the candidate has been selected, they will be notified that they have been selected and will receive an offer. The selected candidate must communicate acceptance or rejection of the offer.

## **POLYTECHNIC UNIVERSITY OF PUERTO RICO AND FLORIDA**

- b. If the successful candidate accepts the offer, they must inform their immediate supervisor of the appointment in the other department or office. Both will agree on the end date and the Human Resources Office will be notified immediately.
- c. The Human Resources Office will prepare a letter informing of the change of position and salary.

**This policy and procedure is necessary to uniformly manage the processes established by the Human Resources Office. In addition, in order to comply with state and federal laws, it is essential to carry out all of the above.**

\*What is Affirmative Action?

Affirmative Action is a commitment by an Institution or Company to comply with the intent of current legislation and to offer equal opportunity conditions to all employees or applicants for employment. This purpose is achieved through the implementation of a detailed set of objectives and plans. These are designed to achieve full and prompt utilization by minorities, women, persons of all ages, persons with physical disabilities, and Vietnam Era veterans at all levels and in all areas of an institution's or company's workforce.

What is an Affirmative Action Plan?

It is based on the achievements attained in each preceding stage, incorporating plans and objectives for future years, in order to achieve prompt and complete utilization by all categories of users, at all levels. The Affirmative Action Plan prepared by the Polytechnic University of Puerto Rico is designed to eliminate in the present the discriminatory effects of the past against protected groups.

## **APPENDIX 6.6.2**



**POLYTECHNIC UNIVERSITY OF PUERTO RICO**  
**ESTIMATED QUARTERLY TUITION COST**  
**ACADEMIC YEAR 2023/2024**



**Quarters:** FALL (August to November)  
WINTER (November to February)  
SPRING (March to May)

**EXAMPLES OF DIFFERENT ACADEMIC PROGRAMS**

**NEW STUDENT CORE COURSES**

EXAMPLE WITH 12 CREDITS WITH SCHOLARSHIP			
Number of credits		Cost	Total
12	(GEN.)	\$ 230.00	\$ 2,760.00
GENERAL CHARGES:			\$ 330.00
LABORATORIES			\$ 305.00
STUDENT CARD			\$ 15.00
ACCESS PARKING			\$ 75.00
TOTAL COST OF TUITION			\$ 3,485.00
PELL GRANT			\$ (2,465.00)
BALANCE OF ENROLLMENT			\$1,020.00

**BUSINESS ADMINISTRATION**

EXAMPLE WITH 12 CREDITS WITH SCHOLARSHIP			
Number of credits		Cost	Total
12		\$ 215.00	\$ 2,580.00
GENERAL CHARGES:			\$ 330.00
STUDENT CARD			\$ 15.00
ACCESS PARKING			\$ 75.00
TOTAL TUITION COST			\$ 3,000.00
PELL GRANT			\$ (2,465.00)
BALANCE OF ENROLLMENT			\$535.00

**ARCHITECTURE**

EXAMPLE WITH 13 NON-SCHOLARSHIP CREDITS			
Number of credits		Cost	Total
7	(ARQ.)	\$ 265.00	\$ 1,855.00
6	(GEN.)	\$ 230.00	\$ 1,380.00
GENERAL CHARGES:			\$ 330.00
LABORATORIES			\$ 305.00
DESIGN FEES			\$ 305.00
STUDENT CARD			\$ 15.00
ACCESS PARKING			\$ 75.00
TOTAL COST OF TUITION			\$ 4,265.00
PELL GRANT			\$ (2,465.00)
BALANCE OF ENROLLMENT			\$1,800.00

COST BREAKDOWN	
General Positions	\$330.00
Student Card	\$15.00
Deferred Payment	\$85.00
Parking	\$75.00
Late Enrollment	\$75.00
Changes (per course)	\$15.00
Laboratories	\$305.00
Design Fees	\$305.00
Associate Program Credits	\$200.00
Architecture Credits	\$265.00
General Credits	\$230.00
Business Administration Credits	\$215.00
Engineering Credits	\$255.00
Graduate Program Credits	\$275.00
Landscape Architecture Master's Degree Credits	\$280.00
Online Master's Degree Credits - MEM	\$275.00
Doctoral Program Credits	\$470.00
Education Credits	\$200.00
Education Credits Graduate	\$300.00

**ENGINEERING**

EXAMPLE WITH 12 CREDITS WITH SCHOLARSHIP			
Number of credits		Cost	Total
6	(ING.)	\$ 255.00	\$ 1,530.00
6	(GEN.)	\$ 230.00	\$ 1,380.00
GENERAL CHARGES:			\$ 330.00
LABORATORIES			\$ 305.00
STUDENT CARD			\$ 15.00
ACCESS PARKING			\$ 75.00
TOTAL TUITION COST			\$ 3,635.00
PELL GRANT			\$ (2,465.00)
BALANCE OF ENROLLMENT			\$1,170.00

**IMPORTANT NOTES:**

- >FOR YOUR REGISTRATION TO BE VALID YOU MUST GO TO THE TAX OFFICE OR CESI ON THE DESIGNATED DATES.
- >IN ADDITION, YOU CAN PAY AND VALIDATE YOUR ENROLLMENT THROUGH MY POLY (UNIVERSITY PORTAL).
- >YOU CANNOT OFFICIALIZE YOUR ENROLLMENT IF YOU HAVE ANY PREVIOUS BALANCE.
- >THESE COSTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.
- >COSTS MAY VARY ACCORDING TO SCHOLARSHIP ASSIGNMENT AND/OR CREDITS ENROLLED.
- >FULL PELL GRANT AWARD APPLIES TO A STUDENT WHO ENROLLS 12 CREDITS.
- >OTHER POSSIBLE FINANCIAL ASSISTANCE IF YOU QUALIFY (PLEASE CONTACT THE FINANCIAL ASSISTANCE OFFICE FOR INFORMATION)

STATE AND FEDERAL  
INSTITUTIONAL: ATHLETES, HONOR, CHOIR