Architecture Program Report

University of Puerto Rico School of Architecture

September 7th,2022

MAB

National
Architectural
Accrediting
Board, Inc.



Architecture Program Report (APR)

2020 Conditions for Accreditation 2020 Procedures for Accreditation

Institution	
Name of Academic Unit	
	□ Bachelor of Architecture
Degree(s) (check all that apply)	Track:
Track(s) (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	Track: Undergraduate Degree in a non- architecture major + 106 graduate semester credit hours
Undergraduate degree with non- architecture major + 90 graduate semester credit hours)	□ <u>Doctor of Architecture</u>
	Track:
	Track:
Application for Accreditation	Continuing Accreditation
Year of Previous Visit	2014
Current Term of Accreditation (refer to most recent decision letter)	Continuing Accreditation (Eight-Year Term)
Program Administrator	Blanquita Calzada Acosta
Chief Administrator for the academic unit in which the program is located (e.g., dean or department chair)	Mayra O. Jiménez Montano
Chief Academic Officer of the Institution	Angélica Varela Llavona
President of the Institution	Luis Ferrao Delgado
Individual submitting the APR	Mayra O. Jiménez Montano
Name and email address of individual to	Mayra O Jimenez Montano
whom questions should be directed	mayra.jimenez@upr.edu

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: The NAAB team in 2014 expressed the following causes for concern in their Visiting Team Report (VTR). Conditions Not Met: I.2.1 Human Resources & Human Resource Development.

Causes of Concern:

A. Financial Resources: Recent budget cuts and the foreseeable continued tightening of financial resources is creating a series of pressure points on the administration and faculty that the team feels may eventually negatively impact the work of the program and of its students if not remedied or at least eased.

These conditions include:

- A hiring freeze which is keeping open positions unfilled, effectively increasing faculty workloads, and reducing the availability of faculty and staff to students, most notably the lack of counseling.
- The lack of opportunities for faculty advancement.
- Reduction of travel/study opportunities.

During the visit, we noted that several faculty members have either contributed from their personal resources to provide adequate support for programs or, in some cases, are donating the use of their own professional equipment for use in their courses. The team feels strongly that these conditions are not sustainable and are likely to contribute to 'burn-out' if not attrition; as such, it is raised as a significant cause of concern.

B. **Human Resources & Human Resource Development:** In addition to the factors listed above, it is the University's policy to limit appointments of non-tenured faculty to a semester-by-semester basis. Given the low number of tenured faculty, the potential lack of incentive to remain and the uncertainty of re-appointment on a regular basis, the team feels that this issue too, must be highlighted as a significant cause of concern.

2014 Team Assessment: In reviewing the resumes of the faculty as well as the listing of administrative and support the student experience and learning environment, with the noted exception concerning advising. The faculty consists of 62 full and part-time professors who teach the range of offerings with a general teacher to student ratio of 1 faculty to 6.06 students.

The range of faculty education and expertise includes 12 PhD/DDes, 48 March, 2 BArch and, of these, 32 are licensed architects. The 8 academic administrators (Dean, Assistant Dean, academic coordinators, etc.) also participate in teaching; providing direct access and connection with the administration for the students in the comfortable environment of learning.

The faculty profiles show not only a diversity of educational backgrounds that converge with the particularities of the island but also a diversity of interests, experiences, and professional work that offer particularities that offer the students expanded perspectives. These diverse



backgrounds also address issues of Equal Opportunity and Affirmative Action which are clearly demonstrated as being central to the University policies. The composition of the faculty represents the cultural and socio-economic diversity within the academy and profession itself.

For the UPR, the Office of the Dean of Students offers general support to the students (including but not limited to housing, health services, student organizations, etc.) Additional support staff, such as library staff, is also part of the faculty and teach related courses. There are 12 support administrative personnel (including computer lab technicians and woodshop staff). Despite obvious financial limitations, UPRSOA has addressed prior concerns about the availability of facilities by making available a number of dedicated individuals to provide extended availability to the lab, woodshop, and collaborative teaching with faculties from other institutions.

Transparency of roles and responsibilities within the administrative structure and duties is obvious as is access to posted personnel and human resources policies within the Human Resources website as well as in its Decanato de Administración (Administration Deanship) website. These include general training and workshops related to teaching improvement, communication, etc.

Unfortunately, professional opportunities for faculty are largely hindered by the economic situation of the school and the increasing (and foreseeable) budget cuts across the University as a whole. This includes more limited travel opportunities for both faculty and students. Combined with the lack of tenure opportunity is the fact that the remaining faculty are all on semester by semester appointments. This leads to a high level of uncertainty amongst faculty members at the very high potential of massive turnover should the decision be not to renew any number of them. Despite this, Dean Rodríguez has made increasing attempts to maintain programs and to develop, through the faculty, multiple ways of establishing dialogues with peer and collaborating institutions.

The university maintains clear indications of how to achieve such rankings and changes to academic status, despite the fact that ranking, promotions, and tenure have been virtually eliminated by budgetary issues. Over the last seven years, while the School of Architecture has maintained a steady faculty count, only one professor has been offered tenure and none are currently on 'tenure track.' The balance of the faculty, including Program Directors, Associate and Assistant Deans are not tenured and are on a contract basis. Further, the University's current policy of freezing hiring to replace positions that become vacant through normal attrition is creating a severe shortage of human resources that threatens the future of the program as remaining faculty members deal with dividing the tasks left open by departures amongst the remaining.

In spite of this, both faculty and administration of the school demonstrate remarkable resourcefulness, commitment and dedication to the school and mostly to the students. Faculty members are actively engaged in finding alternative means, several have self-funded initiatives or found themselves in a fundraising role to overcome restricted funding and, at least one, furnishes his own professional equipment to provide tools and resources for his lab.

(Summary of activities since then)

The University of Puerto Rico School of Architecture's (UPRSoA) faculty consists of 58 professors: 13 Tenure, 1 Tenure-Track, and 34 Adjunct (9 full time, including 3 deans' positions, and 25 part-time) who teach a wide range of offerings with a general teacher to student ratio of 1: 6.7. The design studios have an enrollment between 8 to 12 students per studio, while the conference courses at the bachelor's level range from 20-30 students, lecture courses from 15-20 students, and at the master's level between 5-15 students. Faculty's education includes 13 PhD/D Des, 43 M.Arch, and 2 B.Arch, 28 of which are licensed architects. Women represent 45% of the faculty, a significant increase since the School's foundation (in the 60's - 0%, 70's it was

11%, the 80's - 11%, the 90's - 12%, in 2000 - 17%, in 2010 - 27%, 2020 - 35%, and 2021 - 45%). It should be noted that all Dean's positions of the Deanship are occupied by women.

Due to the critical fiscal situation and the hiring freeze policy to replace positions at the University of Puerto Rico, there are few opportunities to fill vacancies due to resignation, retirement, or death of professors. Since the last accreditation, 9 professors have retired and only 3 faculty positions have been recruited: two in 2016 who today have a permanent position (Tenure), and one in 2021 with a probationary position (Tenure-Track).

In our efforts to address this *Cause of Concern* and increase the number of professors with Tenure, and with the goal of establishing an approximate ratio of 60% (Tenure) to 40% (adjunct or non-permanent faculty), applications for positions were made, based on the established recruitment plans. The 2012-2016 Recruitment Plan proposed the recruitment of 5 professors with positions in the areas of urban design, project management, heritage conservation, digital technologies / BIM, and construction technologies (existing position # 142-002).

The 2021 Recruitment Plan has the following objectives: 1. Define the profile of professors in accordance with the changes to the curricular programs and the new academic offers; 2. Promote academic, disciplinary and social diversity; 3. Promote research and development of School's Research Centers; 4. Stimulate innovation, the development of skills and knowledge, in accordance with the demands and needs of the country; and 5.Establish the ideal ratio of professors to the number of students enrolled. This is supported by the 2018-2023 School of Architecture Development Plan, PDEA (in Spanish). The PDEA also includes a needassessment and evidence-based analysis on the following aspects: faculty profile, student profile, enrollment, graduation rate, and curricular changes. The data was obtained from the Institutional Research and Assessment Division, DIIA (in Spanish) located in the Campus' Academic Affairs Office. The PDEA shows an increase in enrollment for both programs; 10% at the undergraduate level and 12% at the graduate level. It also demonstrates a significant reduction in professors with tenure (as mentioned above: 9 retired professors and 3 expected to retire in the next five years), as well as the need for approximately 36 professors with full load, distributed in 20 Tenure professors and 16 Adjunct or non-permanent professors. In addition, the plan recognized changes to existing academic programs and the creation of new programs based on the country's, and the profession's needs and demands for transformations. The Bachelor's degree in Environmental Design and the Master's degree in Architecture programs were revised, and new academic offerings were created to enrich the academic experience of our students. On August 20, 2021, we presented this plan to the Chancellor and requested a meeting with him, which was granted on August 25th. Our plan was evaluated by Dr. Sonia Balet, the Rio Piedras Campus' (UPRRP) Accreditation Liaison Officer and Accreditation Advisor of the Deanship of Academic Affairs, DAA (in Spanish). At the request of the DAA, on October 25, 2021, we submitted a revised plan. After an evaluation by the DAA, four (4) new faculty positions were approved for 2022.

The University of Puerto Rico's budget comes mainly from the contribution of the Government of Puerto Rico. In the last 15 years, the UPR has experienced a significant reduction of up to 40% of its budget due to Government cuts. The UPRRPs' budget has been reduced from \$203,807,671 in 2010-2011 to \$170,504,286 in 2021-2022; a 30% reduction. Despite these dramatic cuts, the UPRSoA's budget has been maintained and ranged between \$4.2 M and \$3.7 M in the last 5 years.

The budget items that have been significantly affected are funds for materials, lecturers, visiting professors, and travel (professor trips for conferences, seminars, and international academic, and research experiences). Funds have NOT been allocated for research and special projects, with the exception of those obtained through grants managed by professors. In this regard, the professors have obtained grants amounting to \$850,000 in projects over the last five years.

Federal funds granted to the UPR System for the pandemic, such as: CARES (Coronavirus Aid, Relief, Economic and Security Act), CRRSAA (Coronavirus Response and Relief Supplemental Appropriations Act), HEERF II (Higher Education Emergency Relief Fund II) and ARP (American Rescue Plan) have supported the purchase of new technology and software, as well as the development of online courses and programs. The UPRSoA has benefited from these funds to update the audiovisual system of the Jesús Amaral Auditorium, as well as technologically furnish the Thomas Marvel Jury Room and the classrooms, so that virtual classes can be taught. The allocation of approximately \$1M of these non-recurring funds has helped mitigate the fiscal crisis in the last two years.

On the other hand, the Graduate Studies, and Research Deanship's Training Academic Experience Program (PEAF) is a Teaching Assistant work-study program for graduate students. These scholarships have increased in the last five years: (2017 - 2018) - \$69,760.00; (2018 - 2019) - \$59,296.00; (2019 - 2020) - \$75,864.00; (2020 - 2021) - \$82,840.00; (2021 - 2022) - \$115,976.00.

The UPRSoA's Trust, a non-profit entity whose purpose is to promote the UPRSoA's development, is another instrument that has helped mitigate the fiscal crisis. The Trust was established in 2002 through Deed no. 17 of May 21, 2002. After remaining inactive from 2006 to 2016, it was reactivated in April 2017, consisting of a new Board of Directors, a new bank account, and an assistant director. It generates income by offering workshops and courses to the general public and receives donations for recurrent scholarships for graduate students. The Trust also supports faculty and academic programs by facilitating improvements to our academic offering, and physical facilities.

The UPRSoA has had no significant budget reductions since the last accreditation visit in 2014 due to the consistently assigned budget in the last five years, in addition to pandemic federal subsidies for the last two years. Despite this, the scarcity of fiscal resources remains and is reflected in the limited resources for research and special projects, especially for the urgent need to create at least 20 permanent faculty positions. It is important to recognize that tenure positions not only benefit teaching, but also strengthen research, student service, mentoring, and their continuity, and also benefit the administration as some positions can be filled by these.

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: As a result of the changes in the 2020 Conditions for Accreditation, the UPRSoA made changes to the program in three specific areas: 1. conscious and responsible integration and understanding of the balance between the built and natural environment and climate change mitigation; 2. assessment methods, in both program self-assessment, and student learning assessment in order to guide decision-making and encourage changes that in turn promote student, staff, and faculty success; and 3. policies, and actions aimed at commitment to diversity, equity, and inclusion.

The first area addressed is related with two Shared Values of the Discipline and Profession: 1. 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 and; 2. 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 (p.1). Furthermore, the Program Criteria 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 (p.2), summarizes the approach and integrated changes to the program.

It is important to clarify that as a result of a Master's in Architecture Program Self- Assessment carried out in 2018, the UPRSoA began to take action to create more aggressive environmental awareness, incorporate sustainability issues, and resilience to the courses within our socio-economic and environmental island context: the economic crisis, the population emigration, and the impact of both hurricanes Irma and María in 2017. These events drastically changed the environment in which our architects' practice and what society expects from them. These factors required a serious reflection and immediate changes to our curriculum so as to offer the most relevant education to aspiring professionals of architecture in Puerto Rico. The UPRSoA understood, in a critical and constructive way, the social, economic, political, and legal contexts that impact the different scenarios of practice in our profession and it had to take immediate action to update its curricular structure and contents.

The subsequent changes included curriculum and syllabi revisions in order to include topics in line with the current challenges in the profession whose main commitment is society, the environment, and intervention contexts. The changes also sought to encourage a strong presence of professional architects in our society to search and research possible solutions to complex issues. Current architectural education mandates a focus on the convergence between practice, research, and new technologies to expand the methods of analysis, design, and construction. Research and the production of new knowledge in architecture is an important component of architectural practice which makes architecture efficient, and relevant to the contexts in which it is created. Our revisions aspired to an education centered on the user diversity, their needs, inclusion, and participation in the design processes as well as, an architecture aimed at protecting the increasingly vulnerable natural environment, and cultural heritage.

In May 2020, NAAB approved the M.Arch <u>Substantive-Change-(Letter-April-2020)</u>, including those aimed at an ethical, responsible, and committed approach to the environment, as well as the integration of public health, safety, and welfare practices in the production of architecture. The 2020-2021 academic year began with the implementation of these changes.

At Bachelorette level, we also made minor changes to the Bachelor of Environmental Design (BED) curriculum. We addressed the topics or concepts that were integrated into the courses with the curricular change. A plan was drawn up to implement the revised syllabi from the curricular change (Studio Sequence Table) that included the definition of concepts, levels of implementation, examples of projects, scale of the projects, and student-learning assessment rubrics applicable by criteria and domains. These topics escalated in complexity according to their design studio course level. Meetings were held with all the design studio professors to define the objectives, establish calendars, monitor the process, and issue recommendations to make adjustments to teaching methods, the curricular sequence, or the academic offer.

The other significant change was the rigorous integration of assessment methods, for both student and program constant and sustained evaluation. Section 5-Resources, specifically part 5.2 Planning and Assessment in 2020 Conditions for Accreditation document, was the basis for strengthening and making changes related to this matter. It should be noted that since 2016, the student-learning assessment within the established campus domains has been carried out in a sustained manner. These are: content knowledge, information skills, effective communication, critical thinking, social responsibility, and research and creation. The Senate approved curricular change proposal for both the bachelor's and master's degrees included a student learning assessment plan used as the basis for initiating this process. In addition, to plan, analyze, and evaluate results, the UPRSoA formed a student assessment committee composed by Carola

Ballester, Dean of Academic Affairs and Assessment Coordinator, Nathalie González, Director of the Santiago Iglesias, Hijo Library (SIH Library), Ernesto Rodriguez, Bachelor's Program Coordinator, and Blanquita Calzada, Graduate Program Coordinator. This committee issues recommendations based on student-learning assessment results.

Student-learning assessment rubrics were created for each of the new curricular change course topics as related to the NAAB Student Performance Criteria. These were designed and implemented with the support of the Online Learning Assessment System, OLAS. OLAS is a Student Learning Assessment Office, OEAE (in Spanish) managed online platform that facilitates the UPRRP's appraisal process. Since the second semester of the 2020-2021 academic year, the UPRSoA incorporated to OLAS the following rubrics created to assess student learning within the current architecture discipline's domains and criteria as delineated by the 2020 NAAB criteria: Design Thinking, Design Process, Research Techniques, Visual Representation, Research Project, Coherence and Integration in Design, Community Restoration Project, Construction Building, Technical Knowledge and Skills, Sustainability Strategies / Environmental Systems for Elementary Design, Design III & IV Sustainability Strategies and Professional Practice.

In addition to the Student Learning Assessment Plan, since 2016 we have developed other academic and administrative evaluation instruments, the results of which have helped make decisions for the continuous review and transformation of the academic program. The results of this process supported the changes and adjustments to the academic program, especially due to the integration of the aforementioned concepts. Among the actions carried out are: incorporation of elective courses with specific topics; recruitment of professors in specialized areas of the discipline, and adjustments in the order of courses in the curricular sequence, among others.

Student evaluations are carried out annually for Tenure professors, and every semester for tenure track, adjunct and non-permanent professors. The evaluations focus on the faculty's performance in the classroom and their results help us identify the best candidates for teaching positions, promote quality teaching and contribute to their professional development. These evaluations are part of the Peer Evaluations carried out by the School Personnel Committee. This committee evaluates all teaching faculty and issues recommendations to the Dean for promotions, tenure, and hiring of faculty. The UPRSoA recognizes it as an essential process for the fulfillment of the aspirations and goals established in our development plan. In addition, it offers faculty tools for their improvement and academic performance leading to the promotion of academic excellence, dissemination of knowledge, research, and creation. It is a constructive, educational process that recognizes the merit of teaching.

Since 2016, the School's Student Affairs Dean has developed the <u>Student Profile Survey at undergraduate level</u> and the <u>Student Profile at graduate level</u>. This survey is administered annually, and the results help us recognize the socio-educational characteristics of the students, their needs and aspirations, define steps to follow consistent with their profile and make course attendance, collaboration, participation, and construction of better study spaces in our school and academic community.

In 2017 we carried out the <u>Alumni Survey</u> with the purpose of establishing ties with the graduates of the UPRSoA, supporting them in their professional development and lifelong learning experiences. This tool was established to take place every five years. In 2022 it was administered. In 2022, we also carried out an <u>Employer Survey for Recently Graduated Alumni</u> to identify the level of satisfaction of the latter, as well as their strengths and weaknesses.

In 2022, we developed the <u>Faculty Self-Assessment</u> that offers valuable information to help identify UPRSoA's strengths and weaknesses and, in a responsible manner, make decisions based on the results, with the intention of enhancing and promoting a collaborative culture.

All these evaluation instruments have directed the UPRSoA to a constant and conscious transformation with both an internal and external look at our program. They are tools that help us identify resources, define strengths, weaknesses, and opportunities, in order to make decisions on the way forward.

In the 2020 Conditions for Accreditation, Diversity, Equity, and Inclusion is another topic of emphasis, therefore one of the goals that should be met as a competency for graduates is based on supporting diversity, equity, and inclusion in architecture education, and the profession (p. ii). Also, one of the Shared Values of the Discipline and Profession emphasized the commitment of the architects to equity and inclusion in the environments they design (p.1). The Program Criteria PC.8 Social Equity and Inclusion, focuses on 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 (p.2). Finally, in the Resources 5.5 Social Equity, Diversity, and Inclusion part, the program must demonstrate its commitment to diversity and inclusion among current and prospective faculty, staff, and students (p.8).

UPRSoA is one of four NAAB accredited programs in Puerto Rico and the only one belonging to the public educational system. Our institution, by nature, is diverse and our community is a racial and cultural mix. According to the 2020 Census, 98.9% of the population of Puerto Rico is classified as Hispanic or Latino. The diversity index is 2.2%. Puerto Rico is a Hispanic country, but it is easy to lose sight of the richness and diversity that exists within our population beyond our Hispanic heritage. The census shows that 17.5%, consider themselves to be black or mixed race, 59% white or mixed race, and 17.1% white. For many years, the Black or Afro-Latino population has been bunched with Hispanic, reducing their presence in our demographic statistics. While there is evidence of a high percentage of people who consider themselves white, we mostly consider ourselves Hispanic, and rich with racial diversity.

In our academic context, the August 2021 Student Profile, an annual census that UPRSoA carries out, shows that 60.4% of our students consider themselves mixed race, 29.2% white, 6.7% black, and 3.7% other. On the other hand, student age ranges fluctuate between 18 and 70. Most students go from high school to our Bachelor of Environmental Design (BED) while a smaller group comes from bachelor's degrees in other disciplines. Most are full-time students, although the profile of students who work while studying has increased. Also, the DIIA data shows that in 2021, 62% of the school's students were women and 38% men.

The Student Profile helped us define the weakest areas that needed to be addressed. Among them, increasing the percentage of black students. Therefore, the School's <u>Student Recruitment Plan</u>, tied to Campus initiatives, included a list of towns to be visited for recruitment activities. The Plan also focuses on closing the generational gap between adult Track 3.5 students who come from bachelor's degrees in other disciplines, and students from our BED through workshops and individual support to our academic community.

UPRSoA's adjusted the admission and selection process to accommodate for enrollment increase. The 2021 newly admitted student group is comprised of 60%, admitted by General Application Index, IGS (in Spanish), 20% transfer students who come from either other faculties or other institutions, and 20% admitted through the portfolio process. This last group has a lower IGS, therefore, we periodically evaluate their academic performance to provide them with adequate learning support or tutoring services if necessary. Our School has a social and academic responsibility to help ensure equal opportunity, equitable educational participation, and equitable outcomes by meeting the various needs of all students.

One of the great problems of the pandemic lockdown has been the isolation of students and teachers and, consequently, the lack of activities that foster a sense of community and belonging in the UPRSoA. Students admitted in August 2020, did not visit the UPRSoA until two years later,

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hence, this group has not had a university life experience. For this reason, professors were encouraged to use various strategies to promote effective and constant communication with students in the virtual environment. They were recommended to carry out activities to provide inclusive learning environments and to be responsive and adaptive to a wide range of individualized circumstances. Some students expressed feeling isolated and disconnected from peers, reducing motivation and academic persistence. Cultivating a sense of community and belonging in educational spaces, for all students, is a current hot topic in higher education. Collaborative work such as synchronous classes, work groups, common projects, chats, and discussions were included in all courses.

Currently, and back from the pandemic isolation, we are working on a face-to-face activities calendar with the purpose of fostering a sense of community and belonging such as: tree planting, conferences, exhibitions, mural painting, field visits, and community involvement. It is important for instructors to create a welcoming and safe space for all students and to be an inclusive role model not by preaching for change but leading by example.



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: First and foremost, the UPR is the only higher education public institution on the Island. Established in 1903, the UPR's mission is to achieve the following objectives: 1. Transmit and increase knowledge through the sciences and the arts, putting this knowledge at the service of the community through its professors, researchers, other university personnel, students, and graduates; and 2. Contribute to the development, cultivation, and enjoyment of the aesthetic and ethical values of culture. As a public institution, the University is committed to provide educational services to the economically disadvantaged. Currently, two out of every three undergraduates, and one third of its graduate students, receive financial aid. In 2020 the UPR has eleven campuses and an enrollment of 52,130 students, employs over 3,988 faculty members, and over 5,841 non-teaching personnel.

As the largest of eleven campuses, Río Piedras Campus offers a wealth of opportunities for students to seek additional specializations, concentrations, certificates, degrees, and extracurricular activities. Both undergraduate and graduate degrees are offered in architecture, planning, humanities, education, arts and sciences, general studies, business administration, communications, science, information technology, law, and natural sciences, to mention some. The Middle States Association of Colleges and Schools has accredited the Río Piedras campus since 1946. Along with the Mayaguez and Medical Sciences Campuses, Río Piedras is one of the three graduate research campuses of the UPR System. Since 2018, our campus has been classified as Doctoral Universities: High Research Activity by the Carnegie Classification of Institutions of Higher Education, the only among comparable institutions in Puerto Rico. In 2021, the Río Piedras Campus had an enrollment of 13,226 students, of which 57% were female and employs over 1,142 faculty members, and over 1,227 non-teaching personnel. A significant number of students come from outside the San Juan Metropolitan Area. The retention rate is 80% (2020 cohort) and the graduation rate is 56% (2014 cohort).

Located in the capital city of San Juan, Río Piedras district is popularly named as a college town. The campus has 160 buildings on a 250-acre site. The first buildings were the Normal School in 1902, the Model School, and the Principal's Residence, both built next to the Central Road (today Ponce de Leon Avenue) in 1903. In the first years, the development of the University occurred somewhat spontaneously. In 1908, the architectural firm of Clark, Howe and Homer designed a new facade for the Model School in the California Mission Style. In 1909 a milk processing building was constructed in an agricultural area, east of the academic center. Arts and Crafts' Workshop buildings, a SIH Library and a Gymnasium were planned, as well as the grandstand and the fence (all demolished now). In 1912 construction began for the Memorial Hall (Baldorioty Building) and buildings for the Law School and the School of Pharmacy were in operation in 1918. In 1924 the Chicago firm of urbanists Bennett, Parsons and Frost were contacted to design a master plan for the future development of the university. It wasn't until 1935, with the establishment of the Puerto Rico Reconstruction Administration (PRRA) and the large sum of federal funds that it invested for public works in Puerto Rico, that the partial design and construction of the Parson Plan began. In 1936, architect Rafael Carmoega, working under the Puerto Rico Reconstruction Administration (PRRA), designed the distinctive University of Puerto

Rico clock tower (La Torre) based on the 1924 Parsons Plan. The iconic university clock tower was built in 1937 and christened as the Franklin Delano Roosevelt tower. Under the supervision of architect Rafael Carmoega, a group of local architects designed what is known as El Cuadrángulo (The Quadrangle), a plaza-like quadrangle defined by several buildings and a 2000 seat Theater or Aula Magna at the end of the axis with La Torre. The campus's central quadrangle and tower were listed on the National Register of Historic Places in 1984.

However, from the 1940s onward, a new architectural paradigm, which discarded historical vocabularies and incorporated attitudes learned from Germany and from the studio of Frank Lloyd Wright, stemmed from German émigré Henry Klumb. For 20 years Klumb was sole architect for the University of Puerto Rico, designing buildings for the campuses at Río Piedras and Mayagüez until 1966. At that time chancellor Jaime Benítez assigned the design of the General Studies Building to the architectural firm of Toro & Ferrer. Other buildings for the university have been designed by architects Antonio Marqués Carrión (sports facilities, 1971); José Firpi (student residence Torre Norte, 1971); the firm of Reed, Torres, Beauchamp & Marvel (new Education Faculty Building, 1974 and the first expansion to the Faculty of Natural Sciences Building, 1978); the firm of García & Landray (second expansion the Faculty of Natural Sciences Building, 1989); GDO Arquitectos (School of Architecture Building, 2001), and American Institute of Architects-AIA award-winning General Studies Building in 2007 by architect José Toro. All the buildings in the Campus represent various stylistic manifestations of Spanish Revival, Tropical Modernism, Post Modern and Contemporary architecture. In addition to La Torre and The Quadrangle, and several buildings in the UPRRP campus have been added to the National Register of Historic Places, such as the former female residence hall 'Residencia de Señoritas' building.

The UPRSoA, was established thanks to legislation approved in Puerto Rico in 1958 for such a purpose. That same year and to that effect, Puerto Rican architect Santiago Iglesias Jr. presented a resolution at the annual convention of the American Institute of Architects, celebrated in Cleveland, Ohio. In 1965, Puerto Rican architect trained in Cornell University, Jesús Eduardo Amaral, was selected as an executive consultant and given the responsibility to establish the school. Proposals were submitted to UPR's Río Piedras Chancellor Jaime Benítez and finally in 1966, the School was officially recognized by the Council of Superior Education.

The UPRSoA's mission is to train committed professionals capable of acting with ethical and social responsibility, through processes that pursue research, constant reflection and the development of critical and creative thinking, and whose actions contribute to the evolution of the profession and the creation of economically, socially, and culturally sustainable environments, as well as the protection of Puerto Rican heritage.

The UPRSoA is unique within the Island's contemporary context due to the contributions through research and practices it carries out from different perspectives and the professionals it prepares to work in our country. Within our current island context: economic crisis, population emigration, impact of both hurricanes Irma and María in 2017, and earthquakes in 2020, architects' practice and what society expects has drastically changed. Our school understood the consequences of these events in a critical and constructive way. For these reasons, the UPRSoA has been proactively setting new goals to expand academic alternatives in recognition of different and changing needs within the local communities and the profession.

First, the UPRSoA had to take immediate action to update the curricular structure and contents that we offer to aspiring professionals of architecture in Puerto Rico. Changes were made to both the BED, and the Master of Architecture programs. The programs' changes included topics in line with the current challenges in the profession whose main commitment is to society, the environment, and climate change. Particularly, the Master of Architecture program encouraged a strong presence of professional architects in our society to search and research for design solutions to complex issues, promoting the convergence between practice, research, and new technologies to expand the methods of analysis, design and construction. We also aspired to an

education centered on the user diversity, their needs, inclusion and participation in the design processes; as well as architecture aimed at protecting the natural environment, and our natural and cultural heritage which are vulnerable and at risk at this time. These changes to the curriculum strengthen the Graduate Program in Architecture's (PGA) mission, which is to provide students with the academic instruction to form capable, critical, and reflective future professionals who contribute positively to the development, and protection of the natural, and built environment. In order to achieve this mission, the PGA has established the following objectives:

- 1. Stimulate critical thinking and creative ability as tools for the formulation and resolution of the challenges of the built environment through different scales.
- Promote learning based on the areas of knowledge that include design, history and theory, technology, professional practice, and other areas related, with a multidisciplinary and collaborative approach.
- 3. Promote design as a research instrument, strengthening the tools, techniques, and methods inherent to this process.
- 4. Develop the necessary skills for the exploration, generation, and representation of ideas through verbal, graphic, and written tools.
- 5. Promote ethical performance that contributes to quality of life through active role at the service of users and communities.
- 6. Promote the transformation of the built environment through critical study of public policies to propose actions that have repercussions in favor of the society.
- 7. Promote convergence between traditional practice and technologies emerging to expand the methods of analysis and construction of an efficient architecture, pertinent and relevant to the context where it is created.
- 8. Promote a user- and citizen-centric architecture within a spirit of diversity, inclusion, and participation in the design processes.
- 9. Promote an architecture focused on the protection of the environment, the natural, and cultural heritage.
- 10. Critically understand the social, economic, political and that impact the various scenarios of the practice of the profession.

All these actions definitely brought us closer to defining a program that recognizes its context, the needs of our communities, the imminent need to act in relation to climate change, within the context and at the service of the community through its professors, researchers, other university personnel, students, and alumni.

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: All the Faculties and their respective programs have an active participation in the definition of the Campus' plan, *Plan Estratégico, Compromiso 2018-2023, Río Piedras Campus* and its operationalization. Each UPRSoA action contributes to Campus Plan's fulfillment. As mentioned before, the PGA is a unique Campus and UPR system program. However, it is part of a network of programs with common goals, as a promoter of social and economic development through the creation of professionals at the service of the Puerto Rican community and the world. With this said, and from a multidisciplinary approach, the UPRSoA has transformed its curriculum and established joint, and dual programs, minor concentrations, and professional certifications in conjunction with other Campus and UPR system faculties as well as with international academic institutions.

The relationship with our academic community is established through: 1. creation of academic programs with other faculties and schools; 2. participation in investigation and research projects; 3. support for initiatives to service the local communities; 4. search for external funds; 5. support for individual initiatives, faculties, and offices which our specialized knowledge, tools and facilities, allows us to collaborate with; 6. architectural advice to campus building infrastructure and facilities, and finally, 7. through UPRSoA extracurricular activities.

The diversity of departments, degrees, and programs is a priority for the UPRSoA and constitutes an integral academic Río Piedras Campus component. This synergy offers our students many interdisciplinary options according to their evolving interests. Since the last accreditation visit, the School has implemented a change in our Master of Architecture curricular sequence, eliminating the two year track and establishing two new tracks: M.Arch 1.5, and M.Arch 3.5. As a result of those revisions, M.Arch-Juris Doctor Joint Degree with the Law School was updated accordingly. We also established a Joint Degree with the Graduate School of Planning. We have created Professional Certificates in: Architectural and Urban Heritage Conservation with the University of Seville's School of Architecture in Spain, and in Architecture and Landscaping in Tropical Climates. Each consists of a set of five courses, for a total of 15 credits.

Starting the academic year 2023, we will be offering the master's degree in Project Management with specialization oriented towards construction projects (Certification 97, 2020-2021, Academic Senate). The program is a one-year, 34-credit degree. Also, a Master of Science in Architecture (M.Sc.Arch.) has been proposed. It is an academic proposal consisting of a one and a half year, 30 credit, advanced research or specialized practice steppingstone in the architecture professional career track. Finally, and in collaboration with the General Studies Faculty, UPRSoA has proposed a Joint PhD in Urban Studies.

Since 2018 the UPRSoA offers a minor concentration titled, Integrated Practice in Architecture/ Engineering with the Mayaguez and Ponce Campuses. The UPRSoA also offers a minor concentration titled, Art, Design, and Contexts of Intervention with the Humanities Faculty; and proposed another minor concentration titled, Design and Innovation, in collaboration with the Innovation and Marketing Support Center, i+C.

In addition, both undergraduate and graduate students have sought cross-disciplinary degrees by completing specializations, concentrations and additional degrees in Philosophy, Art History, Modern Languages, and Social Sciences. Since 2008, the School has been offering Introduction to Architecture, which is recognized as one of the campus arts requirement courses. Introduction to Sustainability-LEED, Sustainable Urbanism, History of Puerto Rican Architecture, Architecture and Cinema, Pre-Engineering, Photoshop, Sketch up, Digital Photography, and Free hand Drawing are other courses open to non architecture students, following the UPRSoA's commitment to improve the knowledge of architecture in our society. The school's community has access to courses, lectures, and exhibitions offered throughout the campus' schools, departments, museums, and libraries.

The UPRSoA collaborates in research projects with other faculties. Dr. Jorge Lizardi collaborated with Humanities' professors in the project *Desplazamientos y memoria colectiva: Tiempo, espacio y cultura,* subsidized by the Puerto Rican Foundation for the Humanities. Dr. Humberto Cavallín's Center for Design Research, CIDi (in Spanish) collaborates with Natural Sciences professors in a NIH Research Grant in the project, *Taking a breath after disaster: homes, mold and health in Puerto Rico.* In addition, he collaborates with professors Dr. Benjamín Bolaños Rosero and Dr. Filipa Godoy Vitorino from the Medical Sciences Campus, researching fungi diversity and concentrations inside post Hurricane Maria residences. Professor Rafael Vargas, the UPRSoA FAB LAB director, collaborates with Natural Science professor Dr. Nicolau in the NASA Project MIRO – Puerto Rico Space Partnership for Research. Also, he collaborates with i + C, by training entrepreneurs for the development of innovative projects. Currently we are devising the Else and Henry Klumb Center Development Plan, Klumb Center, an interdisciplinary project in

NvB

collaboration with both Humanities and Natural Science Faculties, the Center for Urban, Community and Business Action, CAUCE (in Spanish), and community based organizations. Our Professor Robin Planas Casado is part of the RIO research, which collaborates with five other researchers from the Counseling Office, DCODE (in Spanish) and the Natural Science Faculty. This research is the development of a mobile application that works as a complementary therapeutic tool for students who self-harm.

The UPRSoA collaborates with other Campus' initiatives to service the local communities. Professor Elio Martinez Joffre's design studio course collaborates with CAUCE, designing community projects in Río Piedras. One such project was the design of a community center and basketball court in the Capetillo neighborhood.

After hurricanes Irma and María in 2017, the UPRSoA collaborated with the Facilities Office in a campus building damage inventory. Also, our academic community participated in a volunteering initiative at the José Celso Barbosa School for the establishment of a community hub. For this initiative, the UPRSoA collaborated with the Education, Humanities, and Social Sciences faculties for much needed aid to the Río Piedras community after the hurricanes. Professors Martínez Joffre and Edwin Quiles also collaborated in the repair of Río Piedras community housing structures. Professor Andrés Mignucci and a group of volunteers made an inventory of post Maria conditions of Henry Klumb designed campus buildings. Dr. Daza also made an evaluation of the Quadrangle buildings after the 2020 earthquakes. Professor Anna Georas used her Professional Experience Internship course to collaborate with the Medical Sciences administrative team to prepare a base map of campus vulnerable areas to better prepare for the impact of future natural disasters.

UPRSoA collaborated with the Division of Continuing Education and Professional Studies, DECEP (in Spanish), in the preparation of research grant proposals. Furthermore, two UPRSoA professors teach professional continuing education courses through DECEP. UPRSoA collaborated with the UPR Central Administration in proposal writing for FEMA and CDBG funds directed towards urban and architectural projects for Río Piedras.

The UPR FAB LAB offers product design technical support to campus students by prototyping or modeling projects. The Architecture and Construction Archive, AACUPR (in Spanish) helps the Office of Planning and Physical Development, OPDF (in Spanish) by providing them with campus buildings original plans. The UPRSoA's SIH Library is conducting an important campus wide pilot-project on long distance education. Professor and academic Senator Anna Georas, is part of the Committee for Physical Development and Environmental Conservation (Certification 86, 2020-2021, Academic Senate), which advises on ethical and environmental aspects of the Campus. The Committee is currently working on the protocols to transform fossil energy into renewable energy and to reduce water consumption on campus.

UPRSoA also collaborates in graphic and industrial design such as the Innovation and Marketing Support Center (UPR i+C) logo and branding; the University Theater mobile store for the sale of theater memorabilia; the booth for the campus's representation at the Chiapas Book Fair in Mexico; the booth for the Student Recruitment Fair at the San Juan Convention Center, Plaza Las Américas Shopping Mall, and Ponce Convention Center Expos. In addition, we lend the School's classrooms, Jesús Amaral Auditorium, and Torres Martinó Gallery to other campus faculties, and offices.

The UPR System benefits from many of the UPRSoA activities and initiatives. Every year we have a cycle of conferences open to the academic community, and the general public. On the other hand, the Torres Martinó Gallery holds in-house exhibitions, as well as exhibitions by other campus individuals and groups.

The UPRSoA collaborates intensely with the improvements and development of campus' physical spaces. The UPRSoA Dean is the President of the Campus Design Board, which advises the Chancellor on matters related to the Campus's structures and urban spaces. In collaboration with

OPDF, we have participated in the design of several campus architectural proposals. The second-year design students designed the Law School's Student Journal Headquarters. The third-year design studio participated in the building design for the Communication and Information Faculty, FaCI. Similarly, the fourth-year design studio worked on a student- residence building at the Ponce Campus; a project commissioned by the Ponce Student General Council. Professor Javier Isado remodeled an auditorium in the Natural Sciences Faculty. Through the Design Institute of the School of Architecture, IDEA (in Spanish), professor María Gabriela Flores worked with students Ashley Ramírez, Carolina Pérez, and Yeishalee Álamo, on the remodeling and rehabilitation design of the Campus Sports Complex bathrooms, Likewise, professors Robin Planas and Blanquita Calzada, together with student Carlos Ríos, worked on the design of the Finance Laboratory 201 A, in the Business Administration Faculty. The project is currently in adjudication to be built. Professor Juan Penabad documented the conditions of the now closed Henry Klumb's Señoritas Residence. This study was used as a basis for the Residence's remodeling project proposal. Professors Esteban Sennyey, José Caro, Robin Planas and Mayra Jiménez carried out the code compliance assessment of the Torre Norte residence building, as well as its master plan.

The UPR offers a rich interdisciplinary environment for the school's academic community and represents an invaluable array of collaborations that expand the Institution's opportunities.

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 campuswide and community-wide activities).

Program Response: Our commitment to students' achievement inside and outside the classroom starts with promoting a healthy environment of respect and collaboration. Students are expected and given the opportunity to collaborate with the faculty and administration in decision-making and in a team effort when supporting academic, social, and cultural activities. This relationship accepts and promotes students' voice and supports an ethical responsibility towards the profession and in general. In celebration of these leadership skills, the UPRSoA nominates students elected to the Alpha Rho Chi Bronze Medal, the Maruja Fuentes Leadership Scholarship and the Tu Coop Leadership Scholarship, awarded in the annual Academic Achievements Activity. Also, the school's networking and promotional efforts seek to elevate students' accolades to the public sphere and promote their leadership skills. This is achieved by joining efforts with the Communications Office in our Institution. Also, our indexed publication, InForma, always includes student collaborations and celebrates student work, their community, and personal achievements.

Our UPRSoA promotes close alumni relations that result in creative opportunities that, in turn, benefit our students in the form of scholarships, competitions, exhibitions, prizes and, very important in today's economy, job opportunities. Our Professional Experience Internship Program, iXP (in Spanish), is a key experience for our students' professional development. The iXP also offers the opportunity to perform community service. Students provide assistance to local communities by designing projects for them. Students collaborated with Habitat for Humanity, HFHPR, by cleaning a building in Santurce, painting a mural on the rooftop (Fall 2016), providing graphic design for their 20th anniversary (Spring 2017), cleaning a patio for the house of a new owner, and designed and painted a mural as part of a proposal (Spring 2017). Students have also volunteered with the Municipality of Manatí and with Enterprise Community Partners with the production of the Guide for Resilient Housing Design in Island Communities.

Professor Elio Martínez Joffre's community design studio also carries out activities outside the studio that promote learning and, above all, community sensibility. The design studio drafted a design proposal for a university student housing project titled the Mesón de Amor (Spring 2022). Other projects designed are: the Haitian house for the *Bendiciendo el Prójimo Foundation* (Spring

2020), the design and construction of portable sinks for homeless people, the Multiuse Center in La Perla, San Juan, a "Bike Shelter" in Río Piedras, the Community Center Blondet, the PR House in the Dominican Republic, and the rehabilitation of the Jesús M. Lago Quiñones School.

In history and technology courses, professors organize guided visits to architectural projects with the purpose of exposing students to real experiences. These activities include: tours of Old San Juan, visits to construction sites, museums and artists' exhibitions, and the Capitol building dome restoration. The design studios also carry out visits to sites and contexts of intervention, and to projects that are architectural precedents. Professor Juan Penabad's technology class visits the mechanical rooms of buildings to explain the integration of systems into architecture.

Professor Humberto Cavallin, <u>CIDi</u> director, recurrently participates in the <u>PBL Lab Stanford</u>. The Lab is the home of a unique, innovative, integrated research curriculum development effort launched in 1993 in the Department of Civil and Environmental Engineering at Stanford University. Our students participate in this global opportunity as architects, project managers, structural, and MEP engineers, to design complex campus buildings in different contexts. Some of the projects have been designed for the following campuses and their contexts: University of Puerto Rico, Río Piedras Campus (Island), University of Nevada (Pacific).

Professor Dr. Natacha Quintero González from Brandenburgische, Technische Universität, Germany, invited our professor Omayra Rivera Crespo and her students to participate as an institutional project partner in the summer program "Play, Place-making, and Participation" for summer of 2022. The chosen location to intervene is an economically challenged community center close to our campus. Initiatives like these foster the integration of the academic community with the surrounding communities, like Capetillo Abajo. Participatory place-making projects are a way of developing nearby communities while guaranteeing community involvement.

Our students participate in the UPR's Honor Studies Program, <u>PREH</u> (in Spanish). The program is an innovative academic modality with an inclusive and investigative focus. It seeks to provide students with curricular offerings that allow them to analyze and solve pertinent and current architectural problems.

Students are encouraged to participate in local and international architectural design contests. UPRSoA stands out for its participation in such contests. At the local level, students who participated in the Resilient House competition sponsored by the College of Architects and Landscape Architects of Puerto Rico, CAAPPR, won an award. Professors Francisco Rodríguez and Rafael Vargas design studio students came in second place in said competition. The 'Bioschool' design is another thesis by Isabella Hillman to receive an award for the exemplary research carried out, this time in the CAAPPR biennial awards event. At an international level, two graduate students, David Acevedo and Jomarly Cruz, have recently submitted their thesis projects, both receiving the Architecture Masterprize 1, and Architecture Masterprize 2.

The UPRSoA activities and learning opportunities inside and outside the classroom for the last two pandemic years have diminished although the deanship made use of virtual strategies and tools to stimulate a sense of community and learning. For example, the conference cycle continued virtually and successfully. Online conferences enabled the UPRSoA to have 'visiting' guest speakers without budget limitless audiences. In the last year, overall conference participation doubled compared to the years before the pandemic.

Similarly, summer trips to New York, Peru, Brazil, Mexico, Greece, Spain and Italy were suspended during the pandemic period, but this year they resumed. This summer of 2022, Professor Elio Martínez Joffre resumed his trips to Mexico in collaboration with the Autonomous University of Mexico, UNAM.



The Student Affairs Deanship maintains a close relationship with student organizations. Dean, Anixa González, collaborates closely with the organization of student activities. Until recently, the American Institute of Architectural Students, AIAS and the Latin American Coordinator of Architecture Students, CLEA (in Spanish) were active in the School. Student organization continuity has been a challenge since the pandemic. Prior to the pandemic, the AIAS initiative, *Móntate que nos vamos*, organized community work, design competitions, and tours by our school professors. José Coleman-Davis (Ocean Park y la Paz), Miguel Calzada (Plaza Barceló) and Manuel Bermudez (Museum of Anthropology and History) led tours to some of their own celebrated projects. Likewise, the administration organized extracurricular activities such as a visit to the San José Church with its restoration architect Jorge Rigau.

During the last years, students participated in the following Latin American Social Workshops: Panama (2016), Ecuador (2017), and Peru (2018). In these events, students exchange valuable experiences with other architecture students from Latin America. UPRSoA alliances with the Foundation for Architecture - FxA, the College of Architects and Landscape Architects of Puerto Rico, CAAPPR (in Spanish), the AIA-Puerto Rico Chapter, and Habitat for Humanity allow students to participate in the professional world.

Summary Statement of 1 – Context and Mission

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

Program Response: The UPRSoA mission is to train professionals capable of acting with ethical and social responsibility, through processes that pursue research, constant reflection, and the development of critical, and creative thinking, and whose actions contribute to the evolution of the profession, and the creation of economically, socially, and culturally sustainable environments, as well as the protection of the Puerto Rican built patrimony.

The UPRSoA is part of the public education system and is located in the capital's urban Río Piedras campus. Interdisciplinarity, diversity, and research distinguish this campus. The privileged campus and its metropolitan location, set the UPRSoA up for constant research and collaboration opportunities. The relationship with our academic community is established through the creation of academic programs with other faculties; the collaboration in interdisciplinary research; the support to local community service; the search for external funds; architectural design collaborations with other campus development and facilities offices and faculties; and finally, through extracurricular activities.

The UPRSoA is committed to its students' achievements inside and outside the classroom. Students are expected to collaborate with the faculty and administration in decision-making and in a team effort to support academic, social, and cultural activities. The UPRSoA promotes a healthy and respectful environment characterized by participation and collaboration with academic, social, and cultural activities. This relationship recognizes students' voice and supports the preparation of ethical and driven professionals.

We offer our community opportunities in the form of scholarships, competitions, exhibitions, internships, research centers, and our alliances with external institutions.



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: UPRSoA exposes students to theoretical, methodological, practical, and technical knowledge to face complex design processes at different scales, and recognize the current challenges of the discipline, closely linked to their contexts, so that they are capable of producing resources and knowledge that contribute to the Puerto Rican economic, social and, cultural transformation (School of Architecture Development Plan - PDEA 2018-2023).

For UPRSoA, architecture takes a relevant new turn and, therefore, also education, after the experiences lived in the country: the fiscal crisis since 2015, hurricanes Irma and María in 2017, the earthquakes of 2020, added to the worldwide transformations of this new century in the professional practice, in the new ways of doing architecture imposed by technology in all stages of architectural work, and the current challenges imposed by climate change, and the urgent protection of the environment.

The changes to the academic program are based on the principles that our UPRSoA has historically pursued, through the works and postulates of architect Henry Klumb. Klumb, a central figure in the architecture of our Campus. Klumb believed that building design should respect the local needs, habits, and traditions of the people for whom it is designed. As expressed by the architect and former Dean of the School of Architecture, Efraín Pérez Chanis (1992), Klumb's thoughts were governed by the observation of socioeconomic phenomena and metaphysics, almost religious, between the activity of the human being with his natural, and ecological environment. For him, the essence of architecture is in the right balance between the forces of nature and the growth of culture. The result of this interaction will be rich and meaningful patterns that reflect the purpose of life and habitation. Architecture is, then, a response to human problems and needs that, in Klumb's words, "will provide, in addition to material gains, also the environmental conditions for the well-being of [humanity] and the stimulus for its cultural and spiritual growth" (Henry Klumb Collection, AACUPR).

The design process translates, for UPRSoA, into an exercise that integrates knowledge and expresses itself with added complexity at the different levels which it is taught. It begins with the conceptual approach of the architectural object until achieving its complex constructive reality. In this educational path, students learn concepts and skills and to apply and integrate sustainable and ecological footprint reduction principles for the least impact on the environment. It includes the management and protection of natural and cultural resources; the protection and security of the human being and user of the architecture; the integration of systems and the use of design tools.

The design learning process is based on carrying out a project, Project-based learning (PBL). Each project exposes the student to the definition of problems inherent to architectural design that is nourished by experience, evidence, discipline and creativity to solve them. Therefore, the design process must be seen in terms of analytical understanding of the situation and creative decision making. The activities and explorations carried out in the design studios, the critical and creative reflection, are what stimulate the development of design thinking. In this shared process, the student must be able to evaluate and make decisions responsibly at

internal and personal levels. Also, it constitutes a learning and development of design thinking, group discussions using verbal and graphic languages of the discipline which are generated in the design studio as a social learning space. The three essential principles of design studio are multisensory experimentation, communication, and collaboration.

The design studios, at all levels, seek to solve real problems or situations, where the user must be the center. Studio problem-solving stems from real contexts that include client needs as a focal part of the design process. Conditions and site analysis are the first step of a design exercise. The integration of course ARQU 4145 Research Techniques Applied to design is a curriculum change to fortify this step so students have the tools to investigate evidence-based design and, in this way, the solutions respond to architectural problems. Design courses are also supported by technology, history, and structure lectures, and field visits for the purpose of gaining knowledge and experience in particular topics that will be applied to the design process. The analysis of the site, including the profile of its inhabitants, is required to understand the contexts of intervention from different approaches: social, economic, cultural, physical - urban, and environmental. The application of current codes and regulations, provide for health, safety, physical, and emotional well-being measures for the user. Passive and energy technologies must be applied to all architectural projects according to the design studio level, for resilience and sustainability.

The Design Committee and Program Coordinators constantly review studio design student evaluations and outcomes to assure syllabi goal achievement in architectural production and to review compliance with UPRSoA mission and vision. Other assessment tools are five-year work plan evaluations, periodic faculty meetings, and student learning rubric evaluations each semester. These processes lead to adjustments and changes in the curricular sequences and courses. For example, the ARQU 6336, Design Laboratory course is focused on contextual and multidisciplinary research. The course is conducted through field visits, conferences, the development of theoretical frameworks, and physical-urban analysis to fully understand the contexts of intervention. One set goal is to strengthen context research, and the integrated practice methodology. Although included in the syllabus, design committee assessment has shown deficiencies in the use of this methodology. After faculty meetings, the action taken was the preparation of a semester final design review, conference, and interdisciplinary presentation calendar, specifically to ensure participation of professionals from different disciplines in the course.

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: Excellence in the teaching and research and creation processes as integrated practices are strategic axes set forth in the School's <u>School of Architecture</u> <u>Development Plan - PDEA 2018-2023</u>. Our goal is the strengthening and development of knowledge and intellectual production of architecture as a transforming agent of local and international society. More specifically, its objectives seek to integrate relevant topics into the design process, facilitate the collaboration of interdisciplinary projects, develop innovative activities and practices. These objectives are achieved by executing transformative practices that reach different intervention areas and sectors for the protection of the natural and built environment and, above all, the health, safety and well-being of the inhabitants.

The island of Puerto Rico is located in the tropical belt. The climate is hot with extreme temperatures ranging from 70 to 102 degrees Fahrenheit. The recent increase in temperatures recorded on the Island may be due to global climate changes, but also to local changes caused by the combined effects of deforestation and urbanization. The trade winds

that flow along the coasts and the effects of the sea-land and hill-valley breezes affect the general climate of the Island. These phenomena result in local microclimates that are not reflected in the typical patterns of the entire Island. The island's climate is also affected by cold fronts and tropical disturbances including troughs, storms and hurricanes, causing high-intensity and long-lasting rains, resulting in floods and landslides. Rainfall in Puerto Rico is highly variable in its temporal and spatial character. Floods are the leading cause of death and property damage during catastrophic weather events. Also, we have intense periods of rain scarcity, mostly in the southern region. The climatic condition of our island is of constant and unpredictable changes, and poorly-made human decisions exacerbate the effects of these natural events.

Faced with this local scenario, the UPRSoA's role is to understand the principles of organization of ecological communities and environments and act responsibly. This effort transcends academic institutions, and a task that requires interdisciplinary, government, and public and private conjoined action. However, the role of education is fundamental in this transformation. Constant rethinking and reassessing are necessary to address new local and global realities. Our role is to prepare students to be ecologically literate. Ecological literacy is a powerful concept as it creates a foundation for an integrated approach to environmental problems. Advocates champion eco-literacy as a new educational paradigm emerging around design thinking, participatory design, and integrated design and sustainability. Puerto Rico and its global context is at the center of the 2018-2023 Development Plan. The specific action guided by our Plan as follows:

At Curriculum level

UPRSoA has begun the process of methodically integrating a teaching-learning structure into the curriculum to create an ecological awareness, as well as practical tools to integrate into the discipline systems, methodologies and construction processes that mitigate for reduced and calculated environmental impact. The design course is recognized as the space where knowledge and skills are applied to carry out an architectural project that responds to environmental stewardship and professional responsibility. Among the integrated topics are: principles of passive technology, cross ventilation, orientation, sustainability, ecological footprint, nature integrated into architecture, such as natural lighting, low-impact land adaptation techniques, sustainable management of runoff, catchment and re-use of water, operations and maintenance, thermal insulation, green roofs, energy efficiency and solar protection, participatory design concepts for decision-making, and building life-cycle considerations and flexibility for future adapted reuses.

For example, the design course ARQU 4134, Intermediate Architectural Design taught by Professor María Helena Luengo is a third-year design studio which includes a research phase studying historical, environmental, and sociocultural aspects. This contributes to recognizing the problem and defining the emphasis of the projects in terms of the natural world: water, organic matter, energy; the built world: abandoned buildings, unused urban environments; and the social world: social or cultural values. The students visit and meet with the community. In the following work phase, the design criteria is defined taking into account the design emphasis and objectives, and relevant sustainability standards as a reference. The course encourages critical thinking and discussion by reading articles and news related to the topic being developed. The studio seeks to confront students with global and local challenges. Semester by semester, the course adjusts to the changing reality and the evolution of knowledge and tools for analysis and evaluation of sustainability.

The design studios are nourished by core and elective courses. The core courses that support the design process are: the Technology and History sequence, in which environmental literacy and the ecological ethical commitment are present; the Technology sequence with Technology I, II & IV; and elective courses like Climate change + LEED



(ARQU 3015/6991), Urban Landscape and Socioecological Systems (ARQU 3015/6200), Landscape Architecture (ARQU 4612/6612), Re-thinking the City: Urban Theories in the Twentieth Century (ARQU 5995/6991), Urban Agriculture (ARQU 5995/6991), Natural Ventilation/ Illumination (ARQU 3015/6991-2), and Integrated Practice for Sustainable Infrastructure (ARQU 4147) (see PC.3 for more details).

At Research level

Professor Humberto Cavallin's collaborative research project titled, Building Capacity: A Collaborative Undergraduate STEM Program in Resilient and Sustainable Infrastructure subsidized by the National Science Foundation, NSF initiated further projects such as the establishment of, "Resilient Infrastructure and Sustainability Education - Undergraduate Program" (RISE-UP). In addition, he works with the research project Taking a breath after the Disaster: Homes, Mold and Health in Puerto Rico with funds from the National Institute of Health, NIH. Professor Jorge Lizardi records and relates heterogeneous memories after the social catastrophe unleashed by Hurricane María and the wave of mass emigration from 2017-2018, through photography, short films, mural art, and writing, in the project, Displacements and collective memory: Time, space and culture, subsidized by the Puerto Rican Foundation for the Humanities, FPH (in Spanish). Professor Doel Fresse was the overall winner of the 2021 Shelter Competition entitled SHELTER-Designing with a Hurricane Shell with Palmar, a modular system for a minimal home. Each module serves as a programmatic component for both indoor and outdoor uses. All these components support minimal living in the tropics before, during and after natural disasters or disruptions like global pandemics. Students Christian González and Gabriel Rivera won second place in the Competition for a Resistant House in the Caño Martín Peña, sponsored by the CAAPPR, the engineer guild, CIAPR (in Spanish), the G8 and the Land Trust, with its proposal entitled "HOUSE | CORE" designed under the mentorship of professors Francisco Javier Rodríguez and Rafael Vargas in 2018.

The Biotropical Architecture Environmental Laboratory, LAAB (in Spanish) directed by Professor Pedro Muñiz, has a design approach that capitalizes, through human resources and research, the strategic geographic location and our tropical climate. The LAAB serves research, theses, and end-of-career projects directly related to the development of architectural projects that focus on biotropical climate aspects.

The digital fabrication laboratory, UPR FAB LAB, is currently supporting "Sociedad de Ambiente Marino" a project to design and fabricate thousands of artificial models of staghorn corals that will be used to attract marine life to reefs and thus advance the process of recovering themselves. These are produced by both additive manufacturing and 3d printing methods. The UPR FAB LAB is also collaborating with Watric Energy Resources, a local company that utilizes innovative methods to promote sustainability. It is currently developing new techniques for the extraction of resources and renewable energy in order to make them more accessible. Its water generation technology uses air to produce drinking water at home, safely and completely off the grid. The UPR FAB LAB collaborated to support #Walt's manufacturing in its first prototype models, equipment to produce water from the air, ensuring that each home can have constant access to clean drinking water which resulted in a patented technology system.

The future Klumb Center project aspires to undertake essential research in tropical architectural design for the exploration of new relationships between art, architecture, and the environment that lead to the search for practical solutions to the social and environmental problems of Puerto Rico and the Caribbean region.

The UPRSoA is committed to disseminating research findings and promoting the use of principles and values that lead to the protection of the environment and a sustainable life.

Current actions taken are, published publications, conference cycles, and extracurricular activities on tropical environmental sustainable design, open to professionals, researchers, and the public. Among the publications are:

- Cavallín, Humberto. Vélez-Torres LN, Bolaños-Rosero B, Godoy-Vitorino F, Rivera-Mariani FE, Maestre JP, Kinney K, Cavallin H. 2022. Hurricane María drives increased indoor proliferation of filamentous fungi in San Juan, Puerto Rico: a two-year culture-based approach. Peer J 10: e12730.
- Daza, Luis. Composite Soils Using Synthetic Lightweight Aggregates to Prevent Slope Collapses and for Settlement Control. December 2021. International Journal of Natural Disasters, Accidents and Civil Infrastructure. Vol.21 (1)
- Daza, Luis. A Case Study Repository for Resilient Infrastructure and Sustainability Education following a Natural Disaster. Case Study #2: Seismic Vulnerability of Public Schools in Puerto Rico. Asee – 2021, NSF Rise-Up Repository CLP HC. May 2021.
- Rivera Crespo, Omayra. Resilient Houses in Puerto Rico: resisting disaster by redefining housing, Revista de Arquitectura de Bogotá, No2, July-Dec2021.
- Rodriguez, Luz Marie. Against the pedagogy of mimesis: Problematizing the built environment from Paulo Freire's theory, with Yara Colón. In Vitruvius Arquitextos 256.03, year 22, September 2021.

Among the extracurricular activities are: *Steps*, a platform for online and asynchronous courses, created by Dr. María Helena Luengo in collaboration with our Instructional Technologies and Distance Education Integration Office, TIED (in Spanish) in which the virtual course structures are facilitated in the development and organization of specialized content in architecture and urban planning; *Siembra Sombra*, a reforestation collaborative initiative with *Para la Naturaleza* in a green lot adjacent to the building a with the participation of 100 UPRSoA students and volunteers; and 14 distance conferences for a total of 21 approved Continuing Education hours on Health, Safety and Welfare in the Built Environment (approved by the CAAPPR).

Long term planning and periodic assessment will continue to ensure that ecological literacy is achieved, and that local and global environmental issues are the driving force in architectural creation through the curriculum, research and extracurricular activities.

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: One of our institutional values outlined in our Development Plan is Diversity and Integration which demands respect for differences and encourages integration in our community with options that stimulate an optimal academic environment (School of Architecture Development Plan - PDEA 2018-2023 pag. 31). Consonant with this value, we have developed the DEI Plan to promote and implement actions that guide diversity, equity and inclusion. We also updated the Studio Culture Guide, previously revised in 2007. It now includes:

"The studio culture in the era of globalization assumes a more inclusive understanding in its teaching-learning practices with the responsibility of serving a wide and diverse community. Civility, respect, collaboration and awareness are essential in the design studios, workshops, research centers and every space in the School, to promote an environment of healthy coexistence, justice and equality. The School supports dynamic

and open dialogue in the design studios, an environment in which diverse opinions and different life experiences are shared. A culture of mutual respect and inquiry supports a lifelong learning process that begins in the studios. However, the need for diversity in shop culture goes beyond adapting to changing demographics. In a globalized world, it is no longer possible to simply think in terms of the local, but also delving into diverse cultural and social contexts is essential for a renewed studio culture."

The DEI Plan focuses on three areas. 1.Integration of the academic and professional community, whose purpose is to integrate the various profiles of students, teachers, non-teachers, and external resources to our academic and professional community with actions that establish environments of respect, commitment and equal opportunities for the search of a variety of paths that facilitate education, research and service in architecture; 2. Opportunities for education and growth, to ensure that students receive the opportunities and tools for an excellent education, acquire the knowledge and skills necessary to become competent professionals with confidence and self-assurance; 3. Diversity through the curriculum, to prepare future professionals with the skills to intervene fairly in the development of the built environment; in the design of inclusive and universal spaces for all profiles of people through the integration of values, needs, and points of view of vulnerable or underrepresented sectors.

These areas are designed with the purpose of achieving excellence, creating change, and ensuring community engagement in facilitating diversity, equity, and inclusion. This plan is a continuous effort to obtain feedback, make adjustments, and implement transformative actions in our academic community and in our society. Our website contains a tab that includes content, experiences, conferences, and resources related to DEI topics. This space serves as a reference and support for our community.

In the context of Puerto Rico, a diverse faculty is one that reasonably reflects the demographic characteristics of our general population. Our strategic Caribbean position, centric to North, Central, and South America and between the Americas and Europe is a catalyst for diversity and also one of our greatest resources. This geographic location makes our island an import and export hub.

The UPRSoA faculty, predominantly male since its foundation, has actively changed its composition in the last decade. Recruitment efforts have resulted in a more balanced faculty. 2021 faculty composition consisted of 47% female professors, some of which also hold administrative positions. Our goal is to reach 50% women in teaching by 2023.

As part of efforts to maintain a robust and diverse student enrollment, we have identified public schools with underserved, high-poverty, and higher percent of black population to host activities and encourage interest in our profession. In addition, the Architecture Summer Camp's objective, ongoing since 2004, is to attract youth interested in art, design, and architecture to an architectural academic experience. Every summer the camp offers scholarships to low-income students interested in architecture.

Upon the sustained student enrollment increase during the past five years, adjustments have been made to the admission and selection processes. The 2022-2023 student admission composition is: 60% admitted by General Application Index, IGS (in Spanish), 20% transfers from either other faculties or other institutions, and 20% admitted through the admission by portfolio process. This last group has lower IGS than the rest, therefore, we have a responsibility to periodically evaluate their academic performance and if necessary, provide them with adequate learning support or tutoring services. Our UPRSoA has a social and academic responsibility to help ensure equal opportunity, equitable educational participation, and equitable outcomes by meeting the various needs of all students. In order for students to receive the necessary tools for teaching-learning processes, academic mentoring is available

for emotional and academic support. Through the Student Development Counseling Department, DCODE (in Spanish), professional help services are offered to students aimed at satisfying their study, vocational, personal, and family needs.

Faculty-wise, UPRSoA professors have been extremely productive in DEI driven research and design, resulting in articles, book chapters, and peer reviewed essays published locally and internationally. UPRSoA conference cycle also addresses different perspectives on race, gender, marginalized populations, urbanism, poverty, and social justice issues. The UPRSoA peer-reviewed journal, InForma, publishes commissioned articles about architecture, urbanism, and spatial theory, thus, serves as a vehicle to discuss, teach, learn, and disseminate issues from within the Caribbean, but in forthright dialogue with a globalized society. This outward projection produces knowledge about architecture and cities which can ultimately inform policies, shift paradigms, and lead to the creation of just, inclusive, and democratic spaces.

The Professional Experience Internship, iXP, encourages access to the profession and prepares students for the career path. In addition, the internship has a community service component with the purpose to place students in pre-selected communities for community-based work experiences.

Dr. Regner Ramos has been fundamental in implementing a comprehensive approach that emphasizes cultural diversity in both graduate and undergraduate courses, talks and peer-review articles. Universal Design, a course taught by professor Esteban Sennyey encourages the designer to consider the consequences of design and to place the needs of all people at the very center of the process. The course provides a detailed introduction to the universal design principles, and a theoretical understanding of design tools and techniques.

Community support projects. Many of the design courses integrate real projects located in communities with particular housing, public and community space needs. In addition to meeting the objectives of the course, the integration of this type of project exposes students to real-life situations while contributing to the community's development. Also, joint studios pair UPRSoA students with students from diverse backgrounds and nationalities to find solutions to one problem exposing them to dissimilar approaches. The Community Design Center is also a singularly important experience as it exposes students to socio-cultural diversity. Students in these design studios are required to visit local sites and interview with stakeholders from diverse ethnic, social, and cultural backgrounds who are accustomed to improvise and informal architectural solutions. Dr. María Helena Luengo's third year design studio worked on the COSSAO Project, located in the town of Utuado. Cossao is an example of a grassroots medical emergency facility development for local farmers and the elder population in the face of environmental disasters.

Thesis and end-of-career projects. The development of urban and architectural projects that take social, political, cultural, and ecological conditions into consideration before assuming any design posture is a necessary and valuable experience for students who prepare to practice in a globalized society. Our student body's interest in DEI is evident in thesis and end-of-career projects topics. These projects begin with an investigation about the context, and culminate with the development of an architectural project, addressing concerns and presenting architectural and urban solutions in vulnerable sectors. Marginalized women, elder population, the LGBTTI+ community, black communities, functional diversity, and gentrification in urban areas, are examples of tackled topics. Some exemplifying thesis and end-of-career projects are: *Urbanism without age: old age, inclusion and architecture* (Alexandra Santana Maldonado, 2019), *Abating decay: a treatment and recovery home for the elderly in depression* (Illian Karineé Pérez López, 2020), *Enlighten me: the relationship between natural light, housing and old age* (Carolina Paredes Cuevas, 2021), *Golden Cohousing: typology adapted to shared housing for older adults in PR* (Krizia A. Reyes Silva,

2022), Diversity and equity in the public space of Cataño: the creation of a social center for the elderly and children (Melissa Ramos López, 2022); Between the campus and the urban center of Río Piedras: Phenomenological experiences in urban tours carried out by the blind (Sairimar Gómez Negrón, 2018), Abating decay: a treatment and recovery home for the elderly in depression (Illian Karineé Pérez López, 2020), Architecture for autism: Designing for the senses, Vocational Training Center (Natalia B. Vissepó Barba, 2022); An architecture against violence: a space for healing and rehabilitation for women (Paola Isabel Pérez Miranda, 2020), Custody architecture: Integration of the architectural space in the intervention with the victims of domestic violence (Nelmaris Camacho García, 2020), Making the space safe: the female university student and the public space of the Rio Piedras urban area (Claudia P. Gerena Rolón, 2020), Privacy in spaces within shelters for battered women (Irma Núñez Estévez, 2021); Relics of Discrimination: Unveiling the Binary Gender in Architecture from the Public Bathroom (Reily Joel Calderón Rivera, 2020), Gaytrification: A Double Identity (Giancarlo Cajigas González, 2022), "Pasea Lxs Uvs" (black, trans, and queer communities) (Arnaldo Cotto Reyes, 2022); Mass Migration: The Challenge of Reception Neighborhoods for Immigrants at the Border (Eriana C. Vázquez A, 2019), Integration Borders: How to revert the borders between communities due to the contrasts in forms, morphologies and physical-spatial relationship? (Alejandro González Cantini, 2020).

The UPRSoA is committed to providing a working and learning environment in which our academic community coexists in a healthy common space. All our efforts and actions are aimed at integrating the various student, professor, staff, and external resource diversity-ladden profiles into our academic and professional community with actions leading to respectful, committed, collaborative, and equal opportunity environments.

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 UPRSoA's commitment to train committed professionals capable of acting with ethical and social responsibility, through processes that pursue research, constant reflection, and the development of critical and creative thinking, is established in our mission.

The strategic axis of *Teaching, Research and Creation* and its goal: *Excellence in the processes of teaching, research and creation as integrated practices, will lead to the strengthening and development of knowledge and intellectual production of architecture as a transforming agent of local and international society, was the basis to making curricular changes to the BED and the Master's in Architecture. The UPRSoA did so by incorporating new knowledge, the product of research, into the architectural design process.*

The knowledge acquired in the academic environment is transmitted to practice, so that the work of architecture professionals responds, on the one hand, to the transformations of the social, economic, and environmental reality that we are currently experiencing and, on the other, to the needs of the knowledge society that the same discipline of architecture demands. Therefore, both for the academy and for professional practice, research is today an axis to prioritize in the professionals training. Research is the key to accessing current issues affecting the discipline and their solutions. Knowledge, consequently, boosts the development of architecture and the built environment in all areas of human activity, including, of course, the professional practice. This explains why research training in the academy has become an imperative need, since changes in the discipline also imply changes in the training of professional architecture. It is essential to develop professionals capable of self-improvement, to implement the necessary and desired changes in their performance context,



but even more to be constantly motivated to seek new scientifically based alternatives that contribute to the production of new knowledge.

Research, production, and dissemination of knowledge in the UPRSoA has increased in recent years thanks to the commitment of professors, students, and the entire academic community. This is also due, in part, to changes to the academic program curriculum. At the BED level, the purpose of ARQU 4145 course, *Research Techniques in Architecture* is to integrate research methodologies into the design process and, thus, evidence-based design. Other areas of our curriculum, particularly history and theory courses, use scholarly research and writing to develop widely applicable research and communication skills. Essay writing and small research projects developed in the courses, seek to develop critical thinking, research skills, and communication skills. Investigations on historical topics can be researched in the SIH Library and the AACUPR archives. These also have capable personnel to help students with research and writing techniques and style.

On the other hand, ARQU 6336 Design Lab and ARQU 6337 End-of-Career Project are research and design studios with an interdisciplinary approach. Students solve a design problem from different perspectives and approaches. External resources and researchers from different disciplines are invited to the design studio to enrich the research that will conclude with the design of an architectural project that seeks alternatives and solutions to design problems based on the findings carried out during the research phase.

Our research centers, AACUPR, CIDi, UPR FAB LAB, ESMAT, and LAAB are producing knowledge through their respective investigations and publications. Each center has staff, professors and students developing specific projects collaborating with other faculties and institutions in establishing interdisciplinary, multidisciplinary, and transdisciplinary practices. The UPR FAB LAB, directed by Professor Rafael Vargas, collaborates with the Marketing and Innovation Center (UPR i+C) in the I-care project through the design and manufacture of prototypes devised by student entrepreneurs who are part of the program. This collaboration resulted in a proposal for an undergraduate minor concentration in Design and Innovation, focused on the creation of innovative services and products and their commercialization. In addition, it is part of the NASA PR Sprint project, Puerto Rico Space Partnership for Research, Innovation and Training to Engage the Next Generation of Explorers (PR-SPRInT) for collaboration in digital prototyping and computer aided design methods. As aforementioned, the UPR FAB LAB also collaborates with the non-profit entity for reef restoration, through the digital creation of artificial corals.

The Structures and Materials Laboratory, ESMAT (in Spanish) has a library of construction materials. Professor Rafael Vargas conducts studies on sustainable materials, and Professor Luis Daza carried out studies on structural resistance in his structure courses.

The CIDi focuses on the study of the different processes related to the formulation and resolution of design problems. These areas include: studies in cognition during the formulation and solution of design problems, designer's social interaction, and the study of the different techniques and methods used in designing. In addition to these research activities, the center carries out educational and consulting projects. CIDi is currently conducting the following investigations: Taking a Breath after the Disaster: Homes, Mold and Health in Puerto Rico after Hurricane Maria, Humberto Cavallin (PI), a grant from National Institute of Health (NIH); <a href="Building Capacity: Collaborative Research: Resilient Infrastructure and Sustainability Education: Undergraduate Program (RISE-UP), Carla López del Puerto (PI), Humberto Cavallin (PI), a grant from National Science Foundation (NSF); Fungi, Asthma and the Built Environment: a Pilot Study, Humberto Cavallin(PI), Benjamín Bolaños (PI), with a grant from UPR FIPI funds and SoA support; Fundiares, Luciana Paulino (PI), Humberto Cavallin (collaborator), with a grant from Sao Paulo

Research Foundation; Changes in Microbes of the Built Environment in Early Stages of Urbanization, Dr. María G. Dominguez, MG (PI), Cavallin, H (Collaborator), with a grant from Alfred P. Sloan Foundation; TraceSpace 2.0 / Development of a Multitouch Desk for the Design Studio, Humberto Cavallin (collaborator), with FIPI-DEGI funding and SoA support.

The LAAB focuses on biotropic architectural research. Dr. Pedro Muniz is currently working on the analysis of casement windows with instrumentation (anemometers) in the LAAB Wind Tunnel (WC-3 window and WC-2 type casement). Recent examples of thesis projects researched at the LAAB are: Effect of the Balcony on Natural Ventilation and Lighting of the Social Housing Buildings in the Tropics by Giovani Caraballo, The Interior Patio and the Hall in Multifamily Housing: Geometric Analysis and its Effect on Natural Ventilation and Solar Protection for Tropical Hot and Humid Climates by Antonio Vázquez Molinari, The Wind Tower in the Suburban Single Family House by Sofia Rivera, and Wind Catcher in the Underground Housing: A Geometrical Analysis and its Effect in the Natural Ventilation and Daylighting for Tropical and Humid Climates by Edwin Látimer.

Independently funded research enables professors to hire teacher assistants and student collaborators. Dr. Regner Ramos carries out his research project, <u>Cüirtopia</u> with FIPI institutional funds. Cüirtopia is a mapping project that reimagines how we register, represent, and document queer spaces in the Caribbean. "Cüirtopia" exists across a variety of formats and iterations. Some of these have been: an exhibition at the Museum of Contemporary Art of Puerto Rico; a short film at the MAXXI in Rome; a radio show; a fictional story told via Instagram; community events; architecture courses at the UPRSoA; and site-based installations. Dr. *Coloso: A Factory of Queer, Digital Monuments for Puerto Rico* (began in 2021) is another research project Dr. Regner Ramos is working on, in collaboration with Kleanthis Kyriakou. This project is funded with a Graham Foundation grant.

Since 2019 the UPRSoA also encourages and motivates students to self-start research projects with the mentorship of willing professors through the Independent Study academic mechanism. Students with a particular academic curiosity may submit an independent research proposal to a professor, or a team of professors, who upon accepting, will mentor and guide the student through a semester-long credit research project. Students may also approach professors with a proposal to contribute with a professor's ongoing research project. Satisfactory outcomes receive variable (1 to 3) credit hours for the produced research. Proposals must be approved by both student and mentor as well as Program Coordinators.

Dr. María Helena Luengo continues her research in sustainable urbanism, professors Dr. Mayra Jiménez and Dr. Andrea Parga carry out research on modern architecture in Puerto Rico and the Caribbean using visual research methodologies, specifically, photography for the recovery and creation of visual narratives. Dr. Omayra Rivera Crespo conducts research on marginalized communities in Puerto Rico and the Caribbean, through participatory community design process. Her research project is titled, *Housing of Special Communities in Puerto Rico: intersectionality, adaptability and community participation* (2021). *The Architecture of the Puerto Rico Reconstruction Administration: Strategies for Decolonization,* is another interdisciplinary research project which Professor Luz M. Rodríguez currently works on with the help of AACUPR's resources. Many of the UPRSoA's research projects conclude in publications, presentations, and local and international conferences. These academic products benefit both the academic and professional sectors. The UPRSoA professors have produced over fifty academic <u>publications</u> over the past five years.

The UPRSoA has encouraged aperture to the academic community for knowledge exchange through interfaculty research, conferences, and exhibitions, increasing the level of interdisciplinary work into specific areas of research. Since 2019, our professors have given 80 presentations and conferences related to their research and projects in local and

international settings. AACUPR has conducted a series of exhibitions and publications, collaborating with professors from other faculties, such as Dr. Sylvia Alvarez Curbelo and Dr. María Luisa Moreno. Under the leadership of ACSA Distinguished Professor, Dr. Enrique Vivoni-Farage (now retired), the AACUPR published close to twenty books on the Puerto Rico architectural patrimony. Dr. Luis Daza, Dr. Humberto Cavallin, Dr. Jorge Lizardi, Dr. María Helena Luengo, and Architect Robin Planas have collaborated with other professors from the Humanities, Natural Sciences, Business Administration, and the Medical Sciences Faculties in several projects and research investigations.

For the past 21 years, InForma journal has consistently published research, reviews, and interviews pertaining to urban issues, architecture, and related disciplines authored by local and international students, professors, architects, writers, and artists.

At the academic level, the UPRSoA created and expects to launch a Master of Science in Architecture (M.Sc.Arch.) in Fall 2023. This academic proposal consists of 30 credits and provides an additional career step through advanced research or specialized practice in architecture and the built environment. It is aimed at students with professional degrees in architecture (graduated from a B. Arch., M. Arch.) or non-professional baccalaureate degrees in engineering, planning, project management, history, design, and art disciplines. The M.Sc.Arch, is a flexible program adaptable to the study path defined by the student, under the mentorship of a faculty professor specialized in the desired area of interest. The proposed areas of interest are: Research in design (methods and practices in the design process); Technologies of architecture (mechanical and structural systems, materials, and construction methods, biotropical architecture, urban ecologies - resilient cities) and History, theory and criticism of architecture. M. Sc.Arch. graduates will be able to develop the skills and acquire the knowledge to carry out research that can be applied to architectural design from the professional or academic field; transmit architectural knowledge to other disciplines; or lead studies in order to improve the space that is inhabited and be part of interdisciplinary research groups where the architectural theme is a key piece.

UPRSoA faculty, staff, and students make unique contributions to the Institution in the form of scholarship, community engagement, service, and teaching. The UPRSoA is committed to offering a holistic, theoretical, and practical education, and offers opportunities for the members of its learning community to engage in new knowledge. These investigations and projects result in new and innovative knowledge focused on design of the built environment in response to ever-changing conditions. Architectural production is gestated from the new knowledge produced by research. Research, the result of an interdisciplinary effort, dissolves disciplinary boundaries and allows for responsible inquiry from different perspectives. The institutionalization of the curriculum, considering these approaches, the constant review of the results obtained and the support to the research centers give a character of permanence and continuity to the understanding of the architecture discipline.

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: The conventional design process has been well tested and followed all over the world since the advent of modern architectural pedagogy. This approach combined aesthetics and technology in design to suit the industrial world. However, because of complex social change, the environmental ethical debate, the urgent need for sustainability and urban restoration, among other issues involved in the contemporary world, there has been rising awareness in architecture regarding the significance of context-based and user-based design. Design studios should integrate creative and research methods that enhance the

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student's perception of design from the end users point and emphasize the collaborative nature of architectural design for the study of the complex contexts of intervention.

UPRSoA recognized that the user must be fully integrated into the architecture, therefore, the program integrated interdisciplinary collaboration methodologies into its curriculum to identify real problems of the communities and users that lead to the search for solutions to design problems. In this scenario, the user is not only an inhabitant of the spaces being designed but is also a multidimensional being with needs at different levels. Therefore, the design process cannot be separated from a complex cultural and psychosocial analysis, and the results of this type of analysis must be fully integrated into the architectural product.

There are several types of research methodologies that design studios integrate into the design process to obtain the data that will, in turn, help make design decisions. Among them, participatory design, environmental psychology, context-based learning, and evidence-based design. These processes are inherently interdisciplinary as they include behavioral sciences, environmental sciences, or social sciences. For example, Participatory Design is a dynamic process that involves two major factors: first it initiates awareness among students, of the concept of "cultural design", which is a term used to indicate design that consciously attempts to make design suitable to the culture of the design user. Participatory design helps students gain experience in understanding the various cultural components, and the need to incorporate cultural requirements. Second is the user participation during the design process taking place in design progress at the early design process stage as an efficient tool of understanding the user needs and preferences. Participatory Design has become widely used for designing contextually suitable solutions and authorizes the users to have increased ownership over the process and the design outcome. The third-year courses of professors Anna Georas, María Helena Luengo and the community design studio of professor Elio Martínez Joffre promote participatory design, focusing on the user and the communities that are involved through design processes.

Collaboration is embedded in the structure of our curriculum. From the elemental to the advanced design studios, our students are required to work in teams on research/analysis and project-based learning. Teamwork allows them to navigate collaborative processes to accomplish goals, design decisions, practice conflict resolution, and to develop effective communication and interpersonal skills.

The Architectural Design Laboratory ARQU 6336 and the End-of-career integrated project ARQU 6337 are comprehensive design studios where the entire group works together in an effort to simulate the interdisciplinary and collaborative nature of practice. These studios engage faculty and professionals in specialized areas of expertise, like structural or environmental systems, to participate in the teaching process. These studios are often teamtaught so that students witness faculty collaborations and appreciate the benefits of individuals working toward a common goal. ARQU6336 integrates Context-based learning (CBL), which calls for real-life examples in teaching environments in order to learn through the actual, practical experience with a subject rather than just its mere theoretical part. CBL is a student-centered approach to teaching and learning, utilizing scenarios to replicate the physical, economic, social, and political context to the student's working environment.

The BED's Minor Concentration in Architecture and Engineering, RISE UP, coordinated by Professor Humberto Cavallin from CIDi, is a collaborative and interdisciplinary effort between the Río Piedras, Ponce, and Mayaguez Campuses. It provides students with environmental design tools to address future infrastructure and environmental challenges. This program also prepares students to aid in the prevention, recovery, and mitigation efforts of past and future environmental challenges impacting the Puerto Rican infrastructure. This program is based on integrated design principles.

There is significant and important interaction between our UPRSoA and other Campus Faculties. Collaborative efforts have been made to create interfaculty academic programs, like the creation of two minor concentrations, one with Humanities and the other with Business Administration. In addition, the UPRSoA offers graduate joint programs with the Law School, and with the Graduate School of Planning. In addition, the SoA has undertaken other academic initiatives and collaborative projects with the Natural Sciences (Environmental Sciences), and General Studies.

Many of our graduates have distinguished themselves by being leaders, locally and internationally, in their respective areas. Architect and lawyer Margarita Frontera is the President of the CAAPPR; Architect Carlos Rubio Cancela, is the Executive Director of the State Historic Preservation Office, SHPO; Architect Yiselle Santos-Rivera is the founder of Women Inspiring Emerging Leaders in Design, WIELD, Yiselle received a 2022 AIA Young Architects Award and serves on the AIA National Board. All of these alumni are examples of leadership in our profession, for the academy and our students.

Student organizations such as SoA Student Council and AIAS, provide leadership opportunities and foster community among our own student body, our institution, the AIA - Puerto Rico Chapter, and with the professional community. Our students regularly display leadership on both the local and international levels by holding offices, playing an active role in the academic and administrative decisions, and hosting student events. Our students have representation in all School committees (with voice and vote) except the Personnel Committee, as well as on various campus-level boards and committees. They participate in student governance through the Student Council and the Academic Senate. Students contribute to the intellectual and social life of the institution through Student Council organized activities. Other student organizations such, CSI, USGBC and CLEA also promote cultural and educational activities.

Students also learn about community and social responsibility through involvement with their peers, professionals of our discipline, and the academic community, through academic or professional events. UPRSoA students stand out amongst interdisciplinary student groups with their leadership skills. Annually, the UPRSoA awards a BED or Master's student with the Maruja Fuentes Viguié Scholarship to an exemplary leader with proactive civic values. Tu Coop Scholarships are also awarded to three more Graduate students who stand out in community service and leadership.

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: Architecture is a profession nourished by other disciplines and contexts. The understanding of interdisciplinary issues, closely tied to the changing human condition, allows a comprehensive understanding of architecture. These issues are ever changing conditions, therefore, architecture, as a discipline, is also in constant evolution. For this reason, the education and professional practice of architecture requires constant updating and acquisition of new knowledge to innovate and promote transformations that respond to user needs, as well as the natural and built environment.

One of the essential skills that must be developed in architecture education is "learn to learn". The UPRSoA needs to prepare students to take charge of a life-long learning process which includes cognitive, affective or emotional, metacognitive or self-regulation dimensions of learning. This competence entails being aware of the learning process itself, identifying the

learning needs of each student to determine the opportunities available, the ability to initiate and persist in learning, managing time and information effectively, either individually or in groups. The goal is for the student to be an autonomous learner where self-criticism, self-assessment, and reflection direct the paths to follow, not only personal ones, but also professional ones, and help them define the real contributions that they can make to society.

Knowledge acquisition is not exclusive to academia, informal and experiential learning is valued and is part of lifelong learning. That is why we must provide the tools to build an inclusive society that offers equal opportunities for access to lifelong learning. Core, elective courses, and design studios, include assignments and projects aimed to develop student independence, self-assessment and reflection by assigning tasks such as: establishing their own methods of study, analyze problematic situations, look for alternatives and make decisions, self-assess one's own learning, work autonomously and work effectively in a team.

If, on one hand, we promote the values of the profession and the desire to "learn to learn", to acquire knowledge to grow as professionals and as sensitive and empathic human beings with others and the situations that surround them, on the other hand, we have the commitment to create concrete ways to maintain bridges between the profession and the academy with the purpose of promoting lifelong learning and continuing education.

The professional experience internship course, iXP, recognizes and encourages the professional responsibilities of architects and leads students to the professional world with the responsibility that it entails. The iXP is the link between academic life and the professional world. In 2021 we created the Professional Internship Office, to guide and support iXP students towards professional life. The objective is to guide students in the job search, the creation of a portfolio, and preparation for interviews. Similarly, this office is a link with the architecture offices for the recruitment of students. Every semester, Dr. Anna Georas offers a conference titled, *Path to Licensure*, to teach aspiring architects professional ethics, the licensure process, and architecture's role in cultural, social, environmental, economic, and built contexts.

UPRSoA collaborates closely with local professional entities like the CAAPPR, FxA, and AIA Puerto Rico Chapter, to provide professionals with continuing education hours. In turn, these organizations promote UPRSoA conferences and activities among their members. Members of these organizations actively participate in UPRSoA activities such as the Conference Cycle, Pikoteo (informal technical talks held at noon in the lobby), guided visits, and exhibitions. UPRSoA serves as a continued education certified provider for Health, Safety and Welfare continued education credit hours. Our activities are also open to the general public with the intention of further disseminating and promoting the value of the discipline.

In the last three years we have held 21 conferences, <u>equivalent to 32 credit hours</u> of continuing education. The UPRSoA collaborated with the <u>FxA</u> in the following architecture education conferences, articles, tours, and webinars for the general public: <u>lecture on architecture in women</u>, <u>design conference</u>, <u>caribbean design history webinar</u>, <u>history and conservation of the Capitol building</u>, <u>Capitol building ornamentation</u>, and <u>biofilia in school design</u>.

Our faculty comply with three continuing education routes. Firstly, all new professors at the UPR must comply with two teacher training courses offered by the Campus's Center for Academic Excellence (CEA in Spanish), as required by the University's Certification 101, 2000-2001. In addition, all tenured faculty must comply with CEA's continued education courses to continue tenure and receive rank promotions.

The second faculty <u>continuing education route is required by the College of Architects</u> and Landscape Architects of Puerto Rico (CAAPPR). Most of the professors at the UPRSoA are

either licensed or architects in training. Puerto Rico's law, specifically Act Num. 173 from August 12, 1988, "Ley de la Junta Examinadora de Ingenieros, Arquitectos, Agrimensores y Arquitectos Paisajistas de Puerto Rico," as amended, and Regulation Num. 8380, "Reglamento de Educación Continua de la Junta Examinadora de Arquitectos y Arquitectos Paisajistas de Puerto Rico," as amended, requires licensed architects to complete a minimum of twelve (12) hours of Continued Education (HEC) per calendar year and architects intraining to complete six (6) hours of continued education per year.

Thirdly, Puerto Rico's law, by way of the Government Ethics Office, as amended in Article 3.3, establishes that all public employees must comply with 20 continued education training hours in ethics and values every two years. From these, a minimum of 10 hours must be taken through training or other education methods offered by the Ethics Development Center (CDPE in Spanish), and the other 10 hours through workshops provided by either public or private providers and validated by the CDPE office. All professors must comply with this requirement to continue working with the University of Puerto Rico.

UPRSoA collaborated with the AIA Puerto Rico Chapter, in the recent Women Architects in Puerto Rico exhibition and conference series, presented in Plaza Las Américas shopping center in San Juan and in Plaza Caribe Mall in the southern town of Ponce.

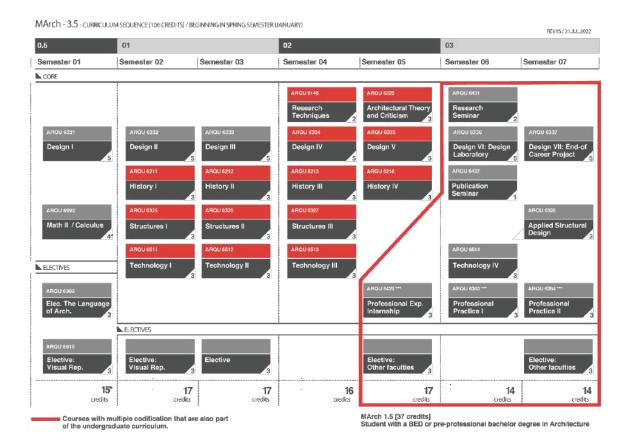
AlA is the creator of the Henry Adams Merit program. Founded in 1921, the H. Adams Awards are given to the two students with the highest-grade point average obtained at the Master's level. This recognition and medal is delivered by the President of the AlA Puerto Rico Chapter in our annual Academic Distinctions ceremony. In this activity, UPRSoA also grants the Jaime Cobas best thesis or end-of-career project, and best thesis or end-of-career presentation awards. The evaluation criteria is: effective application of research, coherent and current design, sustainable design strategies, system integration, and quality of drawings and technical details. Such initiatives, where professionals recognize student achievements serve to incentivize students and create bridges between academia and the practice.



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.

The narrative includes both Master program tracks 1.5 & 3.5 (See Part 4: Curricular Framework) since the content and courses in both share the same sequence (history/theory, structures, technology, research, and professional practice, with some exceptions) and lead to the professional degree. The differences will be highlighted through the narrative. The group of electives and extracurriculars are available for both tracks. It is important to note that Track 1.5 Master's students have taken all the BED core courses. BED course codification ranges from ARQU 3121 to 5995. Codification beginning with a 5XXX (for example ARQU 5005 and ARQU 5995) signifies advanced level courses that can be taken both at the Master's and BED levels. In addition to 5000 + codified courses, all other UPRSoA Master Degree courses are all 6000 + codified. Most of the courses in the M. Arch Track 3.5 are the same as in the Baccalaureate in Environmental Design through a multiple numerical coding, of different academic levels, as stated in Annex 4 of the Certification number 112 of the year 2014-2015. Courses with multiple numerical coding are allowed, since they belong to the same discipline with specialized knowledge in architecture. The subject and content have several levels of complexity and allows undergraduate and graduate students to participate in the same course. Upon completing ARQU 6335 design course, or their third full credit academic year. Track 3.5 students meet with Track 1.5 students for the same curricular sequence (equivalent to a full credit academic year plus one regular (or summer) semester until graduation).





3.1 Program Criteria (PC)

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

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: The UPRSoA mission is to train committed professionals capable of acting with ethical and social responsibility through processes that pursue research, constant reflection, and the development of critical and creative thinking. Our students graduate prepared to transition from academia to internship and licensure and be successful in local and international practice. They graduate with a clear understanding of the professional and academic institutions that will guide them along the path to licensure in Puerto Rico and the United States. These are the National Council for Architectural Registration Boards, NCARB, the College of Architects and Landscape Architects of Puerto Rico, CAAPPR, the Puerto Rico Licencing Board (*Junta Examinadora* in Spanish), and The American Institute of Architects, AIA Puerto Rico Chapter.

Every semester, the Professional Experience Internship Program, iXP, taught by professor Anna Georas offers Path to Licensure Conferences. Each conference is accessible on our Facebook page and YouTube channel. The conference teaches students about logging hours into the NCARB record, the AXP and ARE 5.0 Guidelines, and the requirements for licensing in Puerto Rico, and other jurisdictions. The conference ends with a questions and answer session. Recently, the UPRSoA held a conference on ARE studying strategies, titled, Imagen vale más que mil palabras: estrategias de estudio para la reválida by Professor Saritza Martínez.

Students may further delve into a range of career opportunity areas through our free elective courses (see part 4.3 for list). These include topics like sustainability, research, graphic or landscape design, materials, conservation, history, rendering, and photography. Also, minors like Rise-UP and Art-Design and Contexts of Interventions and the possibility of joint masters with other disciplines like Juris Doctor, Planning, and Administration with Project Management, allow students to pursue dynamic and combined career paths. Likewise, students have the flexibility to take electives in different faculties.

The main courses with career opportunity and licensure content are: Professional Practice I (ARQU 6383), Professional Practice II (ARQU 6384), and Professional Experience Internship (ARQU 6425). Furthermore, all core course syllabi cover content included in ARE exams.

ARQU 6383 Professional Practice I by Professor Luis Pico Lacomba introduces students to the fundamentals of traditional professional practice but also expands into the diverse career paths available to the architect within the context of the profession and beyond design. ARQU 6383 introduces students to the ethical, administrative, and regulatory concepts and processes of the professional practice of architecture. It describes the nature of the profession, the context of its education, summarizes the licensing procedure in PR and the US, and explores professional specialties within the practice of architecture.

ARQU 6425 Professional Experience Internship, iXP by Professor Anna Georas is the link between academic and professional life. This course exposes the student to professional experience while working in a firm, organization, or agency to perform architecture-related tasks. The students are immersed in the requirements for the path to licensure as defined by the local Department of State, and the National Council of Architectural Registration Boards (NCARB), and prepare CVs and portfolios, go to job interviews, and open their NCARB



records to register hours. This course has a community service component as part of its syllabus. IXP also has a support office that offers counsel to any student.

Extracurricularly, the UPR holds periodic career fairs, and the UPRSoA sends job opportunity announcements to students and alumni. Many professors have private practices, which often result in jobs and internships. Other programs that allow students to acquire professional experience are the Design Institute of the School of Architecture, IDEA, the Academic and Training Experiences Program, PEAF (in Spanish) through research and teaching assistance, and Summer Workshops (*Talleres de Verano*).

The lectures in the conference cycle cover a variety of topics related to architecture, as do the UPRSoA and AIAS organized project visits. The School also promotes activities by other organizations in Puerto Rico. Finally, the UPRSoA webpage has a <u>section</u> with links to professional organizations, guides, and information about the profession.

In terms of research, an architect can participate in research carried out in collaboration with other faculties and interdisciplinary groups where the contribution and knowledge of architecture are vital for the development of the research. For example, UPR FAB LAB research collaborations and Dr. Cavallin's participation in Urbanization.

One UPRSoA survey asks firms employing our alumni to assess their performance concerning our education. Also, the new curriculum made the iXP a required course.

Going forward, continued strengthening of the iXP course and office, and the networks and services it provides, in addition to pertinent conference cycles, alumni surveys, continued tour visits and collaborations with the CAAPPR, AIAS, and other faculties and organizations for research projects leads to effective career path practice and exposure.

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: The design learning process at UPRSoA is based on carrying out a project, Project-based learning. Each project exposes the student to the definition of problems inherent to architectural design nourished by experience, evidence, discipline, and creativity to solve them. Therefore, the design process must be seen in terms of analytical understanding of the situation and creative decision-making. The activities and explorations in the design studios, the critical and creative reflection, stimulate the development of design thinking. In this shared process, the student must be able to evaluate and make decisions responsibly at internal and personal levels. Also, it constitutes learning and development of design thinking and group discussions using the discipline's verbal and graphic languages generated in the design studio as a social learning space. The three essential principles of a design studio are multisensory experimentation, communication, and collaboration.

Our design studios are core courses beginning the first year of the BED and ending upon completing the Master's degree in Architecture, Track 1.5. Track 3.5 Master's in Architecture Program for students with non architecture undergraduate studies, similarly, take design courses throughout the entire curriculum until completion. Design studios are structured by increasing the level of complexity in skills and knowledge, which will help to solve architectural problems that also increase in scale and complexity. They are studios with reduced student enrollment, between 10 to 14 students per section, with one or two professors as team-teaching. The team-teaching is carefully selected so that the pairs of professors' skills and areas of knowledge complement each other. For example, in the



advanced Master's level design studios, we seek to integrate research into design; for this reason, we have a professor to focus on research processes and another with more experience in professional practice.

The design studio professors lead the studios through individual and group critiques, stimulating dialogue between students and participants. These dynamics empower the student in verbal and graphic expression in the studio about ideas, opinions, and constructive criticism about the projects, and, in addition, it helps them to reflect on their process. This is an approach that is, first and foremost, student-centered. In this sense, the teacher is a guide to help define problems and find solutions, based on research and evidence, to design problems.

The first-year design studio in the BED: ARQU 3131 Design Fundamental I, uses abstract exercises that transition from two-dimensional graphic composition to three-dimensional composition design or object with spatial and sequence emphasis. Students will become familiar with formal and spatial aspects of composition as applied to architecture, such as architectural vocabulary, the process of analysis, principles of spatial ordering, transitions from line/plane - plane/volume -volume/space, the conception of negative/positive space, the use of color, light, and shadow, and the handling of form. ARQU 3132 Design Fundamentals II introduces the factors that influence architectural design, such as the program, context, the handling of form, and some construction matters.

In Track 3.5, the first semester, ARQU 6331 Architectural Design I: Design Fundamentals, is an introductory course to fundamental topics of the design process. The student will become familiar with the architectural vocabulary and recognize the role of diagramming as a basis for proposing a solution (strategy). The topic of inhabitant, issues of program, context, and construction matters will be introduced as a manifestation of design.

The BED second-year design studio: ARQU 3133 Elementary Architectural Design I includes learning the formal and spatial composition applied to architectural space as much as the overall volume of the building. The discussion will focus on the criteria to be considered upon assembling parts that form space and building. Discussion includes considerations on programming, accessibility, material/construction, human scale, anthropometry, and natural conditions in rural context management. ARQU 3134 Elementary Architectural Design II focuses on learning the design strategies necessary for developing medium-scale buildings in urban conditions. Throughout the course, there's an exposition of design strategies to resolve buildings in pre-existing urban contexts, managing regulatory considerations, environmental concerns, the static and strength of materials, and architectural composition.

In Track 3.5, the second semester, ARQU 6332 Architectural Design II: Elementary Design, introduces the student to multiple dimensions of the design process: composition, sequence, urban context, and climatic conditions. It deals with issues of typology, programming, sustainability, and tectonics considerations and integrates strategies to work with the variables in the design process, looking for coherent answers to simultaneous problems.

The BED third-year design studio: ARQU 4133 Intermediate Architectural Design focuses on mixed-use building development and design in complex urban contexts considering historical character, including technical matters, such as constructive and mechanical systems and applicable code regulations. ARQU 4134 Intermediate Architectural Design II focuses on multifamily housing building design, considering the physical and environmental considerations, constructive and mechanical systems, the resistance of materials, the building's operational requirements, and related regulations.

Track 3.5's third semester, ARQU 6333 Architectural Design III: Intermediate Design, exposes the student to the integration of architectural design variables and the development

of approaches to face the design process from the object to the urban scale. Developing the project will include an examination of the form-function relationship in the urban context, construction details, code and regulation requirements, and research of precedents, site conditions, occupants, and programmatic agenda.

BED fourth-year design studio ARQU 4135 is parallel to Track 3.5's ARQU 6334, Advanced Architectural Design I: Architectural as an Urban Component; design sequence objectives meet at this level of both programs. This course exposes the relationship between the building as a constituent of the urban enclave and the city. It also focuses on the understanding and exploration of the city as a collective and complex body composed of inhabitants, social rituals, operational uses, ecology, economy, and adaptation to the physical context: geographical/topographic/climatic. The student will face the design of the building as a multifunctional urban component and how it is coordinated to establish a sense of cohesion and coherence in the city.

BED's last design course, ARQU 4136/6335 for Track 3.5, Advanced Architectural Design II: Building Anatomy proposes a synthesis process applied to a medium-scale architectural project that integrates symbolic, spatial, structural, and technical aspects with the sensitivity of integration in the urban context. The building development will consider requirements and encumbrances that impose the issues of technical and regulatory order so that the building becomes a habitable reality. The final project must demonstrate the integration of the technologies of the associated disciplines: civil, structural, plumbing, electricity, fire extinguishing, mechanical ventilation, and information technology in construction documents.

ARQU 6336 and ARQU 6337, Design Laboratory and End-of-Career Project, respectively, are the only design courses for Track 1.5, and the final design courses in the last academic year for Track 3.5. These are research and design studios with an interdisciplinary approach where students solve a design problem from different perspectives and approaches, taking into account contextual and social needs, environmental value, demographic segments, history, and movements. The student can work individually or as a group to propose design solutions that respond to improving the city through architecture and conclude with the development of an architectural project in an integrated manner.

Throughout the design course sequence, students practice and develop representational skills while acquiring the necessary tools for understanding the role of free-hand, technical and digital drawing, and model-making as essential tools to explore and communicate architectural ideas. In these courses, students implement all that they have learned in other courses in the curriculum. ARQU 3615/6615 - 3016/6991 Digital Architectural Representation courses mainly support representation because it focuses on developing architectural visual communication skills and techniques while offering basic and intermediate level tools for elaborating graphic material on the Photoshop and Illustrator platforms. There's also a group of elective courses emphasizing programs: AutoCAD, GIS, Grasshopper/Rhino, Rendering, and BIM/Revit. Additionally, through the study and analysis of precedents, students will become familiar with different languages, representation techniques, and the history of architecture.

Other courses and experiences that support the design sequence are: ARQU 4145/6146, Research Techniques in Architecture which exposes the students to the fundamental concepts and research methods for its application to the field of architecture. This course assists students in developing skills and competencies in research techniques to learn to define a problem, establish a theoretical reflection, and define research methods while selecting and using tools that enable them to rigorously develop research based on data collection and analysis. The course takes an Evidence-Based Design (EBD) approach. In ARQU 6431 Research Seminar, student skills and investigation competencies are strengthened and applied to conceive a research topic, figure out a pertinent theoretical



approach, and find a relevant and rigorous method to address a design problem. The course encourages appropriate research methodologies for advanced studies in architecture, supporting student work in the Advance Design Labs.

Technology course sequence (ARQU 4311/6511, ARQU 4312/6512, ARQU 4313/6513, & ARQU 6514) and the Structure sequence (ARQU 4321 / 6325, ARQU 4322/6326, ARQU 4323/6327 & ARQU 6328) strengthen decision making in design courses. Understanding the workings and application of structural systems, building systems, sustainable and resiliency concepts, are integral to design. History course sequence (ARQU 4211/6211, ARQU 4212/6212, ARQU 4213/6213, ARQU 4214/6214) teaches students to reflect on the evolution of the discipline based on social, cultural, political, economic and technological standpoints. This knowledge helps students recognize and consciously react to ever changing architectural presets in the design process.

To supplement coursework, the conference cycle and the varied student and School organized activities discuss a variety of topics related to architecture.

Each semester all the design studio projects are submitted at the end of the semester, documenting the entire studio production, which is added to the studio project SoA digital archive. These are accessible to different committees for curriculum evaluation and assessment. Final design juries with invited design experts, studio design professor meetings, and annual student project exhibitions further continues the regular review and discussion of the design studio content and criteria. Also, continued integration of other faculty professors and subject matters into the design studio will continue to strengthen the project outcomes.

The UPRSoA also continues with the Student Learning Assessment plan and semester to semester OLAS evaluations. These, along with design, program coordinator, and curriculum committee meetings will direct future course and curriculum changes and adjustments.

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: Puerto Rico is a tropical island, and some of our challenges include the increasing temperature, troughs, storms, hurricanes, floods, landslides, droughts, coastal erosion, and hot and humid weather. The climate change with its extreme weather and sea level rise scenario led the School to begin a process of changes to the program in 2018 in order to create an aggressive environmental awareness. It incorporated sustainability and resilience principles and concepts to the courses to adapt to climate change, the economic crisis, population emigration, and the impact of hurricanes Irma and Maria in 2017.

The UPRSoA promotes the ecological and sustainable approach through the design sequence, which is nourished by the technology and history sequence and the wide variety of elective courses available for both master program tracks. A design sequences reference table for professors gradually suggests sustainability and environmental skills introduction according to the design studio level (Studio Sequence Table).

Third and fourth year (this latter, equivalent to ARQU 6334 & 6335 Master's Track 3.5) BED design studios emphatically focus on the application of sustainable design. For example, ARQU 4133 & 4134 Intermediate Architectural Design, includes research of historical, environmental, and sociocultural elements contributing to problematizing and defining the projects from the natural resource (water, organic matter, energy), built environment

(abandoned buildings and urban environments) and social challenges. Design emphasis and criteria use sustainability standards. Strategies such as passive technology design for better building performance, natural environmental considerations, building reuse, adaptation and life cycle, brownfield redevelopment, recycling, the use of recyclable and recycled construction materials, urban agriculture, are being tackled in advanced design studios. Projects are also now including atmospheric event mitigation design strategies (for hurricanes, floods, coast erosion, and earthquakes). This is evidenced in the amount of thesis and end-of-career projects focused on climate change mitigation.

The core and elective courses that complement the understanding of the dynamic between the built and natural environment and help students mitigate and design for climate change responsibly are:

ARQU 4311/6511 Technology I by Professor Pedro Muñiz. It explores concepts about the natural environment and its modification to achieve human well-being through identifying the desired environmental control requirements with an emphasis on hot, humid, and tropical climate by incorporating passive or natural systems to the design process. It also explores the appropriate methods, strategies, materials, and components to achieve this. The second part is ARQU 4312/6512 Technology II focusing on identifying the physical, biological, and cultural attributes that affect the site's selection, analysis, and design. Material properties, construction techniques, and rainwater disposition are discussed, as well as the study and characteristics of soil types.

ARQU 6514 Technology IV Energy Systems by Professor Cristina Algaze emphasizes the responsibility and relevance of architecture in the current climate crisis by understanding the energy systems that interact with the buildings and their users, especially in how a building's design can mitigate the environmental impacts of its embodied carbon and operations energy use to respond to the current climate crisis. The course introduces a wide range of criteria to address when designing a high-performance building and the road to a Zero Carbon Built Environment.

ARQU 3015/6991 Climate Change LEED by Brenda Martínez provides students with knowledge about the environmental and socio-economic impact of the design and construction industry, as well as strategies and practices implemented to reduce this impact. Specifically, the course focuses on the LEED Guide for the Design and Construction of Green Buildings and the Leadership in Energy and Environmental Design Guide.

ARQU 3015/6200 Urban Landscape and Socio-Ecological Systems by Professor María Helena Luengo gives students specific knowledge and design tools based on ecological principles to apply in urban environment analysis, problem recognition, and definition of solutions through topics like urban ecology, people-centered urban planning, indicators of urban sustainability and placemaking. The course emphasizes sociocultural criteria and lifestyles decisive for achieving more inclusive, safe, and healthy urban environments.

ARQU 4612/6612 Landscape Architecture by Professor Carola Ballester introduces concepts, history, theories, and design strategies that govern landscape architecture. It explores applied ecological and planning principles through which landscapes are designed to solve social and environmental challenges. Particular emphasis is given to environmental conservation and climate change mitigation through landscape design.

ARQU 5995 by Professor Jorge Lizardi introduces students to advance studies on urban theories, utopias, and planning practices of modernity. The historical context of urban theories is highlighted throughout the semester to explore the paradoxes, knowledge limits, social exclusions, and environmental impacts of modern urbanism on social or natural landscapes. Some history courses also explore city development's long-term impact on the



environment. Similarly, ARQU 4146/6225 Architectural Theory emphasizes how other disciplines help understand dilemmas in the built environment.

ARQU 5995 Urban Agriculture by Professor Juan Gallisá explores the relationship between the environment, agriculture, and urbanism from a broad global framework to the scale of immediate action at the local and neighborhood levels. It explains the principles of sustainable development, the planet state, food security problems, and related topics, and how urban agriculture influences the city's environmental, economic, social, and health spheres in order to apply holistic approaches. In this course, students acquire general knowledge about urban ecological agriculture, how to produce food in the urbanized environment and how to integrate agriculture into buildings.

ARQU 4147 Fundamentals of Integrated Practice for Sustainable Infrastructure, RISE UP, by Professor Humberto Cavallin introduces concepts of sustainability and resilience applied to natural and built structures and the relevance of integrated practice in planning the built environment. Students are exposed to situations in which they assess the characteristics and implications of natural disasters in designing and implementing infrastructure, particularly in Puerto Rico.

ARQU 6991-2 both Natural Ventilation and Natural Lighting, taught by Professor Pedro Muñiz, is taught in the LAAB. These courses study modifications to the architectural form and the environmental design according to natural lighting and ventilation patterns to satisfy the visual and perceptive demands of humans. Both courses explore the environmental and climatic particularities in hot and humid tropical regions through concepts, methods, procedures, and design guides.

Environmental and ecological knowledge is also studied through ARQU 6991-6992 Independent Study. Students can collaborate on research projects with a particular professor by submitting a study proposal to the professor through Independent Study or by participating in the PEAF program as research assistants.

UPRSoA research centers provide another option to participate in ecological knowledge and responsibility. For the past five years CIDi has undertaken collaborative research on the built and natural environment. The LAAB, with its four (4) facilities (Wind Tunnel, Heliodon, Tropisphere, and Design, and Research Studio), generates studies and courses in areas such as natural daylighting and ventilation strategies, and solar protection to develop design guidelines, and outline tropical conscious strategies and solutions for the built environment. The UPR FAB LAB collaborates and supports different projects like Sociedad de Ambiente Marino and Watric Energy Resources. Additionally, there are some results of research examples listed in the Environmental Stewardship and Professional Responsibility Shared Values.

Beyond curricular activities, we recently carried out an afforestation project, <u>Siembra Sombra</u> (Sowing Shadow) in collaboration with <u>Para la Naturaleza</u>. Around 100 students, faculty, and volunteers planted approximately 60 trees in the School surroundings. Moreover, the Conference Cycle held lectures encouraging students to consider the dynamic between the built and natural environment and ecological responsibility like <u>TerraFirma: Territorios</u> <u>Mediados, Pavimentos permeables y muros de contención, Costa Absoluta, and more.</u>

Another extracurricular activity like Steps, a platform for asynchronous online courses created by Dr. María Helena Luengo in collaboration with TIED office offers courses with specialized architecture and urban planning content to students and the general public.

Long-term planning and periodic assessment will continue to ensure ecological literacy achievement to permeate all design studio levels so that local and global environmental



issues drive architectural creation through the curriculum, research, and extracurricular activities at UPRSoA. Also, strengthening the ESMAT materials and structures laboratory through the purchase of innovative tools and technology to study emerging technologies applied to design, in addition to the recruitment of an ESMAT director is in the pipeline.

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: Our history and theory course sequence introduces students to the buildings, cities, landscapes, theories, projects, and concepts that shaped architecture in different historical periods and movements, underscoring social, economic, political, religious, and philosophical contexts. Since 2008 each curricular review has addressed the need to break with the Eurocentric emphasis that had dominated the teaching of architectural history. Professors know that students must be exposed to the cultural diversity of regions and societies closer to us. Hence, in recent years, the history sequence has, within a comparative perspective, integrated the study of architectural histories from Latin America, the Middle East, and Asia into its courses. The critical study of experiences beyond Europe and the US made it possible to entice discussions on colonialism, race, gender, and social inequality between colonial powers and the global south. In design courses, students are encouraged to research the history of the places of intervention and precedents with which they have a sense of belonging. Course content continues to be revised and updated constantly.

BED ARQU 3121/6991(the latter only for Track 3.5), Introduction to Architecture, is the base for the history/theory and technology sequences. It pursues an understanding of the architectural discipline in close relationship with its context of intervention. It also explores the connections between past and present architectural experiences and gives examples of architectural theory and practice from different historical periods organized by classical, modern, regional and contemporary. The discussion will center on the search for the intellectual mechanism of permanence, change, and transformation within the theory and practice of architecture and will establish the limits for defining the design, and space in relation to its methodology/technique and materials.

ARQU 4211/6211 History of Architecture I offers a panoramic view of Western Architecture from its prehistoric origins (Mesopotamia and Egypt) to the Italian Risorgimento. However, the course aims at advancing a critique of the western notion of classical in the history and practice of architecture and the typical understanding of a common western development thread within that idea. At the same time, regionalizing the connection of architecture with technological innovations and its role as a cultural product representing distinct worldviews and meaning, the course reviews selected interventions on the landscape and architectural work from diverse regions, cultures, and times.

ARQU 4212/6212 History of Architecture II. Renaissance, a Genealogy of Modernity, offers a panoramic view of theories, practices, and spaces that created the foundation for modern architectural information. Class illustrated lectures compare buildings, public spaces, and cities from America, Asia, Africa, and Europe through an extended period (between the thirteenth and eighteen centuries). A comparative emphasis highlights ideas behind the architectural forms and technologies that transcend times and national boundaries while challenging Eurocentric dominion on historical narratives.

ARQU 4213/6213 History of Architecture III. History of Modern and Contemporary Architecture and Urbanism emphasizes the study of the answers that architecture posed to dilemmas caused by modernization, industrialization, immigration, social inequalities, and environmental disasters during the 19th and 20th centuries. The course addresses the

political and social contexts in which European avant-gardes took form and studies architectural and urbanism responses to two world wars within their long-term impact on city development and the environment. The transferences and reinterpretations of modern architecture in the Caribbean and Latin American countries, emphasizing Mexico, Brazil, Cuba, and Venezuela, are explored. Finally, the course addresses architectural "critical regionalism" theories or other forms of resistance to cultural traditions ruptures, environmental destruction, and social exclusions caused by Modernity.

ARQU 4214/6214 History of Architecture of PR discusses the social, economic, political, religious, epistemological, technological, and cultural contexts that underscore and inform architectural design, thinking, and professional practice in Puerto Rico. This course covers the precolonial period until the present.

ARQU 4146/6225 Architectural Theory emphasizes intersections with other academic disciplines. It is based on the study of authors, images, plans, and buildings through theoretical perspectives and analytical frameworks that sciences and humanities can bring forth to understand the built environment's dilemmas.

For those who want to delve deeper into history and theory courses, UPRSoA offers a wide range of elective courses:

ARQU 5995 Precolumbian and Colonial Cities and Architecture of Latin America by Professor Jorge Lizardi. Through specific examples, it addresses the future of architecture and its cities, of theories and makers, as one of the most important historical expressions of the formation of Latin America and the Caribbean from pre-Columbian times to the present. The critical consideration of emblematic examples of each formative period will serve to ponder to what extent we can speak of unitary experiences. However, the discussions will also consider those spatial legacies that propose disagreements and suggest that Latin America will not cease to be an elusive idea in more than one sense.

ARQU 5995 Thinking the City: Urban Theories in the Twentieth Century by Professor Jorge Lizardi introduces students to advanced studies on urban theories, utopias, and planning practices of Modernity. Class discussion revolves around how cities have been studied, represented, and designed during the 19th and 21st centuries and the social problems addressed by historians, artists, social activists, and architects.

ARQU 5995 Explorations of the Architectural project through Photography, Architecture, and Visual Design by Professor Andrea Parga was created as a result of a research project called Learning from the image about communication, architecture, and photography. This course aims to merge photography and architecture to create visual narratives of Puerto Rico Modern Architecture movement, including the UPRRP campus buildings and other Henry Klumb structures. Students take pictures and use the SIH Library and AACUPR to find precedents, photos, and plans to reorganize and create narratives.

ARQU 5995 San Juan Queer Architecture by Professor Regner Ramos seeks to recognize, discuss, and document the queer architectures of San Juan, situating them within an urban and architectural discourse. It will use queer theory, urban theory, gender theory, and space theory to give students the tools to generate projects that document and theorize about these architectures. Students will have the opportunity to investigate and talk about buildings and territories of the Puerto Rican LGBTTI+ community in collaboration with Radio Universidad (Podcast).

ARQU 3015/4614/6614 Architectural Heritage Conservation Principles provides the student with an understanding of conservation history, theories, methodologies, and practices. It starts from historic preservation as the result of an evolutionary and changing process, a



reflection of an individual and a community. Then, it discusses philosophical, practical, and legal issues.

The Conference Cycle lectures and symposiums address topics related to history and theory in architecture. Most conferences get recorded and are available on UPRSoA's Fb and Youtube pages. Additionally, guided visits such as campus tours, Hidden Old San Juan tours, and recently, the Puerto Rico Capitol tour complement history courses. Within the following courses: Historical Conservation, Glorieta Restoration Project, History of Architecture and Archeology, their professors have held visits to historical sites under restoration construction (one such visit was to the Casa Machín-Ramos in San Lorenzo). The School recently held a tour by Jorge Rigau of Iglesia San José restoration project. Deeper exploration of learned experiences and results from this restoration project took place at a conference held at the School.

Every Summer, the UPRSoA offers courses that include study trips, and these experiences conclude with student work exhibitions. In general, exhibitions also complement the understanding of history and theories of architecture. Some of the recent student study trip destinations are Mexico (in collaboration with UNAM), Greece, Brazil, Peru, New York, Cuba, Paris, Spain, London, Thailand, and Cambodia.

Research relating to history, urban theory, and theory of architecture can be carried out by our professors and students by volunteering, or enrolling in an Independent Study (ARQU 5995/6991-6992), or by participating in the Research Assistant opportunities.

Long term planning includes the continuous Student Learning Assessment plan for history and theory courses. Prior assessment to the history sequence revealed student weaknesses in relevant architectural precedents knowledge, therefore, a list of essential precedents was added to each course syllabi of the history sequence. Assessment also showed the need to reinforce the study of cultures closer to Puerto Rico from a more holistic and interdisciplinary perspective. This is important in order to discuss regional cultural diversity, race, gender, and social inequality between colonial powers and the global South. Course content continues to be revised upon assessment findings.

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: Each course and project the UPRSoA takes on recognizes that architecture is both science and art, and directly reflects and impacts culture and society. Research is the key to access current and emerging knowledge of our world, and, consequently, to boost the development of architecture and the built environment in all areas of human activity, including, of course, the professional practice. Therefore, research is currently a top priority in professional training for careers in the academic and professional practices. It is essential to provide students with the necessary tools to develop character and personal criteria, establishing the foundations for a genuine and fair approach to problemsolving.

Almost all courses in the curriculum require investigation work. Students are encouraged to use resources such as the SIH Library, AACUPR, UPR FAB LAB, LAAB, ESMAT, and CIDi. As earlier mentioned, student research work occurs through elective courses, end-of-career projects, volunteering, and working as research assistants. UPRSoA prepares students to engage and participate in specific architectural research through the following listed courses, opportunities, and activities:

ARQU 6336 & 6337 Design Laboratory, and End-of-Career Project are research and design studios with an interdisciplinary approach where students solve a design problem from different perspectives and approaches. Students take into account contextual and social needs, environmental value, demographic segments, history, and movements through surveys, observation, territorial analyses, mapping, interviews, photography, and other means. The course has an important component that focuses on investigating new technologies and materials/systems related to the research topics, thereby improving the functioning and enjoyment of the architectural object. Research is part of all design studios, and the Research Techniques course strengthens student research skills prior to taking ARQU 6336 & 6337.

ARQU 4145/6146 Research Techniques exposes students to the fundamental concepts and research methods to apply in architecture through practical exercises. The course assists students in developing skills and competencies in research techniques to learn to define a problem, establish a theoretical reflection, and describe research methods while selecting and using tools that enable them to develop research based on data collection and analysis rigorously. The course exposes several types of research methodologies that design studios should integrate into the design process to obtain the data that will, in turn, help make design decisions. Among them are participatory design, environmental psychology, context-based learning, and evidence-based design.

ARQU 6431 Research Seminar encourages appropriate research methodologies for advanced studies in architecture and supports student work in the advanced design labs' end-of-career project. This course gives students skills and competencies applied in research to define a problem, make a theoretical reflection, and design the research method pertinent to the problem while selecting and using tools to develop the research based on bibliographic resources and the collection, analysis, and evaluation of data.

ARQU 5995/6991 Intelligent Materials is an elective course investigating the intelligent integration of various materials and their possible emerging and innovative applications in design and architecture. The purpose is to familiarize the student with issues related to research, presentation, and development of projects involving intelligent materials. The intelligent use of various digital manufacturing methods is proposed as a methodology. The course discusses the pros and cons of applications of said technologies and materials and speculates on possible futures where the design world meets the intelligent material environment.

ARQU 6991-ARQU 6992 Specialized Study elective courses allows the graduate student to study specialized areas of interest related to environmental design. Topics, readings, and specialized research methods must be arranged by agreement between the student and the professor, and the nature of assignments may include experimental or research projects and independent work. Areas of study shall complement those covered in other courses, avoiding unnecessary duplication. Some such elective courses include the following titles: Explorations of the Architectural project from Photography & Architecture and Visual Design by Professor Andrea Parga; San Juan Queer Architecture (now a radio program) by Profesor Regner Ramos; RISE UP elective courses by Professor Humberto Cavallin; Cross Ventilation; Natural lighting, both by Professor Pedro Muñiz; and Urban Landscape and Socio-Ecological Systems by Professor María Helena Luengo. Under this elective category, students may choose an Independent Research Study by proposing their own specialized area of interest, guided and mentored by an SoA professor.

The School offers additional elective courses on research tools like GIS, BIM-REVIT, and Rhino/Grasshopper.

Long term planning includes the newly implemented Student Learning Assessment plan for effective research techniques in aforementioned courses with the research component or for Independent Research studies. Prior assessment revealed deficiencies in the research technique knowledge and its use, prompting us to move ARQU 4145/6146 earlier in the curricular sequence. We will continue to support the research centers of the School. Strengthening the ESMAT resources will prompt additional research and testing with innovative materials and structural emerging technologies.

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: Architecture is a discipline of multidisciplinary nature, and it is nourished by other disciplines and contexts to define itself. Our students prepare to meet the profession's needs and standards and the practice's collaborative nature. They understand the interdisciplinary character in the context of complex solutions. The UPRSoA integrated interdisciplinary collaboration methodologies into its curriculum to identify real problems of the communities and users that lead to the search for solutions to design problems. Context-based, user, and participatory design are also part of the curriculum. Furthermore, the UPRSoA benefits from its institutional setting, and the leadership and skills collaborations extend beyond the classroom (see Context and Mission).

In design studios, students learn to work in teams and are encouraged to take the initiative to make communities better. They are required to integrate creative research methods that enhance the student's perception of design from the end user's point of view and emphasize the collaborative nature of architectural design to study the complex contexts of intervention. Likewise, students are encouraged to take the initiative in social, urban, environmental, and other issues in the contemporary world. Track 3.5 students come from different undergraduate programs, and their contribution results in multidisciplinary input. These, merge with Track 1.5 students in the ARQU 6336 Design Lab and 6337 End-of-career projects, enriching multidisciplinary and collaborative work. Both these studios are taught as team projects to simulate the practice's interdisciplinary and collaborative nature. These studios engage faculty and professionals in specialized areas of expertise, like structures and environmental systems, to participate in the teaching process. These studios are also teamtaught, so students witness faculty collaboration throughout the curriculum. This allows students to appreciate the qualities and contributions of individuals working toward a common goal. Course ARQU6336 integrates Context-based learning (CBL), which refers to using reallife examples in teaching environments to learn through the actual, practical experience with a subject rather than just its theoretical part. CBL is a student-centered approach to teaching and learning, utilizing scenarios to replicate the physical, economic, social, and political context of the student's working environment.

For more than a decade, the UPRSoA Community design studio (<u>Taller Comunitario</u>) led by Elio Martínez Joffre has been taking the University to the "street" and bringing the "street" to the University. The studio works with community groups, private non-profit institutions, and government agencies. In the spirit of enriching the built environment and improving the quality of life, it develops participatory projects with the goal of satisfying community needs. The Taller Comunitario is involved in real-life projects with real site, program, budget, and codes and regulations constraints. The students are engaged in the different design stages and can attest to the importance of the client, the architect, the consultants, and the permit authorities as considerations in their design process.

The technology and structure sequence helps students pre-design and communicate better with other professionals during the design process. For example, ARQU 4313 Technology III Building Systems by Professor Juan Penabad, recognizes the architect's role as the main coordinator within a collaborative team of professionals/specialists. The course acknowledges the importance of the architect's proficiency in technical discussions in different fields (plumbing, fire control, air conditioning, electric power distribution, and conveying systems) to properly coordinate the integration of these technologies within the overall design intent.

Through the professional practice sequence, ARQU 6425 Professional Experience Internship iXP by Professor Anna Georas stands out since students can work as a team in their internships in firms or in <u>community service projects</u>. In the other two professional practice courses, the architect's role in the construction and design, and the need for collaboration in our discipline are discussed.

The Minor Concentration of Architecture and Engineering (RISE UP) in the BED, directed by Professor Humberto Cavallin is a collaborative and interdisciplinary effort between the Rio Piedras, Ponce, and Mayaguez Campuses and provides students with knowledge and opportunities regarding the use of Environmental Design tools to address future challenges to Puerto Rico's infrastructure, preparing them to assist in the prevention, recovery efforts, and mitigation of past and future environmental challenges impacting the Puerto Rican infrastructure. INCI 5036 Design Build Project Delivery is part of this minor concentration. The course has been designed as a limited-scope design project emphasizing interdisciplinary/integrated development. Environmental Design students team with students from the Engineering department, and each group is assigned a project requiring all disciplines to collaborate. In the process, students are exposed to techniques to support their workflow and delivery, and consequently, accountability and leadership arise in developing their projects.

The CIDi and the UPRSoA collaborate with Stanford University in the PBL Lab; its unique and innovative research curriculum in the Department of Civil and Environmental Engineering. UPRSoA students participate in this global opportunity as architects and project owners in collaboration with project managers and structural and MEP engineers around the world to design a building for the University of Puerto Rico Río Piedras Campus (Island), University of Nevada (Ridge), and San Francisco State University Campus (Pacific).

Art-Design and Context of Intervention and the recently approved Design and Innovation are two other BED minor concentrations that comply with this program criteria. The minor concentration in Art-Design and Contexts of Intervention articulates a curricular sequence that integrates the arts with architectural design and vice versa. The main objective of this minor concentration is to integrate technical, formal, conceptual, and aesthetic innovation of artistic practice and architectural design. Architecture, as a discipline aimed at the design of spaces, and art, as expression, complement each other in public space interventions in the city. Meanwhile, the Design and Innovation minor resulted from a collaboration between the UPR FAB LAB and the Marketing and Innovation Center (UPR i+C). This program focuses on creating innovative services and products and their commercialization.

UPRSoA Masters degree students also benefit from a rich interdisciplinary environment and an academic community that offers an array of collaborations (see examples mentioned in Context). For one, graduate students can take classes in other faculties like Humanities, Environmental Sciences, Social Sciences, Business Administration, Communication, and Education. One of the curricular elective courses in the Master's program is required to be taken at a different faculty. Graduate students can also study a joint Masters Architecture Degree with a Law Degree or a Planning Degree. Soon, the new Project Management



Master's Program will be launched with the collaboration of Business Administration, for yet another opportunity for inter and multidisciplinarity.

The student organizations, the School of Architecture Student Council and American Institute Architecture Students, provide leadership opportunities and foster community among our own student body. Our students regularly display leadership on local and international levels by holding offices, playing an active role in academic and administrative decisions, and hosting student events. Our students have representation in all school committees (with voice and vote), except Personnel, and on various campus-level boards and committees. They also participate in student governance through the Student Council and the Academic Senate. Students contribute to the intellectual and social life of the institution through activities promoted by the Student Council. Student organizations such as AIAS, CSI, USGBC, and CLEA promote cultural and educational activities. All the associations incorporate the active participation of our students in university life. Students also learn about the community and social responsibility through involvement with their peers, professionals of our discipline, and the academic community through academic or professional events. Annually, we award the Maruja Fuentes Viguié Scholarship to those who stand out among their peers with the highest civic values of initiative and leadership. The Maruja Fuentes scholarship is an economic aid for students in the BED or the Master's Program. The objective is to annually distinguish the student with the highest civic values, initiative, leadership, and community work.

The pandemic brought the opportunity to invite guest professors and juries like Irving Torres, Verónica Rivera, Jorge Sánchez, Cruz García, and Felipe Lanuza, adding to the program's different points of view. Last semester, the Design Laboratory, 6336 and End-of-career 6337 group taught by professors Fabiola Guzmán and Alejandro Mieses included the input of Paloma Torres Dávila, a psychologist who developed social service programs for the Levittown and Cataño areas, as well as around the United States. She presented her experiences and social research methods used by her, and answered specific questions from the student's thesis research. The outcome was greater clarity about what the community needed, based on its economic-social-cultural profile, and a greater sensibility to those particular needs in the design proposals. By the fall semester of 2022, End-of-Career groups will incorporate guests and specialists of the particular group research topics.

As far as long planning, the UPRSoA will continue to develop multidisciplinary opportunities for leadership and collaborations. The School will continue to promote designs studios work in communities, and their active participation with the process. To assure external expert involvement in the design process in ARQU 6336 & ARQU 6337 for specific insight and collaboration, the Graduate Program Coordinator organized a meeting with ARQU 6336 and ARQU 6337 professors prompting them to plan for and include diverse external expert collaboration into their design studios. Student learning assessment will continue to be evaluated for community design studios.

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: The UPRSoA is committed to promoting creative intellectual growth, supporting collaboration, and fostering diversity and respect in the academic community. For this reason, the <u>Studio Culture Document</u> emphasizes, not only on academics matters but on implementing extracurricular activities that enrich the student's social and educational life.

The Design Studios are the main spaces for exchange and creativity, where all participants exchange ideas, opinions, and experiences. Activities that stimulate student participation are

encouraged through individual or group assignments. The undergraduate wing is an open floor plan where partition walls divide design studios, and the circulation and central hall (Agora) are spaces used for pin-ups and juries. This distribution allows students and faculty members to interact and learn from each other's work. The participation of other faculty members, students, and professionals from different disciplines is also encouraged in this open space.

The Studio Culture Document is a student guide that applies to all courses and subjects: design studios, history and theory, technology, and elective courses. This document's information is constantly under revision to improve teaching-learning activities. During the document's revision, students participated in open table discussions, which set up the dynamics of collaboration that should prevail in studios, workshops, peer review, mentoring, time management, responsibility, equity and diversity, and some rules of academic and social coexistence. Additionally, the UPRSoA offers *No te Arropes Talks*, which translates into, No more All-Nighters, to help students with time management. Upper-year students are encouraged to provide assistance, tutoring, and mentoring to lower-level students. Recently, the Student Council took on the initiative to provide free-of-charge structures course tutorials to aid struggling students.

Students and faculty participate in charrettes and competitions about important design issues affecting the community. At the local level, in 2018 Dr. Cavallin's students won an AIA design competition with Casa Amparo Project. Also, our students distinguish themselves by participating in <u>international competitions</u>. The bachelor program hosted a vertical charrette competition among the undergraduate students about a pavilion design in Klumb House Gardens. It will be integrated with the students of Track 3.5 as well, since they come from different undergraduate programs, and their input can benefit the results. Likewise, participation in research projects and independent studies allows students and professors to gather and share new knowledge.

The UPRSoA has student organizations and community service opportunities, supports independent research work, establishes alliances with other universities and entities, and creates fraternization activities. Some of these are the Open Forum for Students by the Dean, the Conference Cycle, *Pikoteo*, field trips, *VaiVen*, and activities for recognizing academic achievements like the Academic Distinctions Ceremony or sharing activities like the first day of class, the Christmas activities, <u>AIAS Recyclable Fashion Show</u>, Holloween or *San Arrope*.

The Open Forum for Students (*Foro Abierto con los estudiantes* in Spanish) is where the UPRSoA administration discusses plans and hears student suggestions, allowing students to be part of the administrative and academic decision-making process.

The yearly Conference Cycle is open to the community and general public with various lecturers and architecture-related topics. There's also *Pikoteo*, a series of informal talks at noon in the lobby on materials and construction techniques. On the other hand, the Torres Martinó Gallery holds in-house exhibitions like the annual Design Studio Student Work and Summer Trips experiences, as well as exhibitions by our academic community like Sites: *Spatial speculations of San Juan Queer by Regner Ramos* (2019) and others like *Fotografías de Chernobyl by Tom Elkins* (2019), *Tom Leytham's Watercolors* (2019), *Javier Atardi's projects* (2019), *Blas C. Silva Boucher: intimidates de un ingeniero* (2019) *Manobras by Melquiades Sastre Rosa* (2018), *Puerta de Rocío with poems of Andrés Bermúdez and drawings of Susan Espinosa* (2018), *Un Paisaje Recorrido. Ciudad, patrimonio e infraestructuras with Escuela Técnica Superior de Arquitectura de Universidad de Sevilla* (2018), *Maruja Fuentes Work* (2016), *CIRCA 1953: San Juan visto por el lente de Frederick Gjessing* (2016), *Topografías by Jaime Suárez* (2016) and more. The Gallery also houses the nomad shop *VaiVen* where pieces produced by students and professors are sold.

Learning out of the classroom is also encouraged through classroom field trips. On the other hand, guided tours are open to the community. *Móntate que nos vamos* is a series of tours organized by the AIAS offered by professors and architects like Jose Coleman (Ocean Park & La Paz), Miguel Calzada (*Plaza Barceló*), and Manuel Bermúdez (Museum of Anthropology and History). For example, design courses visit construction sites, technology classes see buildings with mechanical systems, and history classes tour Old San Juan, the Capitol, and the Campus. Likewise, the School recently conducted a tour by Jorge Rigau (Iglesia San José).

The Student Council and the UPRSoA organize welcoming activities on the <u>first day of class</u> with fun 'ice-breaking' dynamics and games related to architecture to enhance social and academic life. At the campus level, the UPRRP also welcomes students, and organizes a tour of the School. Also, the UPRSoA hosts a yearly <u>Christmas Party</u> where students, faculty, and staff gather to eat, dance, and listen to music. Recently, the Student Council organized an initiative of incorporating up-and-coming artist's <u>murals</u> on three School walls.

Some of these activities did not take place during the first two years of the pandemic or moved to digital platforms but are gradually resuming. Activity participation and the best time slots for these activities are continuously evaluated and revised to make the corresponding changes in the offer.

The faculty and administration are continually working to improve communication with the student body and address concerns from students and faculty. The administration continues to organize and support Student Council activities and to set up the Open Forums and periodic meetings with the Student Council. Extracurricular activities and other activities by and for the academic community must be continually supported, both virtually and face-to-face for the students, especially during this 2022-23 where two entire cohorts have had few to no opportunity to coincide and engage together with the administrative staff, faculty and the rest of the UPRSoA student body.

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 UPRSoA recognizes the importance of establishing an awareness of work ethics in the academic environment. One of DEI's focal points is diversity throughout the curriculum to prepare professionals with the skills to intervene fairly in the development of the built environment and the design of inclusive and universal spaces for all people's profiles through the integration of values, needs, and interest of the sectors vulnerable in the design process. Furthermore, the Studio Culture document discusses respect amongst students and towards the work done in class (whether one's own or others). It also assumes a more inclusive understanding in teaching-learning practices with the responsibility of serving a wide and diverse community (see Shared Value Equity Diversity and Inclusion for more information). The document has been carefully developed as an all-faculty endeavor and is subject to continuous revision (through ordinary faculty meetings) to ensure its validity. The policies established in both the DEI Plan and the Studio Culture document are to be observed and followed in all courses and by the entire UPRSoA community.

The faculty and administration actively encourage students to value social responsibility as an integral component of their future roles as practicing architects. Many design studios integrate real projects located in communities with particular needs related to housing, public, and community space that respond to special petitions by non-profit community organizations

or government agencies, resulting in students' exposure to real situations. Design projects consistently tackle topics such as low-income housing, architectural barriers, and conserving our cultural heritage and natural resources, among others. They also incorporate the analysis of the site and inhabitants' profiles to better understand the contexts of intervention from different approaches: social, economic, cultural, physical, and emotional wellbeing for the user.

Among design studios, the Community design studio (<u>Taller Comunitario</u>) led by Professor Elio Martínez Joffre stands out for taking the University to the "street" and bringing the "street" to the University. The Taller Comunitario takes on real-life projects with real constraints of site, program, budget, and code. It works with community groups, some outside the Island, private non-profit institutions, and government agencies. In the spirit of enriching the built environment and improving the quality of life, it develops participatory projects that propose to satisfy the needs of the space. Students in these design studios must visit local sites and interview the stakeholders, where people from diverse ethnic, social, and cultural backgrounds have settled for years to devise urban and architectural solutions to problems that often arise from chaos or informality.

Thesis and End-of-Career Projects, ARQU 6336-6337 and 6313-6314 (from the previous 2.0 Master track in transition to disappear) largely focus on social equity and inclusion issues. Our students develop urban and architectural projects considering social, political, cultural, and ecological conditions before assuming any design posture. These projects begin with an investigation of the context and culminate with the development of an architectural project, addressing concerns and presenting architectural and urban solutions in vulnerable sectors. Recently tackled topics of concern are: population (elders, kids, women, gender, prisoners, sick, disabled, low income, immigrants, and more), affordable housing, community spaces, marginalized communities, areas with environmental issues (flood, erosion, brownfields), public nuisance and others (see example listing in Share Value Equity Diversity and Inclusion).

Joint Studios bring students from various backgrounds and pair them with local students from our School to expose a variety of approaches and solutions to one problem in design. Competition Studio (where students participate in architecture competitions in different places) is another way that students can explore and research different contexts beyond Puerto Rico.

The history and theory sequence assists in understanding diverse cultural and social contexts to translate them into the built environment and design courses. History of Architecture I (ARQU 4211/6211) lectures, exercises, and other resources' purpose is to underscore the effects of particular social, economic, political, religious, epistemological, technological, and cultural influences on the built environment so that students may grasp the complex ways in which different cultures and diverse social organizations built their environments or innovated on them using the material and knowledge resources available. History of Architecture II (ARQU 4212/6212) has a comparative emphasis that highlights ideas behind the architectural forms and technologies that have transcended times and national boundaries. At the same, it compares challenges to Eurocentric dominion on historical narratives. Within this approach, the course aims to foster a critical understanding of design knowledge transferences between cultures and strengthen students' awareness of non-western cultural traditions. History of Architecture of Puerto Rico (ARQU 4214/6214) addresses how architectural practice and narratives on the Island have historically tackled issues of gender, class, race, and ethnic difference. Finally, Thinking the City: Urban Theories in the Twentieth Century (ARQU 5995) is a pivot of class discussions of the transference of city theories and design ideals from Europe and the US to the Caribbean and Latin America. Such an approach aims to foster critical thinking and deep questioning of urban development outcomes in colonial and postcolonial societies.



The mission of the UPRSoA is to train committed professionals capable of acting with ethical and social responsibility. The professional sequence instills the obligation towards the environment, society, the client, and the colleague. For example, the Professional Experience Internship, iXP (ARQU 6425), encourages access to the profession. The iXP seeds the commitment to serve and embrace their professional paths through the community service component, with the purpose to place students in identified communities to carry out volunteer work related to the discipline that promotes the development of the community, promoting an accessible and fair architecture for all. The students discover the impact their design recommendations can have on the quality of life of communities that cannot afford to pay for an architect's services in the early phases of defining what they want.

Long term planning continues to use Student Learning Assessment tools to evaluate student learning as it relates to community engagement. We recognize there is an infinite number of communities in need of architectural services and our School as an enclave of a wider community, has to address this and by actively doing so through, serves the community while it furthers students' understanding of diverse built environments. We will continue to identify communities at risk and in need to provide them with service and support from the School.

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: The UPRSoA curriculum addresses health, safety, and welfare through the design, technology, and professional practice sequences. The introduction to these concepts is gradual and most prevalent in the fourth-year BED design studio for Track 1.5 pursuing students, and the spring semester of the second-year design in Track 3.5, where students produce a set of technical drawings that synthesize and detail their understanding of: 1. Site design, planning, and ecology; 2. Local zoning codes, IBC, and ADA; 3. Climate considerations and sustainability aspects; 4. Integration of building systems; 5. Stormwater management; 6. Accessibility considerations and means of egress. At the same time, we offer our students a variety of elective courses that delve into the integration of technology, urban and building sustainability, safety issues, codes and regulations, and design. At the Master's level, the end-of-career projects must comply with health, safety, and welfare considerations. As a requirement, students prepare a series of diagrams that demonstrate their understanding of these topics.

Supplemental exposure to Health, Safety and Welfare in the Built Environment are available to students through lectures, construction site visits, office visits, and guest jury who work within the building industry. At the Master's level, students participate in professional internships that expose them directly to these topics by working on projects within the public and private sectors. Students at the Community-based design studio (Taller Comunitario) participate in projects facing real clients with complex health, safety, and welfare issues. Our program's curricular approach believes HSW should be taught and integrated into every studio, and HSW is an environmental issue as much as a technical challenge.

ARQU 5995 Universal Design by Professor Esteban Sennyey is more than a set of practical design rules or prescriptive design guidelines, it is a way of thinking that requires students to consider the design's consequences and put people's needs at the very center of the process. The course provides a detailed introduction to the universal design philosophy and a

theoretical understanding of design tools and techniques, including an overview of the Seven Universal Design Principles as a starting point. Recent advances and developments drawn from related fields (including ergonomics, assistive technology, usability engineering, user-centered design, health and safety research, software engineering, etc.) provide a practical understanding of the evolving design approach. The course rationale includes social, economic, legislative, and business cases.

ARQU 5995 Health, Safety, and Welfare in the Built Environment by Professor Bienvenido Pichardo is a recently added elective course to understand the built environment's impact on human health, safety, and welfare at multiple scales, from buildings to cities. Students interpret and apply state, federal, and industrial building codes and reference standards and regulations, which is the backbone of architecture practice. Through lectures and the discussion of news and design projects, the student is prepared to make self-critical code compliance to their design projects and those of their classmates.

ARQU 6200 Urban Landscape and Socio-Ecological Systems, in addition to the ecological approach, emphasizes sociocultural criteria and lifestyles that are decisive for achieving more inclusive, safe, and healthy urban environments. It provides specific knowledge and design tools based on ecological principles that students apply through exercises like analyzing urban environments, recognizing problems, and defining solutions. The course makes constant adjustments that include bringing up current issues and situations that can generate controversy and allow discussions and debates in the classroom around global, regional, and local environmental and social issues.

The technology and structures sequence gradually introduces HSW. ARQU 4313/6513, Technology III Building Systems does so by studying aspects of: plumbing (supply/sanitary waste/storm drainage and rainwater harvesting), fire detection/alarm/suppression, and considerations on means of egress, mechanical ventilation, and air conditioning. These topics focus on the design parameters and ponder their effect on the occupancy of the built environment. Also, ARQU 6514 Technology IV Energy Systems, emphasizes the responsibility and relevance of architecture in the current climate crisis. Students research current climate crises and how it directly affects the social fabric in general or specific communities. ARQU 4323/6327 Structures III introduces the wind and earthquake loads for a better building design.

All UPRSoA courses feed the design sequence, and HSW issues permeate every discussion. In the history sequence, lectures provide a historical view on issues students might deal with in the studio: sanitation, acclimatization, comfort, endemic ailments, disasters, and post-disaster response. The code's assessment and reactions to recent natural and non-natural disasters are evident through the courses. For example, the studio's response to HSW is noticeable when projects in design studios react to our current situation and context: 1. the economic crisis; 2. the population emigration; 3. the impact of both hurricanes Irma and María in 2017, 4. the earthquakes in 2020 and 5. the pandemic.

Long term planning includes continuing to offer a specific course on Health, Safety, and Welfare in the Built Environment, acknowledging its importance and expanding the HSW literacy amongst the student body. HSW student learning is evaluated first at level 4135/6335 through OLAS. If rubrics show deficiencies in HSW learning and changes are necessary, the Design Subject committee will evaluate, and the curricular review process takes place.

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: The UPRSoA offers courses on Professional Ethics and Practice to achieve students' understanding of their responsibility for professional practice. Most of our school's faculty are practicing architects who constantly refer to their professional experiences in class. The School's strong pursuit of ethically responsible alumni with integrity is evidenced through various professional practice courses. ARQU 6383 Professional Practice I and ARQU 6384 Professional Practice II, at both tracks of the graduate level. Students are exposed to the practice's financial, legal, and ethical aspects. The elective course, Legal Aspects in Architecture focuses on professional conduct issues. The integration of sustainability principles and social inclusion concerns into design projects is evidence that social and ethical considerations pervade core courses (see PC.8 Social Equity and Inclusion).

Professors communicate a great respect and responsibility sense for the architecture discipline and its role in society. The ethics emphasis is strongly taught by example. In Addition to the courses, many professors have private practices, resulting in jobs, internships, lectures, and field trips where students have different opportunities to understand professional ethics, the regulatory requirements, and the fundamental business processes relevant to architecture practice (See PC. 1 Career Path).

ARQU 6383 Professional Practice I introduces the ethical, administrative, and regulatory concepts and processes of the professional practice of architecture and describes the context of the construction industry, its participants, and the rules that regulate the practice of architects, engineers, and surveyors in PR. The course mainly discusses the architect's legal and regulatory considerations and responsibilities in construction documents or contracts in professional services. It introduces the student to the permit requesting platforms from the regulating agencies (PR Planning Board and The Office for Permit Management). Likewise, the course reflects the architectural profession's evolution from the 1950s to contemporary times.

ARQU 6384 Professional Practice II exposes students to the process of creating, registering, organizing, and operating an office for the professional practice of Architecture in Puerto Rico. It helps to understand the economy, the architect's obligations toward the environment, the society, and the client, the scope of the provision of professional services, duties, and responsibilities, and the legal implications from the contracting phase to the execution of a job and the tasks of the architect pertaining the interaction with the owner, consultants, inspector and contractor. Students will also be exposed to the different phases of professional services like the proposal, the construction documents development, pre-bid, the bidding and award, the tasks and responsibilities during the construction observation phase, and the closing tasks of the project. All of these factors undertake the ethics and conduct in the architecture business.

ARQU 6425 Professional Experience Internship, iXP by Professor Anna Georas is the link between academic and professional life. This course exposes the student to professional experience while working in a firm, organization, or agency to perform architecture-related tasks. In Addition to the course, the UPR conducts career fairs, and the UPRSoA sends job announcements to students and alumni. Other programs that allow students to have some professional experiences are IDEA (Design Institute of the School of Architecture), PEAF (Academic and Training Experiences Program) through assisting research and teaching, and Summer Workshops (Talleres de Verano).

ARQU 6385 Construction Finances introduces the student to the fundamentals of several financial aspects of the profession, including business and construction cost finances

(emphasis on quick and semi-detailed estimates), architectural fees and methods of calculation, construction compensation, and delivery methods (including payment procedures during construction), reasons for changes and extra work in construction (typical design and construction failures that impact cost), property valuation and project financing basics, project scheduling and tolerances in construction.

Among the rest of the sequences, the structure courses help to create conscience about the ethical responsibility to provide architectural designs where the structural decisions are oriented to guarantee public safety and compliance with building code regulations.

Long term planning includes the continuous Student Assessment plan for professional practice courses. On the other hand, we continue to encourage the participation of professors in local and international professional activities. Every year, the calendar of activities and professional talks will be worked on in coordination with the CAAPPR, AIA and FxA to strengthen ties between the professional and academic worlds. In addition, we will continue to guide our students on the path to becoming a professional through the support of the iXP.

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: The UPRSoA curriculum has two required professional practice courses, one structures course, and four technology courses where topics of the regulatory context are covered through the theory, study and application of codes and regulations and applied practical exercises.

Our goal is to graduate students with up-to-date knowledge of professional regulatory information and criteria: zoning, land use, and safety regulations, as well as codes applying to buildings and sites, emphasizing Puerto Rico's regulatory conditions. Our island condition consideration is essential because natural resources and development areas are limited and must be protected. On the other hand, due to our geographical situation, we are prone to the threat of natural phenomena that make the understanding and knowledge of the regulations applicable to the built environment more critical to our safety.

At the same time, we have established some areas and topics of study that are advancing in complexity throughout the sequence of design studios so that students starting at the fundamental courses become aware of the importance of these topics. At the 3rd and 4th-year design studio in the BED and second year at track 3.5, student projects must comply with; zoning, land use, code regulations (local zoning code, IBC, ADA), accessibility considerations, and means of egress. At ARQU 6336-6337, the end-of-career projects, students are required to reconcile the differing demands of program, zoning, building, and life-safety codes and economic and financial issues. Structural professors assess the end-of-career project by being part of the committee. In all cases, there's a code analysis phase in design projects.

Most of our faculty comprises practicing architects with a proven respect for all practical matters and the feasibility of the architecture they teach. Besides courses ensuring that students understand how to apply the fundamental principles of life safety, land use, and current laws and regulations applying to buildings and sites (both administrative and legal), our students are customarily involved with local chapters of professional institutions (AIA, PMI) and participate in the Professional Experience Internship iXP, accumulating IDP.

ARQU 6383 Professional Practice I introduces the ethical, administrative, and regulatory concepts and processes of the professional practice of architecture. The course mainly discusses the architect's legal and regulatory considerations and responsibilities in construction documents or contracts in professional services. It introduces the student to the permit requesting platforms from the regulating agencies (PR Planning Board and The Office for Permit Management). ARQU 6384 Professional Practice II introduces the topic of the architect's responsibility in the context of the multidisciplinary practice of the profession, compliance with regulatory aspects of professional practice (the office), the relationship with stakeholders, and compliance with zoning and construction regulations through assignments and presentations.

ARQU 5995 HSW in the Built Environment is a recent elective course to understand the built environment's impact on human health, safety, and welfare at multiple scales, from buildings to cities. Students interpret and apply state, federal, and industrial building codes and reference standards and regulations, which is the backbone of architecture practice. Through lectures and the discussion of news and design projects, the student is prepared to make self-critical code compliance to their design projects and those of their classmates.

ARQU 4323/6327- Structures III help to create conscience about the ethical responsibility to provide architectural designs where the structural decisions are oriented to guarantee public safety and compliance with building code regulations. Wind and Earthquake load calculations are part of this course according to the IBC Code and ASCE-7-2016 Building code.

The technology sequence gradually introduces HSW, laws and regulations, and codes. ARQU 4312-6512 Technology II includes legal restrictions and codes for land use and qualification, ADA, IBC, and PR Building Code, among others, to promote civic responsibility for the welfare and progress of society. ARQU 4313-6513 Technology III Building Systems specific topics tend directly to HSW matters: plumbing (supply/sanitary waste/storm drainage and rainwater harvesting), fire detection/alarm/suppression, and considerations on means of egress, mechanical ventilation, and air conditioning. These topics focus on the design parameters and ponder their effect on the occupancy of the built environment. ARQU 6514 Technology IV Energy Systems emphasizes the responsibility and relevance of architecture in the current climate crisis, where there's a request for research regarding current climate crises and how they directly affect the social fabric in general or specific communities.

All design studio projects, beginning in the second year of BED and Track 3.5 incorporate code and regulation evaluation of the intervention context. In the long term, Student learning assessment and conferences of the regulatory context will continue to be held.

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: At UPRSoA, we work with Technical Knowledge issues from different fronts. The Technology and Structures courses sequence lay the foundation for obtaining this knowledge. Through the design sequence, students apply learned theoretical material to their individual design projects as a practical way to solve specific problems, deepening, and understanding this process with the guidance of the design faculty. On the other hand, history courses ponder on the application of technologies throughout history, the evolution of construction methods, and the study of precedents and their impact on the present.

Students apply technical knowledge in the design sequence, which is more evident in the later designs. ARQU 4136-6335 is where students develop the project further through a

series of constructive drawings considering the technical and regulatory aspects. Instead of the customary conceptual/schematic representation characteristic of academic projects, the final exercise in this course requires specific research on equipment, materials, assemblies, and the design criteria/parameters to be considered in their selection and orchestration into a coherent design proposal. In ARQU 6337 end-of-career projects, students' projects respond to emerging systems, technologies, and assemblings of building construction. The structures and technology sequences supplement these courses.

Within the sequence of technology, environmental, and building systems, students study the theory and application of the passive and active systems and controls that affect interior building environments. The courses include energy efficiency strategies, thermal transmission, natural lighting, natural ventilation, energy efficiency, renewable energy, ventilation, air conditioning, power distribution, lighting, communications, vertical transportation, water supply, sanitary drainage, and storm drainage.

ARQU 4311/6511 Technology I by Professor Pedro Muñiz explores concepts about the natural environment and its modification for the well-being of the human being through identifying the desired environmental control requirements with an emphasis on hot, humid, and tropical climate by incorporating passive or natural systems to the design process. It also explores the appropriate methods, strategies, materials, and components to achieve this. ARQU 4312-6512 Technology II by Professor Pedro Muñiz focuses on identifying the physical, biological, and cultural attributes that affect the site's selection, analysis, and design. Material properties, construction techniques, movement and leveling of land, and rainwater disposition are discussed, as well as the study and characteristics of soil types. All of these consider the regulations and building codes, spaces, circulation systems, and parking lots.

ARQU 4313/6513 Technology III Building Systems by Professor Juan Penabad acknowledges the importance of the architect's proficiency in technical discussions in different fields (plumbing, fire control, air conditioning, electric power distribution, and conveying systems) to properly coordinate the integration of these technologies within the overall design intent. All topics under discussion in this course pertain to the technical (support) systems integrated into the design process to control environmental conditions suitable for human occupancy.

ARQU 6514 Technology IV Energy Systems by Professor Cristina Algaze emphasizes the responsibility and relevance of architecture in the current climate crisis by understanding the energy systems that interact with the buildings and their users. Especially in how a building's design can mitigate the environmental impacts of its embodied carbon and operations energy use to respond to the current climate crisis. Students perform design exercises to implement the energy efficiency strategies and concepts into existing low-complexity residential buildings, enabling students to encounter the interrelationship between concepts of thermal transmission, natural lighting, natural ventilation, energy efficiency, and renewable energy (PVs), among others, with form and function. In addition, they need to understand the basics of electricity and the components of an electrical layout in residential and small commercial projects.

ARQU 6992 Natural Ventilation and Natural Lighting by Professor Pedro Muñiz takes place in LAAB. These courses influence the modifications of the architectural form and the environmental design in the behavior of natural lighting and ventilation to satisfy the visual and perceptive demands of the human being. They emphasize the environmental and climatic particularities in hot and humid tropical regions through concepts, methods, procedures, and design guides.



Within the Structure courses, students study the theory of statics and load paths. They select a building to understand its structural system and prepare diagrams explaining the load paths , materials, and structural details (ARQU 4321/6325 Structures I), and also learn how to assemble structural systems in reinforced concrete or steel systems (the predominant construction materials used in Puerto Rico).

ARQU 4322/6326 Structures II includes a Bridge Competition, where each group of students designs a wood bridge using trusses. The size and scale of the structures are the same for all participants: the bridge with lower weight and maximum load capacity will be declared the winner. Aesthetics and computation report quality will also be part of the final grade. ARQU 4323/6327 Structures III include wind and earthquake load calculations on an actual building according to the IBC Code and ASCE-7-2016 Building code. Each group gets assigned Different structural systems, materials, soil profiles, geographic location, and wind exposition.

ARQU 6328 Applied Structural Design immerses students into the design of concrete or steel structures, where they learn to do structural analysis using computerized software ETABS. The main purpose is to help the students to develop their end-of-career project or Capstone. Students are prepared to understand and create construction documents (plans and specifications) and learn how to assemble structural systems in reinforced concrete or steel. Structural components are designed using the Building Code Regulations (ACI -318 for concrete or AISC-15th ed. For steel). During this process, they understand the importance of structural performance, economy, efficiency, and code compliance. They learn how to coordinate the architectural design process and how it could affect the selection of structural systems.

Long term planning includes the continuous Student Learning Assessment plan for technology courses. Topics on the application of smart materials, emerging technologies and local and efficient construction systems will be reinforced in the design courses. The recruitment of professors with up-to-date knowledge on this subject is a priority. The 2022 Recruitment Plan contemplates the recruitment of a professor with a specialty in emerging materials and technologies. We will continue to support professors in training in emerging systems and technologies. We will support the ESMAT - Laboratory of Structures and Materials in the search for resources to update equipment and technology for the laboratory for structural tests and study of materials.

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: At UPRSoA, synthesis in design is achieved through the pedagogical methodology used in the design studio sequence. It is here where students face, each semester, the exercise of solving architectural and urban design problems integrating concerns of diverse nature. In the first and second year, user requirements, site conditions, accessible design, and environmental responsibility are covered at an introductory level through a carefully calibrated design plan for the assigned projects. As the design studios progress and the assigned projects advance in complexity, the topics of regulatory requirements and code compliance are integrated while the previously introduced topics are deepened.

To achieve a pedagogy of synthesis, we have professors with an interdisciplinary approach to teaching and practice. In the same way, the participation and collaboration of professors of the technology, structures, and history and theory sequences in the design studios, acting as consultants and critics, is promoted so that the pedagogical process manifests itself as a



team exercise. In this way, the design process for our students is eventually understood as a multi- dimensional one where the figure of the architect shares responsibility with other professionals and synthesizes multiple requirements of diverse natures: technological, ethical, economic, social, political, environmental, and natural.

In ARQU 4133- ARQU4134 Intermediate Architectural Design II (third year), students develop the ability to work through general architectural drawings integrating passive design strategies, structural diagrams, renewable building systems, passive design, historical traces as well as social and recreational issues.

ARQU 4135/6334 Advanced Architectural Design I - Design IV exposes the student to understand the relationship between the building as a constituent of an urban enclave and the city. It focuses on the understanding and exploration of the city as a collective and complex organism made up of its inhabitants, social rituals, operational uses, ecology, economy, and adaptation to the physical context: geographic/topographical/climatic. The student will face the design of the building as a multifunctional urban component and how it is coordinated to establish a sense of wholeness and coherence in the city.

ARQU 4136/6335 Advanced Architectural Design II - Design V drives a deeper and more complex understanding of buildings and all its components. The three exercises this semester provide a complete experience of the design process. First, there's a comprehensive site, program, and code analysis. Then, students must orchestrate their design decisions to develop a concrete architectural proposal. Finally, the last exercise provides the opportunity to further develop the proposal in all its parts and considerations (structural, access sequences, means of egress mech/elect systems) and understand how all design considerations relate.

ARQU 6336- ARQU 6337 Design Laboratory and End-of-career Project promotes a comprehensive design process that solves multiple problems simultaneously: program generation, site selection, sequences, code, social context, setting, and sustainability, among others. This entire process occurs with the research topic as a guide for decision-making.

ARQU 6328 Applied Structural Design focuses on structural design for architects applied to professional practice. The students learn how to assemble structural systems in reinforced concrete or steel systems. They learn how to coordinate the architectural design process and how it could affect the selection of structural systems. Students also learn how to use ETABS and apply it to their end-of-career projects.

In the long term, user and regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions continue to be evaluated through Student Learning Assessment. Semestral Design Committee meetings will continue to review design synthesis content and application. The School will continue to hire studio design professors with vast regulatory experience.

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: At UPRSoA, knowledge and understanding of Building Integration are acquired mainly in the advanced design studios. The fourth-year ARQU 4135- ARQU 4136 design studio in BED and ARQU 6334 - 6335 in Track 3.5 are designed as comprehensive workshops that work on building integration concepts. First, from an urban perspective and understanding of the building as an element integrated into its context, and second, as an



artifact that contains and responds to multiple constructive, technical, and design integrated systems requirements.

ARQU 4135/6334 Advanced Architectural Design I - Design IV exposes the student to understand the relationship between the building as a constituent of an urban enclave and the city. It focuses on the understanding and exploration of the city as a collective and complex organism made up of its inhabitants, social rituals, operational uses, ecology, economy, and adaptation to the physical context: geographic/topographical/climatic. The student will face the design of the building as a multifunctional urban component and how it is coordinated to establish a sense of wholeness and coherence in the city. It will present various urban sustainability strategies: the concept of recycling and re-use of buildings, energy efficiency, the reduction of heat islands, sustainable water management, alternative mobility, and others, based on guides, programs, and evaluation systems.

ARQU 4136/6335 Advanced Architectural Design II - Design V studio's structure is a design process applied to a medium-scale urban project (+-20,000 sq ft) that emphasizes creativity and technical rigor. The course, divided into two parts, is an exhaustive analysis of the context studied from multiple perspectives, including site history and morphology, demographics, social interactions, existing infrastructure, climatic factors, land use, and the applicable zoning and code regulations (Local zoning code, IBC, ADA). This first exercise culminates with a schematic proposal that aims for an architectural solution demonstrating high sensitivity towards the site and the city regarding morphology, functionality, climatic considerations, and sustainability aspects. The second part of the semester is the development phase, always aiming for a more efficient building performance and a seamless integration of the different building systems. Each student develops the project further through a series of constructive drawings in this part. In the process, they address various technical and regulatory aspects that include but are not limited to: the integration of structural systems, mechanical systems, stormwater management, accessibility considerations, means of egress, construction methods and materials, and building envelope assembly, among other relevant subjects.

The graduate design studios are also conceived as comprehensive workshops incorporating a higher level of complexity. The notion of building integration and integrated building systems also responds to a theoretical investigation manifested in all the architectural project aspects. In ARQU 6336- ARQU 6337 Design Laboratory and End-of-Career Project, the students will have to examine, understand, and ultimately manipulate the fundamental formal and operative diagrams of all systems taking part in a building. Their understanding of the parameters of each system, and their flexibility to accommodate the requirements of other systems to attain an integrated project whole, will lead to a better informed (responsible) design process.

In terms of building and systems performance objectives and measurable outcomes, the fourth-year comprehensive studios, as well as the master's end-of-career project studios, are supported by a number of courses and research labs in the areas of technologies, structures, and sustainability to study and test the capabilities of the structural, mechanical, material and environmental systems used in the student's projects.

Within the structures' sequence, the courses prepare students to develop critical thinking and the capacity to make design decisions within architectural projects to select structural systems that may behave properly during different loading conditions. ARQU 4321/6325 Structures I focuses on how punctual and distributed forces may affect simple structural systems such as beams and trusses. The student learns concepts based on equilibrium to resist concurrent and non-concurrent force systems. ARQU 4322/6326 Structures II focuses on gravity forces affecting beams, trusses, and columns, where the student learns how to estimate internal forces, stresses, and deformations. ARQU 4323/6327 Structures III

emphasizes gravity and lateral forces (wind and earthquake). ARQU 6328 Applied Structural Design immerses students in the design of concrete or steel structures while learning to do structural analysis using computerized software ETABS. The main purpose is to help the students develop their final career project or Capstone course. Students are prepared to understand and create construction documents (plans and specifications). The students learn how to assemble structural systems in reinforced concrete or steel systems. Structural components are designed using the Building Code Regulations (ACI -318 for concrete or AISC-15th ed. For steel). During this process, they understand the importance of structural performance, economy, efficiency, and code compliance. Students learn how to coordinate the architectural design process and how it could affect the selection of structural systems.

Within the technology sequence, ARQU 4312/6512 includes the criteria of site selection, infrastructure, materials (characteristics, processing, assembly and finishes), construction techniques, and codes. ARQU 4313/6513 discusses mechanical systems application parameters and how to integrate them into the project properly, always considering the correlations between each building system and their response to the overall architectural design intent. ARQU 6514 includes a workshop where demonstrations on current software tools can help the designer make informed decisions regarding energy efficiency and environmental impacts early in the design process to enable an inherently better environmental architecture with an invited REVIT professor. The course tries to demonstrate that all energy processes in the building are interrelated and must be designed as a whole, for example, the building envelope and its relationship to thermal transmission, light, ventilation, lighting controls, etc.

In the long term, integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance continue to be evaluated through Student Learning Assessment. Semestral Design Committee meetings will continue to review building integration criteria in design courses sequence. The Recruitment plan includes hiring a professor with knowledge of emerging materials, environmental control systems, and building performance outcomes experience.



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 University of Puerto Rico is accredited by the Middle States Association of Colleges & Schools (MSACS). MSACS's last visit was in 2019 and next Self-Study Evaluation will be on 2024-2025. For more information visit:

- a) Middle States Commission on Higher Education (Accreditation UPRRP)
- b) <u>UPRRP Accreditation Related Documents</u>
- c) UPRRP MSCHE 2021 Memorandum

Locally, the Board of Post-Secondary Institutions, JIPs (in Spanish) under the Office of Registration and Licensing of Educational Institutions, ORLIE (in Spanish) of the Department of State, is the body in charge of managing public policy regarding the licensing criteria for post-secondary education in Puerto Rico, within the regulatory framework established by the Reorganization Plan No. 6-2018 and Law 212-2018 (Law on Registration and Licensing of Educational Institutions). The JIPs has the power to issue licenses to all post-secondary educational institutions in Puerto Rico. On May 23, 2021, the new JIPs Regulation No. 9272 came into effect, approved by means of Cert. No. 2021-053 and repeals Regulation No. 8265 and No. 8562.

Every graduate program created or with substantial change must be evaluated and approved by the JIPs. The Master in Architecture of our UPRSoA, like all graduate programs at the Río Piedras Campus, is supported by the <u>Deanship of Graduate Studies & Investigation</u>, DEGI (in Spanish) is the liaison between the graduate programs, and the Deanship of Academic Affairs, DAA. DEGI assists the Faculties in the elaboration and transformation of the graduate academic programs. Our Master of Architecture had its curricular review in 2019 and these <u>changes were submitted to the JIPs for approval</u>.

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: The Professional Master's Degree in Architecture defines two routes, Track 1.5 & Track 3.5. Track 1.5 is designed to accept a student body that comes from the graduates of the Bachelor of Environmental Design (BED) of the UPR School of Architecture

or of an equivalent pre-professional degree from other accredited institutions. The M.Arch Track 1.5 is 37 credits and is based, precisely, on the knowledge and skills learned in the pre-professional architecture baccalaureate. Track 3.5 accepts graduates from bachelors in disciplines other than architecture. Track 3.5 is 106 credits. The new M.Arch 3.5 curriculum path began in the summer of 2020, while the M.Arch 1.5 began in August 2020. These two career paths lead to excellent research-based graduate education for informed decision-making in evidence, which promotes interdisciplinarity and which, furthermore, are designed to satisfy the NAAB Condition 3 - Program and Student Performance Criteria.

The BED, and the M.Arch have the core courses divided into 5 material or thematic areas: Design, History & Theory, Technology, Structures, Professional Practice and Architectural Research. The programs may require additional professional courses to address the Institution's mission and context, and reinforce the NAAB requirements.

The Bachelor of Environmental Design, BED, is a pre-professional program with 131 credits. Of these, 81 are core courses, 39 are general studies plus 3 credits of elective courses in Art, and 11 are elective courses. (BED Curricular Sequence (pre-professional))

The Master in Architecture Track 1.5 is a 37 credit program. Of these, 28 are core courses and 9 are elective courses. General studies courses are defined by the previous baccalaureate degree. (M.Arch. Track 1.5 Curricular Sequence)

The Master in Architecture Track 3.5 is a 106 credits program. Of these, 88 are core courses and 18 are elective courses. General studies courses are defined by the previous baccalaureate. (M. Arch. Track 3.5 Curricular Sequence)

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 <u>and</u> the minimum number of credits for general education required by their institutional regional accreditor.

Program Response: The University strongly believes in a liberal arts education and although, traditionally, the undergraduate programs require credits in Spanish, English, Social Sciences, Humanities, Biology, Physics, and Mathematics, these are considered the basic principles of knowing. General education in our Baccalaureate program is a field of coordinated academic experiences and practices, constituted by the intersection of multi and interdisciplinary approaches, elaborated from the areas of knowledge and the complexity of emerging fields and disciplines. Its distinctive character is that it is aimed at knowledge production processes in the context of the integral formation of the student as a historically and culturally situated subject. Therefore, what defines this academic component is its integrative and formative orientation. Two axes articulate general education: the approach to the open and changing nature of worldviews and the integration as a basic principle of knowing. General education is fully integrated with the total student experience throughout the bachelor (Certification Num. 46, Academic Year 2005-2006).



Our Bachelor of Environmental Design was revised in 2008. The changes in this revision were the reduction of credits from 138 to 131; the option that the art course in the general education component may be the Introduction of Architecture course, ARQU 3121; ARQU 4136, Advanced Architectural Design II, last design course in the sequence, was removed (CSA-69-2007-2008-Bachelor of Environmental Design). In 2018, the program was revised again, some of the changes were: the intermediate architectural design course was reincorporated, and courses on research techniques, and theory and criticism of architecture were created. In both revisions, the contents of most of the core courses were updated.

The General Education component at UPR requires a minimum of 42 credits. Below is a breakdown of the minimum number of courses that will be required in all the Baccalaureate programs of the Campus. Programs may determine, based on their curriculum review processes, if they require additional general education courses.

Spanish	6 credits
English	6 credits
Literature (in Spanish, English or Comparative Literature)	6 credits
Mathematics	3 credits
Natural Sciences	6 credits
Social Sciences	6 credits
Humanities	6 credits
Arts	3 credits
Total	42 credits

Although general studies is not part of the required courses in both tracks of M. Arch., General studies is a component evaluated in the admission process since it is part of their respective baccalaureate programs.

According to Certification 95 from 2019-2020 (pg 13), all Graduate programs may include up to a maximum of 30 credits in a Master's Degree program, except in programs such as ours, where the professional accreditation requires additional credits. The University of Puerto Rico's certification on this regard, does not establish a minimum number of credits for a Graduate degree.

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: Students in our graduate program have several study options at our Faculty and outside of it, including international experiences through the Campus's Exchange Program (https://estudiantes.uprrp.edu/internacionales/programa-de-intercambio/), and with the universities with which we have agreements.

At the baccalaureate level, our Bachelor of Environmental Design offers the opportunity to complete the minor concentration in <u>Architecture and Engineering</u>. This is an interdisciplinary study program on resilient and sustainable infrastructure. The program brings together students from the Río Piedras, Mayagüez, and Ponce Campuses in a series of integrated courses. This minor concentration is fifteen (15) credits. Provides students with knowledge and opportunities to assist in current recovery efforts in Puerto Rico, as well as prepare



students to use environmental design tools to address future challenges to Puerto Rico's infrastructure.

In addition, the minor concentration in Art, Design and Contexts of Intervention articulates a curricular sequence that integrates the arts to architectural design and vice versa. Architecture, as a discipline aimed at the design of spaces, and art as expression, complement each other when it comes to intervention in public spaces in the city. The proposal integrates courses from both disciplines to prepare students to carry out interventions in public spaces of the city with spatial awareness, aesthetics and artistic sensitivity, reacting to the particular conditions of the intervention context.

Recently, we created the minor concentration of <u>Design and Innovation</u>, which is a set of 6 courses, 15 credits in total, different from the courses required to complete the Bachelor's degree in Environmental Design or any other Bachelor's degree related to art, design, engineering or another creative discipline. Students who complete this minor concentration will develop skills and abilities to identify opportunities for the development of innovations, integrating knowledge from different disciplines to creatively solve design problems through collaboration, multidisciplinarity, and group work. Students will apply methodologies and strategies to create products and services that meet the needs of users, making them an active part of the creation process. They will define marketing strategies for a product and the steps to follow for the development of an entrepreneurial initiative.

Students also have the opportunity to take minor concentrations in other Faculties, such as, for example, the minor concentration in Human Rights at the Faculty of General Studies, which promotes the integration of specialized courses on this subject, thus complying with the basic principles of the Universal Declaration of Human Rights of the United Nations (UN). Also, they can take elective courses from other faculties, according to their area of interest. The baccalaureate in Environmental Design has 18 credits of elective courses, of which 6 credits must be taken in other Faculties. This offers the opportunity to open doors to other disciplines and add interdisciplinary experiences that enrich the profession. Also, our students have the option of completing second bachelor's degrees in other faculties before beginning our Master's in Architecture.

At the graduate level, in October 2021 the Río Piedras Campus Academic Senate approved the Professional Certification in Conservation of Architectural and Urban Heritage. This professional certification consists of a set of 5 courses, 15 credits in total, different from the courses required to complete the Master of Architecture degree or any other master's program in an architecture-related discipline. The sequence is also intended for graduates of master's programs or architecture-related disciplines who have completed the degree.

The professional Certification in <u>Architecture and Landscaping in tropical climates</u> was also approved. This professional certification is a set of 5 courses, 15 credits in total, different from the core courses required to complete the Master's degree in Architecture or any other master's program in Architecture or a discipline related to architecture. It is organized in such a way that it accredits those who successfully complete them on a par with the requirements leading to a master's level academic degree. The sequence is also intended for graduates of master's programs or architecture-related disciplines who have completed the degree

On the other hand, our students have the option of completing two degrees concurrently, Architecture and Planning or Law and Architecture. As a result of the curricular review of the Master of Architecture, the dual degree between Juris Doctor and Architecture was revised and the joint degree of Planning and Architecture was established. Joint degrees reduce the period to complete both degrees, since it uses the core courses of a program as electives and vice versa.

Recently, the Master's Degree in Project Management with specialization oriented in construction projects management was also approved and elevated to the JIPs. Approved by the Río Piedras Campus Academic Senate on April 22, 2021 (Certification No. 97, Academic Year 2020-2021), the program is a one-year, 34-credit, online master's degree. Its purpose is to develop professionals with knowledge to manage complex projects integrating the requirements and demands of the global standard of the Project Management Institute (PMI). It contains courses related to the component of project management, another of business administration and a menu of electives that will allow focusing on the type of project to be managed, according to the discipline or area of interest of the student. The Faculty of Business Administration will support the program by offering two core courses of three credits each, related to the general aspects of management, accounting, and statistics. This program specifically includes electives in the area of construction management. Upon completion, the participant will be formally prepared in project management and may aspire to take the Certified Associate in Project Management or Project Management Professional certification exam. The program is aimed at professionals or students in the traditional disciplines of construction (environmental design, real estate, architecture, engineering, surveying, decoration and interior design); professionals with prior training in management who wish to specialize in project management and any other person who wishes to train as a project manager in general.

Currently, we are working on the design of the <u>Master of Science in Architecture</u>. The Master of Science in Architecture (M.Sc.Arch.) is an academic proposal consisting of 30 credits, to be completed in two years, providing an additional career step through advanced research or specialized practice of architecture. architecture and the built environment. The M. Sc. Arch. is not accredited and does not lead to a professional degree. The proposal is aimed at all those students with professional degrees in architecture (B. Arch., M. Arch.) or equivalent degrees in fields or careers related to the discipline.

On the other hand, our students have the option of carrying out exchanges in foreign universities with which we have an agreement. The Exchange Program of the Auxiliary Dean of International Relations, DARI (in Spanish) allows a student to study for a semester or a year at a foreign university through the international program of the Campus to take courses that are validated by core or elective courses of our program. This study opportunity allows our students to complement their academic experience, discover alternative worldviews, expand their horizons and, on a personal level, achieve independence.

Our students have carried out exchanges at the University of Granada, the Higher Technical School of Architecture of Seville - ETSAS, the Polytechnic University of Madrid and the University of Palermo, among others. The Summer programs are also options for our students, through collaborative initiatives, they have participated in workshops and design studios at Delft University of Technology, ELISAVA in Barcelona, Autonomous University of Mexico, Zentru fur Kuntz und Urbanistik in Berlin, Francisco de Vitoria University in Madrid and Polytechnic of Madrid, among others. On the other hand, the School carries out in the summer period, courses with study trips with credit hours. Among the destinations of the recently completed travel courses are: Brazil and Peru with Professor Ernesto Rodríguez, Mexico with Professor Elio Martínez Joffre, New York with Professor Ricardo Acuña, Greece and New Mexico with Professor Anna Georas.

Both the Bachelor's and Master's design curriculum sequences are enriched by our efforts to create various academic collaborations with other architectural schools. One of them is the creation of joint studios with Pontificia Universidad Católica Madre y Maestra in the Dominican Republic, Florida International University, Ljubljana University, Arkitektskolen Aarhus, Louisiana State University, MIT, CUNY, Georgia Tech, Stanford University (International Multidisciplinary Design Program), Tulane University, and UPenn, to mention a few.



At the Master's level, in Track 1.5 students must take 9 credits, where 3 credits must be from another faculty and in Track 3.5 they take 18 credits, 6 of these credits from another faculty and 12 from our architecture faculty. Each year we design the academic offer with a <u>series of elective courses</u> that support full compliance with the NAAB Condition 3 - Program and Student Performance Criteria.

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: Our UPRSoA offers a bachelor's degree in Environmental Design, a preprofessional degree in architecture.

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: Not Applicable

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: The M. Arch degree consists of 168 semester credit hours, of combined undergraduate sequence of 131 credits hours and a 37 semester credits of graduate coursework for the Master in Architecture Track 1.5. Track 3.5 is a sequence of 106 credits in which the criteria of the NAAB and the UPR domains are met in 3.5 years so that students from other disciplines, other than architecture, can be admitted to the program and obtain a professional architectural master's degree.



BACHELOR OF ENVIRONMENTAL DESIGN + M.ARCH. Track 1.5

B.E.D. Curriculum Courses		Crs	M.Arch Track	(1.5 Curriculum Courses	Crs
CORE COURS	CORE COURSES		CORE COURSES		18
ARQU 3131	Design I: Design Fundamentals I	5	ARQU 6514	Technology IV	3
ARQU 3132	Design II: Design Fundamentals II	5	ARQU 6383	Professional Practice I	3
ARQU 3133	Design III: Elemental Design I	5	ARQU 6384	Professional Practice II	3
ARQU 3134	Design IV: Elemental Design II	5	ARQU 6425	Professional Experience Internship ixP	3
ARQU 4133	Design V: Intermediate Design I	5	ARQU 6431	Research Seminar	2
ARQU 4134	Design VI: Intermediate Design II	5	ARQU 6432	Publication Seminar	1
ARQU 4135	Design VII: Advanced Design I	5	ARQU 6328	Applied Structural Design	3
ARQU 4136	Design VIII: Advance Design II	5	END OF CAR	EER PROJECT	10
ARQU 4145	Research Techniques in Architecture	2	ARQU 6336	Design Laboratory	5
ARQU 4146	Theory of Architecture	3	ARQU 6337	End-of Career-Project	5
ARQU 4211	History I	3	ELECTIVES		9
ARQU 4212	History II	3	TOTAL		37
ARQU 4213	History III	3			
ARQU 4214	History of Architecture of PR	3			
ARQU 4311	Technology I	3			
ARQU 4312	Technology II	3			
ARQU 4313	Technology III	3			
ARQU 4321	Structures I	3			
ARQU 4322	Structures II	3			
ARQU 4323	Structures III	3			
VARIES	Digital visual communication	2			
	6 credits of the Faculty of and 6 credits in another faculty)	12	-		
Spanish (6 crs (6 crs), Physic Humanities (6	CUDIES Mathematics (3 crs), c), English (6 crs), Social Sciences al Sciences (3 crs), Biology (3 crs), crs), Literature (6 crs), Arts (3 crs) - ARQU 3121 Introduction to	42	-		
TOTAL		131	_		



M.ARCH Track 3.5

Curriculum Courses CORE COURSES		Crs	Curriculum Courses CORE COURSES		Crs 78
		78			
ARQU 6331	Design I Design Fundamentals	5	ARQU 6212	History II	3
ARQU 6332	Design II: Elemental Design	5	ARQU 6213	History III	3
ARQU 6333	Design III: Intermediate Design	5	ARQU 6214	History of Architecture of Puerto Rico	3
ARQU 6334	Design IV	5	ARQU 6145	Research Techniques in Architecture	2
ARQU 6335	Design V	5	ARQU 6431	Research Seminar	2
ARQU 6511	Technology I	3	ARQU 6432	Publication Seminar	1
ARQU 6512	Technology II	3	ARQU 6325	Structures I	3
ARQU 6513	Technology III	3	ARQU 6326	Structures II	3
ARQU 6514	Technology IV	3	ARQU 6327	Structures III	3
ARQU 6383	Professional Practice I	3	ARQU 6328	Applied Structural Design	3
ARQU 6384	Professional Practice II	3	END OF CAREER PROJECT		10
ARQU 6425	ixP – Professional Experience Internship	3	ARQU 6336	Design VI: Design Laboratory	5
ARQU 6225	Architecture Theory & Criticism	3	ARQU 6337	Design VII: End-of-Career-Project	5
ARQU 6211	History I	3	ELECTIVES (12 credits of the Faculty of Architecture, 6 of these credits in visualization and representation and 6 credits in another faculty)		18
Total		·			106

This degree and its new routes are the result of changes proposed in 2018, both in the BED and in the Master in Architecture. The <u>Master's in Architecture Program Self- Assessment</u>, reviewed by an external independent third party of evaluators, motivated us to pursue the changes resulting in the Track 1.5 Master's degree to make it more competitive and to reduce its length (from 2 to 1.5 years). Track 3.5's purpose is to expand and diversify the profile of admitted students (more in section 5.3).

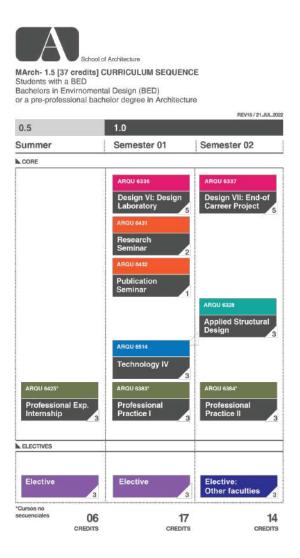
After one year of implementation, we reviewed the program through the multi-level Academic Assessment resources and processes, the Graduate Program 2020-2021 Student Profile survey, and the Faculty Self Assessment instruments and meetings. The findings and results of assessment and the transforming actions taken, as follows:

• Track 3.5: The Student Profile showed that 86% of Track 3.5 students hold jobs, which is why some could not cope with the academic load and some of them were dropping courses to reduce the number of credits per semester. Another reported issue is that summer studio design professors and students stated that the schedule (5-hour class Monday through Friday for 8 weeks) were disadvantageous to student learning, since the students need more time in between one class's meeting to the next to incorporate professors' critique and recommendations into the projects. For this reason, the first design course, Design Fundamentals ARQU 6331, offered in the summer, was moved from the summer session to the regular 15-week Spring semester. With the studio course schedule of Monday, Wednesday and Friday 4-hour class, students can better assimilate the knowledge and skills of the course.

This change implied an adjustment in the admission process, admissions are made in August and January for Track 3.5. Those admitted in the fall semester do not take design that semester and join those admitted next January. For this group, the period of time to complete the degree is an additional semester, as noted when promoting the academic offer.

Track 1.5 & Track 3.5: Another adjustment made was to move the ARQU 6432
 Publication seminar course to the fall semester (Semester 1 for Track 1.5 &
 Semester 6 for Track 3.5) so that they apply the knowledge and skills on
 representation, writing and publication of the course in particular to the ARQU 6336
 course and, in the same way, frees up time to work on the End-of-career project in
 their last semester.

Track 1.5: Curricular Sequence Revised

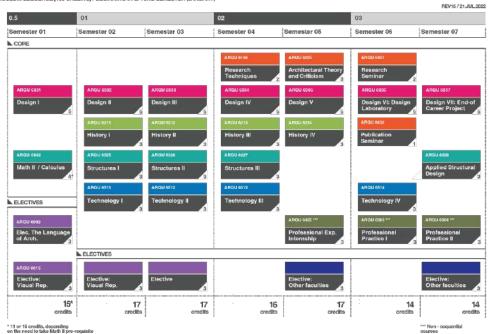




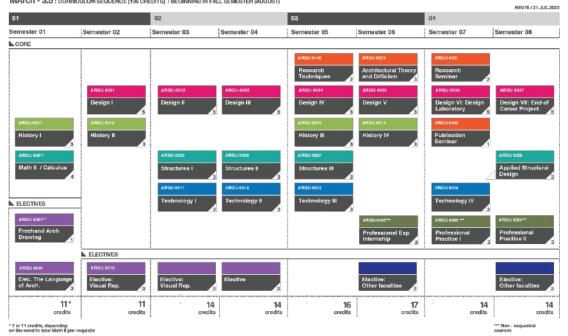
Track 3.5: Curricular Sequence Revised (Fall & Spring admissions)



MArch - 3.5: CURRICULUM SEQUENCE [106 CREDITS] / BEGINNING IN SPRING SEMESTER (JANUARY)



MArch - 3.5: CURRICULUM SEQUENCE [106 CREDITS] / BEGINNING IN FALL SEMESTER (AUGUST)



National Architectural Accrediting Board Architecture Program Report

" Optional



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: The evaluation process of each candidate to be admitted to the Master of Architecture, Track 1.5 or Track 3.5, is carried out by the Graduate Program Committee of our School. This Committee, after a rigorous evaluation process of the prior's academic coursework of the applicant, recommends the students admitted to the Program.

M. Arch Track 1.5

Applicants who come from our Bachelor of Environmental Design, will be evaluated, according to compliance with the admission requirements of our School. These students may be admitted to the M.Arch Track 1.5, a 37-credit master's program. The admission requirements are as follows:

Admission Requirements for the Master of Architecture degree leading to the professional degree (37 credits):

- A Bachelor of Environmental Design, Architecture, or a Pre-professional Bachelor of Architecture or its equivalent from an accredited or recognized University or College.
- Application form.
- A 3.00 GPA or higher on a scale of 4.00 max.
- A 3.00 GPA or higher on a scale of 4.00 max in Design Studio courses.
- Oral and written proficiency in English and Spanish. Certification of courses taken or academic record that proves it.

Required Documents:

- Two official academic transcripts, sent directly to the Graduate Program by the Register's Office of the institution where the applicant studied. They can send a copy initially to open the file.
- Two letters of recommendation (electronic format) for students from academic institutions other than Escuela de Arquitectura at University of Puerto Rico.

- Applicants from other recognized academic institutions will submit a catalog description of the approved courses and a syllabus of the courses taken during the Bachelor, related to the discipline of Architecture.
- Essay (600-800 words) with the statement of purpose to pursue graduate studies and career plans.
- Digital portfolio of design and research works with at least 2 of the best projects of each design year at the rate of one project per semester. Must show the production and creative development of the four years of the Bachelor (Portfolio rubric).

Students who have graduated from our BED, are exempt from submitting the portfolio if their academic index in design courses is 3.70 GPA or more.

Applicants who come from a Bachelors of NAAB accredited Environmental Design, Prearchitecture or a non-professional non-NAAB accredited Architecture degree from recognized universities will also be evaluated according to the fulfillment of the admission requirements of our School. These students may be admitted to the Track 1.5, 37- credit master's program. All of the above is required, plus the following:

- Interview with the Graduate Program Committee;
- Two (2) letters of recommendation from people who know the student's the academic and professional performance and can attest to the candidate's ability and commitment to pursue graduate studies;
- Catalog description of approved university courses and syllabi of courses taken during the bachelor's degree related to the architecture discipline to assess compliance with the NAAB SPC's.

In addition to all the requested documents, courses' syllabi of the program previously completed by the applicant are evaluated, these are compared with the syllabi of the courses of our baccalaureate in Environmental Design and with the NAAB SPC Compliance matrix to evaluate content and NAAB's domains. If the Committee finds that the applicant does not meet any of the requirements and admission criteria (knowledge and skills), a study plan is prepared that includes courses to correct said deficiencies. These courses are not part of the curricular sequence of the Track 1.5 program and the student must take them either before or concurrently to the established curriculum through a prepared study plan.

M.Arch Track 3.5

Applicants who come from non architecture Bachelor's degrees, as determined by the Graduate Program Committee, will be evaluated, based on compliance with the admission requirements of our School. These students may be admitted to M.Arch Track 3.5, a 106-credit master's program. The admission requirements are as follows:

Admission Requirements for the Master of Architecture degree leading to the professional degree (106 credits):

- Application <u>form</u>.
- 3.00 GPA or higher on a scale of 4.00 max.
- Oral and written proficiency in English and Spanish. Certification of courses taken or academic record that prove it.

Required Documents:

- Two (2) official academic transcripts, sent directly to the Graduate Program by the Register's Office of the institution where the applicant studied. They can send a copy initially to open the file.
- Two (2) letters of recommendation from people who know about the academic and professional performance that can attest to the candidate's ability and commitment to pursue graduate studies:



- An essay (600-800 words) with the statement of purpose to pursue graduate architectural studies and career plans.
- Portfolio (for students with art and design bachelor degrees (optional);
- Calculus. The Applicants who have not taken it and meet the above requirements
 may be admitted without said course but must take it and pass it before beginning the
 Structures course sequence.
- Interview with the Graduate Program Committee.

Applicants with a master's degree in Architecture from other universities must apply for admission to either Track 1.5 or Track 3.5. Courses from a previously unfinished Master's degree at another institution may be convalidated. Official course descriptions for History & Theory, Structures & Technology, and Design courses are requested and evaluated by members of the faculty. The process of accreditation of courses from other institutions is governed by Certification No. 95, Year 2019-2020 of the Academic Senate.

Accreditation of courses from other institutions (p.25)

For admitted students who have completed graduate studies in other units of the University of Puerto Rico system and in accredited institutions, the graduate programs may accept up to a maximum of one third of the credits required for the degree, subject to the criteria established by the Graduate Affairs Committee of the school or graduate program (or its equivalent). Accredited courses must have been approved with a minimum grade of B (or its equivalent) in a period not exceeding five (5) years prior to admission and may not have been accredited for another lower grade. Practices or internships required by the programs will not be accredited.

This evaluation process about compliance with the NAAB accreditation criteria is carried out through evaluation rubrics, and documented within the <u>admission process</u> of the professional graduate program. All admitted students have a digital and paper file in the Coordinator's Office that contains the results of their admission process.

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 (The UPRSoA does not have a Preparatory Education Program).

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: The UPR School of Architecture clearly establishes the academic route to become an architecture professional. The route includes a baccalaureate degree in environmental design, followed by a professional master's degree. Program details and the path to licensure in the architecture field can be found in: the School's website, orientation talks on the admission process, Open Houses, School conferences open to the public, and visits to both public and private high schools.



The website, in addition to exposing the academic route, makes available a comprehensive listing of requirements for the submission of transcripts, test scores, letters of recommendation, and the architectural portfolio. Students work directly with the university's enrollment specialist who manages the <u>admissions process</u> and prepares the student's individual program of study.

Bachelor of Environmental Design (BED)

The admission process to our BED has two possible admission routes; 1) students can be admitted by meeting the established academic entrance index, IGS (in Spanish) or 2) students can be admitted by presenting a favorably evaluated art portfolio. Our website has the necessary information to apply to our BED, whether you are a new student, transfer, reclassification.

In the case of transfer students, <u>Certification No. 150, 2013-2014</u> of the Academic Senate establishes that students who have studied at other duly accredited universities outside the UPR System and who wish to enter our Río Piedras Campus will be considered according to the <u>transfer student application rules</u>.

The process for transferring at the undergraduate level begins with an evaluation by the Program Director, to verify whether the student is qualified. If the student is transferring from a non-architecture degree program, that student must participate in the normal admissions procedure. If the student is transferring from a qualified architectural program, then the student is evaluated for placement in the appropriate design year by the Undergraduate Program Committee. Decisions about specific transfer credits are made by the Dean of Students and Student Affairs Officer in coordination with the Undergraduate Program Director. In that case, the Río Piedras Campus reserves the right to determine the number of credits that must be validated by transfer to the student. The validation will be done once the candidate has satisfactorily approved at least 12 credits in the Campus. The student is required to pass at least 36 of the last 48 credits to obtain the degree on Campus. No more than half of the transferred credits in the bachelor specialty courses will be computed for graduation (General Catalog of Undergraduate Programs 2015). The courses that undergo a validation process must meet the following requirements:

- The course must have been approved with a grade of B or higher.
- The validation of required courses of the curriculum will be evaluated by the respective Subject Committees of our School who will issue their judgment in a period not exceeding 2 weeks in the school period, from the moment the request is made to said committee in writing. The president of the corresponding Subject Committee will collect the evaluation of the Committee in a form prepared for such purposes, which will be delivered to the Baccalaureate Coordinator who will carry out the pertinent actions.
- For design courses, both the course grade and the evidence shown in the course portfolio will be evaluated.

Accredited courses must meet NAAB requirements. This evaluation process about compliance with the NAAB accreditation criteria is structured, through evaluation rubrics, and documented within the admission process of the BED. If the candidate for transfer is in agreement with the conditions of admissions, the UPRSoA then proceeds with the University admissions process. The transfer admission process may include the validation of core courses from other institutions. All admitted students have a digital and paper student's record in the Admissions Office that contains the results of their admission process. Some references are: UPRSoA BED program description, UPRSoA Undergraduate Student Manual, UPRSoA Undergraduate Student Manual, UPRSoA Undergraduate Admission guidelines.



5—Resources

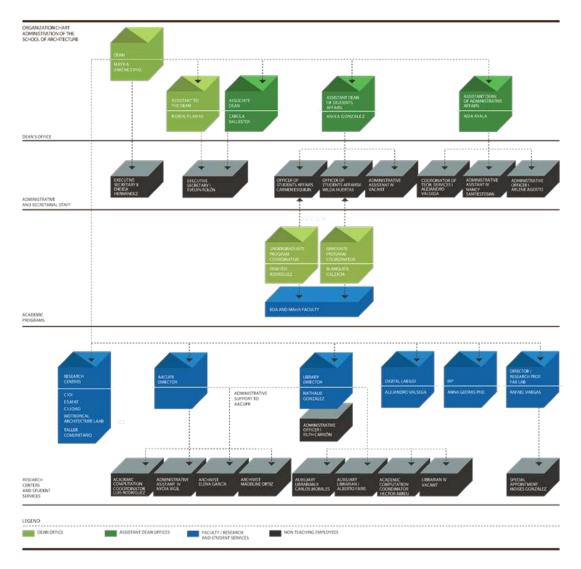
5.1 Structure and Governance

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 UPRSoA is one of nine academic faculties on the Río Piedras Campus. It operates as an autonomous faculty, with its own assigned annual budget. It has over 400 full and part-time students enrolled in its undergraduate and graduate programs. It functions under the direction of a Dean (Dr. Mayra Jiménez Montano), an Assistant to the Dean (Arch. Robin Planas), one Associate Dean (LAIT. Carola Ballester), an Assistant Dean in Administration Affairs (Adia Ayala), an Assistant Dean of Student Affairs (Arch.Anixa González) and a Graduate and an Undergraduate Program Coordinator (Arch. Blanquita Calzada & Arch. Ernesto Rodríguez). The UPRSoA also has an autonomous library (Director Nathelie González), its own architectural archives collection- AACUPR, a computer and media laboratory & Digital Lab (Director Alejandro Válsega), the UPR FAB LAB, the digital fabrication laboratory (Director Rafael Vargas), three research centers (CIUDAD, CIDi & ESMAT), and LAAB - the technology laboratory focused on biotropical architecture issues (Director Pedro Muñiz), one design studio focused on community-based projects, Taller Comunitario (Director Elio Martínez Joffre) and a Professional Experience Internship (Director Anna Georas).





The other two professional programs on campus are both graduate level curricula, and therefore do not have a system of Coordinators. The Law School, which is most similar to Architecture, utilizes a system of Associate and Assistant Deans. The other professional program, that of Planning, while also a graduate "School," is headed by a Director and not a Dean, and is under the jurisdiction of the Deanship of Academic Affairs. These three entities are similar in that, unlike most other academic areas on campus, have a system of program areas rather than a departmental structure. For this reason, the School has program coordinators rather than department heads.

The Middle States Association of Colleges and Schools has accredited the Río Piedras Campus of the Universidad de Puerto Rico continuously since 1946. The Campus is also accredited by the Board of Post-Secondary Institutions, JIPs, the accrediting agency for all institutions of higher education in Puerto Rico. Individual accreditation of the Graduate School of Planning, the Law School, the School of Architecture, and other colleges, schools and departments of the Campus is complied with as required.



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: All faculty and students of the UPRSoA have representation and opportunities to participate in the School and Institutional governance through the faculty meetings, faculty committees (except in the Personnel Committee) and the Academic Senate. The *Regulation of the School of Architecture* establishes the structure, organization, rights, responsibilities, and functions of the members of the academic community and provides the mechanisms that facilitate their participation in the activities that lead to the achievement of the mission and objectives of the School and the University.

Faculty: The Faculty have the functions, attributions and prerogatives as provided in Article 22 (Deans and directors of dependencies within institutional units), Article 23 (Academic Senates), Article 27 (The faculty), Article 28 and Article 29 of the <u>General Regulations of the University of Puerto Rico</u> and those contained in Chapter V (Personnel Regime, provisions applicable to all personnel), Chapter VI (Personnel Regime, provisions on the appointment of the different officers and employees of the University System) and Chapter VII (Personnel Regime provisions applicable to teaching staff) of the same.

The teaching staff will collaborate in the development and achievement of the objectives of the UPRSoA, the Campus and the University. Participate in the presentation and discussion of proposals related to matters that affect the orientation and development of the UPRSoA, the Campus and the University before the corresponding organisms, using the established procedures and mechanisms, such as faculty meetings, the Faculty and the committees to which they belong, election and consultation processes of the School and the Campus. The teaching staff of the School with three quarters (3/4) of the regular teaching task will have the right to vote.

In terms of curriculum development, academic decisions, and programs regulations, the faculty have representation in the Graduate Program Committee, Undergraduate Program Committee, Academic Subject Committee, Personnel Committee, and Teaching Support Resources Committee, that are responsible for curricular, as well as, program regulations revisions. All academic decisions involving major changes to programs are presented to full faculty meetings for approval. Also, they will collaborate in the evaluation processes of their academic work and that of their peers.

The Faculty is represented in the Río Piedras Campus Academic Senate, by two professors, one student and the Dean (ex-officio member). The faculty senators participate on several senate committees, Laws & Regulations, Faculty Affairs and Student Affairs. Every Representative has the obligation to present to its peer's minutes of the meeting and announce any new agreements. The Dean also participates in the Junta Administrativa (in Spanish) the administrative decision-making body of the Río Piedras Campus. The graduate faculty is represented on the Board of the Deanship of Graduate Studies & Research, DEGI (in Spanish); who must also be a member of the Graduate Program Committee CEGI (in Spanish). Any substantial changes to the Program must be approved by the appropriate School committee, the Faculty in general, the Deanship of Academic Affairs, and the campus-level committees at the Senate, before going to the Senate for final approval. It then passes through the Administrative Board – on which the Dean sits – the University Board, and finally, the Board of Trustees. All of these bodies have administrative, faculty and student representation with voice and vote.

Students: Students play an active role in the academic and administrative life of the University, by participating in all School committees (with voice and vote), the Graduate Program Committee and the Undergraduate Program Committee, Academic Subject



Committee, except the Personnel Committee. Students are an integral part of the decision-making process leading to any changes proposed that affect the School and the Academic Programs through the Student Council, and also have a strong representation in campus governance. Students are part of campus-level boards and committees with voice and vote, by their representation in the Academic Senate, in the University Board, which represents all eleven University campuses, and the Junta de Gobierno (in Spanish), the highest authority within the University system (equivalent of the Board of Trustees in the United States).

There are student representatives at each Faculty meeting and the composition of the Graduate Program Committee includes one graduate student, as per the Graduate Program Regulation (Revised in October 7, 2020). In Faculty meetings, the number of student representatives will not be less than two (2) nor more than ten percent (10%) of the number of Faculty members with the right of vote. The student representatives have voice and vote at Faculty meetings.

The student representation will have voice and vote in the Committees by Academic Subject. A ratio of one (1) student representative for every three (3) members of the committee will be maintained.

Staff: Staff members also have the opportunities to participate in administrative decisions by representation in school's meetings and Institution's forums. Non-teaching employees are part of organizations such as the Hermandad de Empleados Exentos No Docentes, HEEND (in Spanish) that support and defend the interests of the group, as well as those of the institution.

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: UPRSoA defined its School of Architecture Development Plan - PDEA 2018-2023, approved at a faculty meeting on October 5, 2018. The PDEA seeks to outline strategies that allow defining effective ways to manage, maximize existing resources, boost the capacities of the human resources, improve spaces for research and creation, in addition to attracting external funds. It is based on a process of reflection, analysis and diagnosis of the existing condition of our Faculty; a review of the mission and vision; and the establishment of four strategic axes: Administration; Teaching, Research and Creation; and Linkage and External Resources. The PDEA is an instrument that establishes the administrative and academic structure to direct the School. It uses the Campus Strategic Plan: Commitment 2018-2023 as a base document, which offers a route for making priority decisions over the next five years in order to direct the fundamental changes required by the Campus, reaffirming the commitment to excellence in research, creation, teaching, and service.

In addition, the PDEA, although set forth prior to the new 2020 NAAB Conditions for Accreditation, and the 2020 NAAB Procedures for Accreditation, its focus and direction is consistent with the established accreditation process that ensures minimum competence of graduates based on the following goals:

- Promote excellence and innovation in architecture education
- Allow program flexibility that adapts to a dynamic context
- Encourage distinctiveness among programs



- Support equity, diversity, and inclusion in architecture education and the profession
- Increase access to the profession of architecture
- Stimulate the generation of new knowledge
- Protect the public interest

The PDEA outlines the mission of the School of Architecture:

The mission of the School of Architecture is to train committed professionals capable of acting with ethical and social responsibility, through processes that pursue research, constant reflection and the development of critical and creative thinking, and whose actions contribute to the evolution of the profession and the creation of economically, socially and culturally sustainable environments, as well as the protection of Puerto Rican built heritage.

Vision 2018: The School of Architecture aspires to achieve academic excellence, both in its bachelor's and master's programs, with diversified, flexible, and inclusive academic offerings; including theoretical, methodological, practical, and technical knowledge that allows facing the complex design processes at different scales and that recognizes the current challenges of the discipline, closely linked to its contexts, and public and private sectors; so that it is capable of producing resources and capacities that contribute to the economic, social, and cultural transformation of Puerto Rico.

The PDEA defines the following institutional values:

Commitment: It has the obligation to ensure the development of the members of

our community in the academic, professional, research,

economic, and social fields.

Discipline: Establishes guidelines and norms that help our community in its

academic, professional, investigative, economic, and social

development.

Social Responsibility: Promotes solidarity and volunteering with the academic

community, the environment, and Puerto Rican society.

Ethics: Cultivate respect for others and correct behavior in situations and

relationships with others.

Transparency: Requires dissemination and clarity in messages, action plans, and

decisions to keep our community duly informed.

Entrepreneurship: Fosters the ability to undertake and start a project with the firm

resolution to meet a goal, through the development of skills and

aptitudes in our community.

Diversity and Integration: Demands respect for differences and encourages integration in

our community with options that stimulate an optimal academic

environment.

The PDEA demonstrates the School's commitment to cutting-edge education and academic excellence. It requires a constant evaluation and update of the resources and methods to advance in the established goals. The four strategic axes and their respective goals, objectives and initiatives include aspects of the program and student criteria established by the NAAB.

The various assessment processes at the School have been developed by the Students Academic and Administrative Deanships, with the support of the faculty and other Campus offices, according to the assessment procedures established by the Campus Administration. Additionally, there have been assessment processes developed by both the SIH Library, and AACUPR that complement the findings produced by the academic program's own efforts.



Student Learning Assessment

Student learning assessment is carried out by both a campus wide effort as well as by our own UPRSoA Deanship. The Campus office responsible for guiding and reviewing assessment tools, domains, and standards is the Student Learning Assessment Office, OEAE, an office incorporated into the Institutional Research and Assessment Division, DIIA (in Spanish) in 2019. The DIIA works closely with and is led by the campus wide Dean of Academic Affairs. Within the UPRSoA, this assessment is led by the Associate Dean of Academic Affairs, in collaboration with both the undergraduate and graduate program coordinators.

Also in 2019, the University revised the Campus domains and criteria by which to measure student learning. The DIIA counts with an institutionalized online tool called the Online Learning Assessment System, or OLAS. This online platform facilitates the appraisal process. After a series of OEAE and DIIA led training and workshops during 2018 and 2019, our school further modified and elaborated our own assessment rubrics.

The institutionalized campus wide undergraduate domains as revised in 2019 are:

- 1- Information literacy skills
- 2- Effective communication skills
- 3- Content knowledge, skills or dispositions
- 4- Research and creation
- 5- Critical thinking
- 6- Logic and mathematical reasoning
- 7- Social responsibility
- 8- Technology

The institutionalized campus wide graduate domains as revised in 2019 are:

- 1- Information literacy skills
- 2- Effective communication skills
- 3- Content knowledge, skills or dispositions
- 4- Research and creation
- 5- Critical thinking
- 6- Social responsibility

The <u>UPRSoA's rubrics</u> are programmed into OLAS, which allows us to assess our courses by measure of the Campus domains each semester. The revised rubrics for the student learning assessment also incorporated each of the revised topics integrated into the courses in accordance with the <u>2020 Student and Program Criteria Matrix</u>. During the second semester of the 2020-2021 academic year, we incorporated into OLAS the following new and revised rubrics: Design Thinking, Design Process, Research Techniques, Visual Representation, Research Project, Coherence and integration in design, Community Restoration Project, Construction practices, building technical knowledge and skills, Sustainability Strategies / Environmental Systems for Elementary Design, Design III & IV Sustainability Strategies, and Professional Practice, <u>particular criteria</u> of the discipline of architecture and required in the NAAB accreditation process.

The process by which the University and the UPRSoA's Faculty and Dean assesses Student Learning is as follows: the UPRSoA's Academic Affairs Dean in coordination with the Undergraduate program coordinator and the Graduate program coordinator prepares and submits to the DIIA a student learning assessment three-year goal plans per program (most recent are the 2019-2022 and 2022-2025). In addition, a <u>yearly plan</u> is prepared before each academic year, and an end of year analysis report is produced. OLAS produces guantitative



data. Each end of semester, the professors of assessed courses fill out rubrics assigned to their courses into OLAS.

If results do not meet University established scoring targets, then transformative actions or improvements are to be discussed at UPRSoA Faculty and Deanship levels as well as submitted to the DIIA and implemented.

Qualitative end of semester course assessment occurs through the UPRSoA's pre, mid (if applies), and end of semester's various academic subject committee meetings. End of semester committee meetings assess academic performance and compliance with established course syllabi.

Throughout the past five years, the UPRSoA has shown sustained student learning assessment compliance with Campus standards, requiring no particular transformative actions. The transformative actions taken, like for example the BED curriculum revision and the creation of the Track 1.5 and Track 3.5 Master's degree programs and punctual revisions to the syllabi respond to qualitative assessment methods, such as subject committee meetings, student surveys, and the five-year program assessments. In order for OLAS to become a more precise and valuable assessment tool, the UPRSoA incorporated the additional rubrics, in addition to establishing a higher target scoring (from the existing DIIA established 70% to our proposed 80% will begin in fall 2023 semester). Also, in spring of 2022, DIIA revised and included new statistical and comparative tools programmed into OLAS, which will allow for more precise and insightful student learning assessment data.

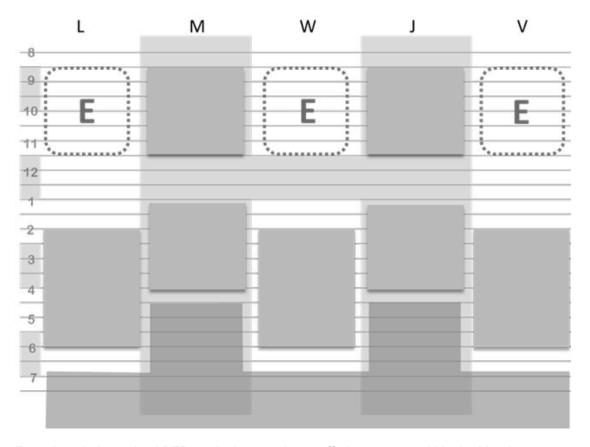
Through OLAS, the UPRSoA has demonstrated rubric scoring above and beyond the campus scoring target for student learning in each of the 8 undergraduate main campus domains during the past five academic years and in each of the 6 graduate domains. A five consecutive year scoring average (from year 2017 to 2022) in the Content knowledge domain assessed in all design courses in both the Undergraduate and Graduate programs reveals that 97% of student scored over the target (the established target is: 70% of the domain objectives were met with a score above 5, from a 1 to 8 scale, 8 being the most compliance). Also, as a general observation during the past five years, a statistical increase in the arithmetic average occurs from the first to the second semesters. This domain is measured every semester of every year. The design courses in the UPRSoA are strictly sequentialthere is a design course every semester of each of the 4 years of the DBE for a total of 8 design studio courses (ARQU 3131 to 3134, and ARQU 4133 to 4136, prior to the revised curriculum it was 7 design studios, not including 4136). The graduate program 2.0, to be phased out, has been fully assessed up until spring of 2022 (its final complete sequence in the regular academic offering). This program included 4 design courses (from ARQU 6311 to 6314) measured in this domain. The graduate program 1.5, with 2 design courses (ARQU 6336 and 6337) has shown the same trend, while the 3.5 program, which has yet to complete the entire sequence of 7 design courses (from 6331 to 6337) has therefore only been partially assessed. The first class from the 3.5 graduate program is programmed to complete in May 2023. Notwithstanding, the increase scoring from one semester to the next in this Content Knowledge domain, shows a palpable student learning improvement from the initial first semester design course, to its sequel on the second semester, within each year, a favorable indicator that students obtain more and are able to apply knowledge more effectively as the academic year matures and progresses.

Similarly to Content knowledge, the UPRSoA has achieved target scoring for all other campus wide and NAAB program criteria assessed through this tool. As of Fall 2022-2023 semester, a raised scoring target from 70 to 80% will go into effect.

Past qualitative-assessment led transformative actions include the minor curriculum revisions to the undergraduate program approved in 2018 and the major curricular revisions to the

Graduate program which revised all course syllabi and reduced the existing completion of the program from two years to one year and one semester (Track 1.5). It also resulted in the creation of the Track 3.5 Graduate program based on the surveyed and market research need for an Architecture Program for students with bachelor's degrees in disciplines other than architectural design.

Another major qualitative assessment induced transformative action is in the time scheduling for the School's programs. The UPRSoA identified existing course time slots generated schedules that promoted an inefficient use of time by students. Based on these findings, in 2012 we redesigned the course schedule based on: time slots. We redesigned the schedule so that non design studio required courses were concentrated in blocks during Tuesdays and Thursdays. Design courses continue to be offered in the traditional schedule of Mon/Wed/Fri afternoons. This grouping minimized idle time between classes, allowing elective courses to be offered on Monday, Wednesday, and Friday mornings. Even though the School, prior to 2016 was ending all courses before 6 pm, which allowed students more flexibility to take courses outside of our department, and also allows them to have spare time during the evenings for personal commitments and/or homework and/or reading, a need for a wider selection of elective courses to comply with NAAB program criteria as well as incorporate the RISE-Up intra campus courses, and emerging representation, and constructive technologies courses now include an elective courses 6 pm to 7:20 pm slot on Tuesdays and Thursdays.



Even though the revised BED curriculum continues offering courses within the Monday to Friday 8 am to 7:20 pm time slots (the now phased out 2.0 Master's program also followed the same scheduling) the entire Master's degree program comprised of the Track 1.5 and Track 3.5 began and will continue as a vespertine program. The Graduate program time scheduling responded to graduate student survey findings in 2017 and 2018, where a substantial majority of students chose a vespertine course time schedule citing a need for



daytime 8 am to 2 pm in order to work. At the Graduate level (and undergraduate students who work to cover study costs are on the rise), where federal student Pell grants are not available and with an older student body with financial obligations, our program scheduling had to respond to these needs. All courses in the Master's program begin at the earliest, 3:00pm from Monday through Friday. The design studios also run on Monday, Wednesdays and Fridays, but from 4:30pm to 8:20pm.

Academic Assessment for BED Program: The Deanship of Academic Affairs - DAA, asks the Faculties to carry out a self-assessment of the Baccalaureate programs every five years. In 2022, we submitted our <u>Bachelor of Environmental Design Program Evaluation 2010-2016</u>, which revealed:

The strengths of the program in light of the most outstanding findings of the evaluation process are:

- Curricular strengthening. It contributes to the production of new interdisciplinary knowledge through the creation of minor concentrations in collaboration with other faculties and campuses and expansion of the offering of elective courses (minor concentrations in Art, Design and Contexts of Intervention; Architecture and engineering; and Design and innovation).
- Strengthening of the undergraduate research component. Courses on research techniques, research theory and research seminars.
- Exceeds the minimum achievement standards for student learning assessment through the Online Learning Assessment System (OLAS) by 91%.
- Sustained and increasing student retention rate.
- Increase in applications for admission to the program.
- Improvements to the recruitment process through the implementation of a new recruitment plan.
- Solid cycle of conferences and workshops with local and international resources.
- Technological improvements to teaching support centers and service areas such as the UPR FAB LAB, the SIH Library, the ESMAT and the AACUPR
- Creation of a technological scaffolding and highly trained resources to support teachers and students
- Encourages the design of real projects.
- Increase in community project initiatives in specific situations and aimed at addressing community problems in different municipalities.
- Increase in collaborations with other faculties with the Design Research Center (CIDi), the Architecture and Construction Archive (AACUPR), among others.
- Collaboration with other institutions in Join Studios with international workshops (Stanford, FIU, SoA-LSU) and support and assistance to exchange programs with Spain, USA, Delft, Netherlands

The BED is an academically strong program. It offers a balanced and diverse academic offer. It must continue to strengthen and integrate research in the different courses and subjects for the development and production and dissemination of knowledge in architecture. On the other hand, it is planned to continue establishing alliances and agreements with other Faculties, Campuses and Universities abroad to create new academic offers, research and interdisciplinary projects that offer students and teachers other options and development opportunities. According to the most outstanding findings of the evaluation process, the areas that need improvement are:

• Student assessment process - review the assessment system and rubrics according to the skills and content offered by the program.

NvB

- Evaluation and quantification of guidance and counseling services, academic quidance service for teachers, and classroom and laboratory services.
- Academic counseling and mentoring services establish mechanisms so that teachers have the necessary tools to offer counseling to students in the program.
- Offer of exchanges, international experiences and the establishment of agreements and alliances with other schools of architecture and institutions abroad.

Academic Assessment for Graduate Program: The Deanship of Graduate Studies and Research (DEGI) regulates the assessment of the Graduate Program. These assessments take place every five years. Since the NAAB's last visit to the School, we have submitted the 2018 Evaluation Report of the Graduate Program, (2010-2016 period). These assessment documents show a comprehensive review of academic and administrative program aspects, following a unified format required for every graduate program on the Campus.

The School uses other instruments such as surveys, informal interviews, census, to collect data that help us make decisions about the future of the School. In addition, we use data collected by the Institutional Research and Assessment Division, DIIA (in Spanish) of the Dean's Office for Academic Affairs of the Campus. The DIIA has the function of conducting research on various institutional aspects and the assessment of student learning. Through the data obtained, it supports the academic and administrative planning of the Campus and the Faculties, fostering a culture of research and assessment that fosters decision-making based on evidence, transparency, and accountability.

5.2.2 Key performance indicators used by the unit and the institution

Program Response: In order to evaluate our success, DIIA and Integrated Postsecondary Education Data System, IPEDS, measure the following key performance indicators:

- Total Enrollment
- Enrollment by Gender
- Enrollment by Age
- Enrollment by ethnicity
- Full-time and Part-time students
- First-time enrollment
- Retention rates
- Graduation rates
- · Number of degrees and certificates awarded
- Student Financial Aid
- Human Resources Employees gender, salaries and categories

Annually, each Faculty must submit a Faculty Achievement Report. This is divided into the priority areas established in the Strategic Plan: Commitment 2018-2023, namely, 1. Research and creation; 2. Academic offer and student support services; 3. University social responsibility and community bonding; and 4. Sustainable management. The key performance indicators are: Number of innovative projects, Number of peer-review publications, Number of conferences in congress, Number of interdisciplinary projects, External Funds, Number of new academics programs, Curricular innovation, Number of research and creative experiences, Number of professional practices, Sustained impact that fosters access, inclusion and respect for diversity, Number of community activities and projects, Numbers of Forums with emphasis in social responsibility and community linkage, Numbers of cultural activities open to general public, Number of collaborative alliances, and Integration of technology, among others



1. Strategic axis: Administration

Object	Project or initiative
Develop agile administrative structures, support services, incentive programs and initiatives to facilitate institutional advancement and quality of academic life for students.	Academic planning for two years
	Budget planning and expense controls
	Administrative optimization
	Student mentoring (group and individual)
	Administrative and faculty training workshops and programs
	Faculty, staff, and student recruitment plan

The University of Puerto Rico's fiscal situation is critical. For the last five years, the UPR's central administration has taken measures to control and reduce the system's operating expenses, thus negatively impacting the School of Architecture's budget. In the adjustments and changes process, the UPRSoA has coordinated workshops and technical talks with the Campus to optimize the management and fiscal administration of the school. These efforts have resulted in staff assignment reorganization, personnel downsizing, and job reclassifications or pay differentials. Similarly, the School produced a recruitment plan aligned with the Campus's axes. These efforts achieved positive results in staff, professor, and student recruitment.

Develop a culture of institutional evaluation and implementation of action plans based on the results obtained.	Data Collection: Surveys, interviews with students, faculty, staff and Alumni
	Student evaluation to faculty
	Faculty peer evaluations
	Administrative staff evaluation
	Student courses and services evaluations

The PDEA 2018-2023 is clear evidence of a path to a planning culture that includes evaluation processes. These processes are supported by other instances of the Campus. At the Campus level, the DIIA and OLAS have been created, as well as evaluations of the administrative personnel. The School prepared the: Student Profile, the six-month evaluation of teachers by students, as well as templates for: peer's evaluations, teacher self-evaluations and of the academic programs.



Update and enrich administrative services through tools and advanced technologies.

Digitized services for students and professors (online courses, course evaluations and online faculty evaluation, assessment processes)

Maintenance and equipment and technology update Plan

Digitization of documents and structuring of file systems on servers and in the cloud

Due to the pandemic, we have incorporated technology not only in academic processes, through the official creation of 90% of our courses to the online format, but also in administrative processes with the purpose of advancing our goals. Many of the student assessment and evaluation processes are digital. On the other hand, we have updated equipment and incorporated technological resources in spaces to offer distance education. The Jesús Amaral Auditorium is in the process of being remodeled with an investment of \$114,000.00. Despite efforts with the Campus' administration to acquire digital cloud space, to store valuable documents of the AACUPR and the academic archives of the school, the efforts and requests have not materialized.

Provide physical spaces that benefit teaching, research and creation.

Maintenance plan and permanent improvements

UPR FAB LAB Project

Improvements to workshop spaces, jury rooms and computer center, research centers and student support centers.

LAAB-Biotropical Architecture Environmental Laboratory

The administrative staff has established a maintenance plan and improvements to the physical spaces of our School, after the damages caused by hurricanes Irma and María in 2017. The affected areas, specifically the bachelors' design studios, were rehabilitated. The concrete slab roof was waterproofed, the acoustical panels were replaced, studio furniture was changed, and floor finishes, painting and improvements to the walls were performed. As for permanent projects, the spaces were redistributed according to our current needs, and the works of Professor Pedro Muñiz's Biotropical Architecture Environmental Laboratory, LAAB, was completed. Larger-scale projects such as the proposal for the creation of a new UPR FAB LAB and improvements for more resilient and sustainable spaces to the SIH Library, were presented to the Chancellor and the Central Administration of the UPR for their support and identification of external funds.

Formalize charrettes, virtual conferences, research, competitions and projects using the agreements with the universities of



Establish formal relations between universities, research centers and institutions to promote the creative and research work of faculty and students.

Mexico UNAM, Argentina University of Palermo, Segovia, Polytechnic of Madrid and Granada.

Increase the number of agreements with other universities.

Promote local and international joint studios

Agreements with public and private agencies and organizations

Visiting professors and students

Establish a fund for additional student scholarships (Juan Marqués, Jaime Cobas, Maruja Fuentes, Beca Tu Coop, and Capitolio Scholarships)

Due to the pandemic situation, in recent years we have concentrated our efforts on offering the best distance education, supporting our professors and students in this difficult time. We were able to maintain relationships with international institutions and architects from abroad, through virtual links while continuing our successful cycle of conferences. In these last three years, due to the pandemic and the university's fiscal crisis, funds for trips and experiences abroad were limited. However, thanks to the efforts of professors, we have established virtual joint studios and projects with other universities. We have established alliances with entities and individuals to offer scholarships and financial aid for students for travel and studies. Unfortunately, the institutional bureaucracy has not allowed progress in the renewal and creation of formal agreements with foreign universities.

2. Strategic Axis: Teaching, research, and creation

Increase the variety and availability of student experiences by incorporating new academic offerings, information technologies, co-curricular activities, and innovative practices.

Conferences, symposiums and exhibitions coordinated with interests of the School

Distance Education and Instructional Modules

Minor concentrations in Baccalaureate level

Review and approval of the Graduate Program academic proposal

Non-professional Masters of 30 credits



PhD in Urban Studies
Development of the digital collection at BSIH and AACUPR

In 2018, we began curricular changes to the existing academic programs with the purpose of updating and making the academic offer more accessible. In addition, three new minor concentrations were created: *Architecture and Engineering, Art, Design and Contexts of Intervention* and *Design and innovation*. In addition, all core courses were changed to distance mode and distance curricular sequences were created: the Professional Certifications for the *Conservation of Architectural and Urban Heritage* and the Certification in *Architecture and Landscaping in Tropical Climates*. Currently, we are working on the *Master of Science in Architecture*. Recent world events have resulted in closer ties between academia and society and its local communities. Courses address these realities more aggressively, incorporating live experiential activities into design studios, core courses in other subjects, and electives courses. We have also given continuity to the cycle of thematic conferences and talks about materials and construction techniques – *Pikoteo*.

Strengthen research skills both in design courses and in history/theory and technology courses.

Review of syllabus to reinforce the research component in design studios, history and theory and technology courses at the BED.

Research techniques course at the BED

Writing and research advisory program at the BED and the M.Arch

Strengthen the research component in design, theory and technology workshops at the M.Arch

Define the tasks of the PEAF, (teaching and research assistants)

Research program and alliances with other institutions to develop end-of-career projects and theses

The Bachelor of Environmental Design's minor curricular sequence change introduced the Research Techniques in Architecture course with the goal to incorporate evidence-based research into design studios. Through this course, we offer students writing skills workshops to reinforce this basic academic domain. Also, students have the option to enroll in individual research courses with professors who are conducting research, or to develop individual research with a mentor professor. Moreover, PEAF students are placed with research professors to be part of ongoing research.

Diverse topics through vertical design conferences (materials and technology,



Integrate relevant topics to the architectural design process, such as, heritage conservation, history, technology, sustainability, and community and urban projects.

participative, and parametric design) in core courses.

Interdisciplinary participation and integration strategies

Core course material coordination to include innovative practices in the profession

We developed the cycle of vertical conferences on sustainability and resilience issues, we also created a series of elective courses with these topics. Each semester we offer new elective courses with the purpose of diversifying the academic offer.

Promote and divulge research project findings and results as well as creative work by both students and professors.

Thesis and End-of-Careers Projects publications repository

Peer - review publications

UPRSoA digital publications Peer review journal (inForma, Digital monographs by professors, Research Centers, Thesis and End-of-Careers Projects publications)

UPRSoA WEB Page, Press release, digital networks

The UPR's Central Administration created the UPR Thesis and End-of-career Project Repository, thus facilitating the dissemination of research and projects of the academic programs. Our academic journal, *inForma, dedicates* a section to outstanding student's projects and research. On our school's web page, we have created a virtual space, *TERTULIAS*, dedicated to presenting current architectural, urban and interdisciplinary projects. The now retired Dr. Enrique Vivoni, created a podcast to expose the projects, publications, and research carried out by the AACUPR.

Facilitate the collaboration of interdisciplinary projects between faculties and programs of our Campus and other campuses.

Research centers interdisciplinary projects

Interfaculty minor concentrations

Natural & Built-environment research

From our research centers, such as CIDi and UPR FABLAB, several interdisciplinary projects have been developed. Similarly, our professors collaborate with professors from other UPR Faculties in the development of research projects. Our minor concentrations have been developed in collaboration with other Faculties, for



example, Humanities and General Studies Faculties. The development of the Casa Klumb Center is an interdisciplinary project that integrates professors from Natural Sciences, Humanities, Business Administration, as well as non-profit entities.

3. Strategic Axis: Link

Strengthen and expand the dialogue and interaction with the professional community to attract to the UPRSoA the experience and knowledge of the real practice.

Collaboration with professional associations

Research centers talks, workshops, projects and research

Licenciature before completing the professional degree (M.Arch)

Professional experience internship - ixP

We collaborate closely with the College of Architects and Landscape Architects of Puerto Rico (CAAPPR), as well as with the Foundation for Architecture (FxA), in the development of accredited courses and technical talks toward professional continuing education and in the dissemination of the profession. These entities also invite our professors and students to present architectural and urban research and projects under development. Our internship program is a link between academia and the profession. With the support of Dr. Anna Georas, director of iXP, we have begun conversations with the Department of State regarding the process of starting the revalidation before completing the professional degree.

Create alliances with the public and private sectors.

Community service

Consulting services to government agencies

Database and link of social networks of UPRSoA collaborators

Casa Klumb Center development plan

The iXP, the Community Design Studio of Professor Elio Martinez, and the bachelor's design studios, especially for the third- and fourth-year level, develop real community projects. Therefore, in addition to exposing our students to real experiences, we offer a service to communities in need. The Centro Casa Klumb project continues to evolve; we are in the development stage of its architectural project for its eventual construction.

Create opportunities to disseminate the knowledge and creative work generated by academic community to the service and

Workshops for adults, teenagers, and children



education of the Puerto Rican community in terms of issues related to architecture, architectural heritage protection, urban development and planning, among others...

Architectural Tours-

- San Juan Oculto

University architectural heritage management and intervention guides

Orientations for schools and libraries of the Country

We continue with our successful summer architecture workshop for high school students. This workshop started in 2004, impacting an average of 100 students annually. We are developing the STEPS platform: online courses open to the public on topics of architectural and urban relevance. During the academic year, students and faculty visit local high schools to offer career orientation talks and our UPRSoA application process.

Promote dialogue and exchange, international experiences and opportunities for academic collaborations.

Study trip courses

International competitions

Joint studios

Academic international exchange programs, Professional and cultural programs

Interfaculty Programs

Every summer we create an academic offer including study trips. In recent years we have visited Brazil, Peru, New York, France, Greece, and Mexico. Due to the pandemic, no trips were made these last two years. In 2022, we restarted the trips with a study trip to Mexico. Our students distinguish themselves by participating in international competitions, recognizing their projects.

4. Strategic Axis: External Resources

Create agile structures that facilitate the management, administration and distribution of resources for the benefit of the entire academic community.

Trust for the School of Architecture

Fiscal tools (Revolving Accounts, Collectors, Petty cash)

Intramural practice

Research funding program

Design Institute of the School of Architecture - IDEA



In the context of the fiscal crisis that the University is going through, the reactivation of our Trust for the School of Architecture has turned out to be a way to financially support the goals of our UPRSoA. We have focused on creating activities that, in addition to disseminating the discipline, generate income exclusively for the benefit of our academic community. On the other hand, through IDEA, we have developed architectural projects carried out by students and professors that not only provide a practice space, but also a source to generate income.

Expand intramural and extramural links for the development and improvement of the UPRSoA projects and activities.	Consulting services for architectural campus projects
	Collaborations with construction companies and professional offices
	UPRSoA space rent
	Community service
	Patent development

We collaborate with the Office of Planning and Physical Development, OPDF (in Spanish) in the development and restoration of architectural projects for the Campus. In addition, through the Design Board, chaired by Dean Jiménez, the Chancellor is advised on architectural and urban matters for the Campus. Regularly, through *Pikoteo*, we invite construction companies to offer technical talks on materials and construction processes. Another way to generate income was by renting our Amphitheater Jesús Amaral. However, due to the pandemic, the initiative was stopped.

Strengthen the relationship with our alumni, architects and construction professionals, as collaborators and sponsors of our UPRSoA.	Alumni services
	Mentoring program for students
	Materials donation program

We maintain a close relationship with our Alumni through a mailing list to keep them informed of our activities and events. Many of them are collaborators and support the school's activities with their knowledge and experience.

Develop education and training seminars and workshops to generate income.	Continuing education program – Webinars for professionals
	Professional certification program
	Workshops for adults, teenagers, and children



Online education

All these activities, STEPS, summer workshops, courses and workshops through our Trust, are sources of income for the UPRSoA.

Promote the search for external resources through the identification of organizations, programs and agencies for such purposes.

Support service for professors and students in coordination with the DEGI

Research Incentive Program at graduate and baccalaureate level

Agile architectural document search and collection program

Matching process of research areas of professors with agencies and programs that offer funds for research.

With the support of DEGI, our professors prepare their proposals for grants and subsidies for the development of projects and research related to their area of knowledge. During the last three years we have obtained grants that reach \$1,000,000.00. The AACUPR has taken the lead in rescuing architectural plans and documents from Puerto Rican architecture firms so that they can be part of the permanent collection of our archive.

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

Program Response: The PDEA 2018-2023 includes the four strategic axes, namely, 1. Administration, 2. Teaching, research and creation, 3. Relationships and 4. External resources. Each axis has its goal, objectives and initiatives for each objective. For this report, we have taken these strategic axes and their respective initiatives as a starting point to define the progress of our mission and fulfillment of the established objectives. The past four years have sustained documented progress towards both the mission and multiyear objectives (see table above in 5.2.2).

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

Program Response: The Ad Hoc Committee that developed the PDEA 2018-2023 worked on the current condition of the School through the situational analysis and SWOT diagnosis (in Spanish) (Strengths, Weaknesses, Opportunities and Threats). This analysis emphasizes the study of the external environment, the internal situation, the available resources, as well as the skills and competencies of the members of the academic community with the purpose of defining the goals and objectives that, in turn, allowed directing specific projects for the academic and fiscal development of the School within a period of five years. Based on these areas, we direct our efforts to continuously improve the learning outcomes and opportunities of the program.



Strengths, Opportunities and Challenges **Areas** Strengths (Internal): We have built a history of recognition as a Discipline public institution at the service of the country. We could assist community groups, government agencies, and public and private institutions to define their context circumstances with the support of interdisciplinary groups from other faculties to direct their transformation. This has been demonstrated by the design studios of professors Elio Martínez, Anna Georas, María Helena Luengo, among others. Through different programs, initiatives, and resources such as the architecture summer workshop, the cycle of conferences, the services offered by our SIH Library and the AACUPR, we have the ability to successfully disseminate and promote discipline in the Puerto Rican community. Opportunities (External): Support the transformation of the country in these critical moments and redefine the responsibility of the architect and the discipline in the built environment. Challenges: The greatest challenge is that, above all, government agencies, since we are also a public institution, recognize that we have the programs, initiatives, and resources to support all government efforts for the architectural and urban transformation of Puerto Rican communities, whether guiding, advising, or designing for Strengths (Internal): There are no other programs or academic Competitiveness offerings in Puerto Rico that can meet the demand and academic performance like ours. We are developing and offering new programs and certificates at graduate and undergraduate level, that opens a diverse and innovative curricular opportunity to our students. **Opportunities (External):** We reached a good number of applications for admission to the UPRSoA programs even though the population of Puerto Rico decreased. There is a lot of interest from alumni and professionals to continue studies related to the discipline of architecture to expand and diversify knowledge in our discipline. Challenges: Maintain the quality of teaching despite the scarcity of human resources (staff and tenured professors) and, on the other hand, the existing fiscal limitation of the UPR System. Strengths (Internal): The academic programs of the Bachelor of **Academic** Environmental Design and the Master of Architecture were recently **Programs** revised. The M.Arch 1.5 program is more focused and adjusted to the new concepts of a master's program according to our institution regulations and the NAAB conditions for accreditation, while the M.



Arch 3.5 opens the opportunity for a diverse and inclusive student profile, admitting students from bachelors other than architecture. Both focus on interdisciplinarity and the development of architectural projects based on research and evidence and an approach to the professionalization of the discipline.

Opportunities (External): The opportunity to enter the world of work more prepared, with theoretical and technological knowledge and skills, aimed at their application to an architectural design project and to work integrated in interdisciplinary professional groups.

Challenges: Because the changes to the programs are recent, we are in the process of properly integrating the research into the design workshops.

Research

Strengths (Internal): UPRSoA has research centers in architecture and urbanism that are unique in Puerto Rico. AACUPR: the only custodian archive of architectural documents and plans in Puerto Rico, the Biotropical Architecture Laboratory, FABLAB, CIDi, CIUDAD, and ESMAT. SIH Library with the largest collection of books and architectural documents in the Caribbean is another important support center for our academic community.

Opportunities (External): There is an urgent need to research and develop issues of ecological sustainability, energy, urban planning, diversity and equity, conservation, history and theory in architecture.

Challenges: The biggest challenge is to have the fiscal budget to subsidize research and projects on these issues.

Faculty

Strengths (Internal): Our faculty is diverse, educated in local and international universities in the US, Europe (Spain, England, France), Central and South America, and in different areas of knowledge of the discipline. In addition, we have a profile of professors with recognized professional practice, evidenced by awards from the AIA, the CAAPPR, among others. On the other hand, we have professors recently graduated from recognized universities who bring new and updated knowledge to our academic community. This combination of knowledge and experiences by different faculty profiles enriches the education and the discussion about the discipline.

Opportunities (External): The economic and social context of Puerto Rico and the world requires the need for innovation, research, and creation. Our professors are immersed in a diversity of projects and research that, in one way or another, contribute to the production of knowledge and innovation in the UPRSoA community. The areas of research and creation are so diverse and enriching that they promote



spaces to interact and interconnect knowledge in order to achieve a deeper and more enriching contribution to the discipline. Challenges: Unfortunately, most of our professors do not have tenure or the security of being hired for years to come. Many of the research opportunities cannot be pursued due to job insecurity. **Strengths (Internal):** High quality and student responsibility. Profile of **Students** bilingual students, committed to education, research, and personal and professional development. Our students, admitted or exchange students in foreign universities, stand out for their attitudes, academic preparation, leadership, knowledge, and skills. **Opportunities (External):** During their time at the UPRSoA, these students with great potential will not only be successful academically but will also be able to partake in extracurricular projects. In addition. once they graduate, they will define a solid community of alumni that supports our UPRSoA and establish communication networks between the practice of the profession and the academy. Challenges: Offer them the tools and resources so that they can continue to grow and evolve as professionals. Foster interest and strong ties with alumni and professionals to keep them engaged with their alma mater. The challenge is to have the administrative structure, that is, outstanding personnel to carry out tasks related to the service, channel contributions/donations, and communicate with alumni. Strengths (Internal): We have the capacity and competitiveness to International establish alliances with foreign universities to promote experiences affairs and exchanges of professors and students. Opportunities (External): There is interest from many foreign universities and institutions in establishing networks, projects, joint studies with our UPRSoA. Challenges: The biggest challenge is to formalize the agreements and alliances due to the bureaucratic processes of the academic institutions. Strengths (Internal): Our physical facilities and technological Resources resources are suitable for offering distance and face-to-face classes. The technological equipment and programming have been updated in the last two years for that purpose. Opportunities (External): Establish alliances with other universities to develop research and creation projects. Hire professors from



abroad who are experts in specific areas of architecture to broaden the scope of knowledge.

Challenges: There is specialized equipment, particularly for the UPR FAB LAB that we hope to acquire to advance some recent research proposals. Likewise, we request space in the Campus cloud to store the digitized documents of the AACUPR.

Although we have up-to-date technological resources, fiscal resources and, above all, human resources (support) to initiate and develop projects are limited.

Professional continuing education

Strengths (Internal): The fiscal structure through the Trust for the UPR School of Architecture and our trained faculty are two factors that allow us to offer a wide range of continuing education courses to professionals in the discipline.

Opportunities (External): Need for continuing education for professional architects and other related disciplines professionals.

Challenges: Define the administrative and organizational structure to establish a strong and diverse continuing education program.

Employment

Strengths (Internal): We promote the continuous commitment of an excellent education from our accredited program that prepares in architecture and offers opportunities for diversification and learning in other disciplines related to design.

Opportunities (External): New opportunities for jobs, professions, and transdisciplinary labor groups due to the construction boom in Puerto Rico and the world.

Challenges: Prepare our students to enter the world of work and prepare them for licensure exams (educate them to do it in English as a second language).

5.2.5 Ongoing outside input from others, including practitioners.

Program Response: The outside input received contributes to: evaluating our performance in comparison with other academic communities similar to ours; keeping current the curricular offer responding to changes in architectural education; responding to the needs required by our professional practice; advancing in research on the discipline and define the role that the School should play in helping meet the challenges of our communities and the country. This input also contributes to the regular administrative and academic monitoring and planning to keep up with the demands of today's world.

As mandated by the institution, and with DEGI's oversight, the Master's Program carries out self assessment every five years. The most recent, the 2018 Graduate Program Self Assessment Report is evaluated by an external committee. Academics with experience in the self-assessment evaluation of architecture schools, composed of former students, architecture professionals, and representatives of the profession's guilds make up this committee. They issue their recommendations for the academic future of the School based on the results of the self-assessment and their professional and academic expertise.

UPRSoA also has input from the School of Architecture's Trust, a non profit organization, established in 2002 through Deed 17 of May 21, 2002, with the purpose of supporting the academic programs, the faculty, the physical resources and the community service. Its trustees are alumni and professionals related to architecture who recommend the aforementioned aspects and help direct the academic, fiscal and dissemination and promotion projects of the UPRSoA.

The Foundation for Architecture - FxA and the College of Architects and Landscape Architects of Puerto Rico - CAAPPR, are allies of our School. Both professional entities collaborate in professional and academic activities for the education, dissemination, and promotion of architecture to students, alumni, professionals and the general public. With the CAAPPR we have a collaboration agreement to carry out continuing education courses and with the FxA we collaborate in disseminating the discipline. In addition, its members participate in our juries, conferences and extracurricular activities.

As established by the Bylaws of the Editorial Board of our inForma journal, only one member is part of our Faculty, the rest are external members with the responsibility of suggesting topics, requesting articles, reviewing, editing and approving the technical content of the journal. This group of international members keep us abreast of global discussions about the discipline.

Pikoteo, the technical cycle of conferences, sponsored by the UPRSoA Student Council, is an activity carried out by experts and companies from the construction world.

Courses that include field trips each summer, joint studios, and community projects are academic collaborations that contribute to academic work and the exchange of ideas and knowledge. Similarly, alliances with other universities contribute to the development and enrichment of academic programs, for example, the Certificate in Heritage Conservation of Architecture and Urban Planning carried out with Dr. Mar Loren from the University of Seville. Similarly, professors such as Humberto Cavallin, Anna Georas and Jorge Lizardi collaborate with external peers in the development of architectural projects and research.

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: The results of the student assessment and the professors' self-assessment on the performance of their courses are some of the tools to make changes and adjustments to the courses to ensure student success. The results of the student's academic performance are discussed in faculty meetings for design studios coordination and in the Committees by Subject meetings. The recommendations resulting from these meetings are submitted to the coordinators and the committees of academic programs to make the pertinent changes in the courses. For example, adjustments have been made to the scale and program of the projects assigned in each level of the design studios. Another recommendation was to establish a schedule for the delivery date of projects at the end of each semester so that these do not coincide with deliveries and exams of other courses. Professors must comply with this calendar so that the student workload at the end of the semester is balanced.

On the other hand, every semester, professors define strategies in their courses to ensure student success and commitment to their education. Among them are: recognizing the syllabus as a contractual document between the professor and the student, this contains the rules and expectations between the parties, calendars and evaluation process, topics and activities to be carried out. It is an institutional requirement that the professor discuss the syllabus with the student in the first week of semester and deliver a copy to the Deanship, establishing that class attendance is essential; respect and communication between the teacher and the student are encouraged, it is also a requirement that the faculty announce to the students their office hours.

At the beginning of each semester, a talk on studio culture is offered, which includes topics on time management, the dynamics of respect and collaboration that should prevail in design studios as a social space for study. In addition, activities that stimulate student participation are encouraged, through individual or group tasks and assignments, for example, oral presentation of the advances of student's projects, through juries, pin ups and critique sessions between students and pairs.

On the other hand, the survey on the student profile reflects particular situations of students regarding study conditions, work schedules, economic situation and the resources they have. The survey also reflects students' academic interests. The results of this survey have led to creating elective courses of interest to them. Also, the Dean holds regular meetings with the governance structure of the School's Student Council (president, vice president, secretary and treasurer and student representatives per academic year), in the meetings held, the calendar of activities and projects is established, in addition, the concerns of the student body are presented to find solutions. Twice a year, student forums convened by the dean are held. In them, students present their concerns about different aspects of the UPRSoA community. These communications with the student body have helped us make adjustments to class schedules, change SIH Library, UPR FAB LAB and the Computer Center schedules, as well as establish administrative and academic protocols, improve student's services, among others.

The faculty evaluation process is a requirement of the institution. Peer evaluations are the primary criteria for Faculty recruitment, retention, tenure, and promotion. Its purpose is to identify the best candidates for teaching positions, make recommendations for promotion, promote quality of teaching and contribute to their professional development and success. The School recognizes it as an essential process for the fulfillment of the aspirations and goals established in our development plan. It offers tools to the faculty for their improvement and academic performance leading to the promotion of academic excellence. In addition, it provides guidance on the dissemination of knowledge, research and creation. It is a constructive, educational process that recognizes the merit of teaching. The institutional documents of the UPR related to the evaluation process are: the Development Plan of the School of Architecture (2018-2023), the General Regulations of the University of Puerto Rico, the Professor's Manual, Certification Number 67 (1989- 1990) of the Academic Senate, Certification Number 141 (2013-2014) of the Academic Senate, Certification Number 113 (2014-2015) of the Academic Senate, among others. The principles that govern the faculty evaluation process are:

- Merit: based on the concept of merit, values and achievements
- Formative: provides tools and resources for the professional and personal improvement of the teacher.

Objectives of teacher evaluation:

- Meet the academic and administrative goals of the Institution.
- Raise the quality of teaching.
- Improve the academic and professional development of teachers.

- Cultivate academic excellence.
- Perform an outstanding professional attitude.
- Promote service to Puerto Rican and international society.
- Foster an ethical environment of respect and tolerance.
- Systematically integrate assessment processes.

The promotion of faculty takes into account a process that begins with a periodic evaluation of individual faculty members by the Personnel Committee, who then delivers their recommendation to the Dean. The Staff Committee, composed of five (5) tenured Faculty with the rank of Full or Associate Professor, representing each of the major academic areas in the School, monitors faculty performance, academic development, and professional accomplishments. The committee is responsible for guiding, in coordination with the Dean, on the teacher evaluation process and maintaining a constant dialogue with those evaluated through a training process.

Professors who are candidates for promotion and those who are candidates for tenure are evaluated in terms of the four assets: Quality of Teaching, Research and Creation, Dissemination and Publications, and University Service. This process is done annually and includes classroom visits, review of evidence, and interviews by the Personnel Committee, and student evaluations of faculty performance in their courses. In both cases, the results of the evaluation are submitted to the Dean of Academic Affairs and the Administrative Board for the relevant processes.

Non-permanent Faculty are evaluated either yearly or on a semester basis, depending on the length of their individual contracts. This includes classroom visits by the Personnel Committee to assess the courses the faculty teaches and are supplemented by student evaluations. The results of these evaluations are translated into recommendations on how to teach classes, carry out evaluations, integrate pedagogical strategies into the courses, assist in research and creation or the professional improvement of the teacher.

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: The School of Architecture instills its assessment policy through the very same administrative and academic procedures and protocols it continuously applies at different levels. The School's Mission within the wider scope of the University as an institution, the quality of teaching and academia, the coherence and effectiveness of the curriculum, as well as the effective results it yields are continuously gauged and audited both as a work agenda and implicitly.

As mentioned above, the Graduate Program is subject to Deanship of Graduate Studies and Investigation, DEGI's standards and administrative protocols including those pertaining to academic self-assessment. At the Bachelor level, the Deanship of Academic Affairs, DAA asks the Faculties to carry out a self-assessment of the Baccalaureate programs every five years. In 2022, we submitted our Bachelor of Environmental Design Program Evaluation 2010-2016.

The University of Puerto Rico established the Office for the Academic Excellence in Student Learning, OEAE (in Spanish). This office requires the UPRSoA to state its Mission Statement and demonstrate its implementation within the overall context of the Institution's own Mission Statement as well as to state and assess the students' expected level of knowledge, skill and capabilities in several dimensions.

These University offices oversee and support the UPRSoA and continuously audit the efficiency of both teaching and learning outcomes. This important introspection is based on scientific data

collection measuring first-hand results through the application of specific questionnaires with rubrics focusing on the recognition of applied skills (learning effectiveness). With the curricular assessment results and findings, the UPRSoA deanship and its faculty, channeled through the Subject matter, Curriculum, and Program Coordination Committees analyze the data and make proactive changes to update and strengthen student learning and the school's aptitude and competitiveness.

The 2018 Self-Assessment Report motivated the UPRSoA to pursue substantive changes to the curriculum. The curricular change process initiated in 2018 with the undergraduate and graduate program committees, the curriculum committee, and the subject matter committees. This rigorous curricular changes process also included the Faculty's approval prior to the additional institutional approval phases.

The 2018 Self-Assessment Report found that very few students completed the 2-year program intime due to diverse factors and that most would complete it in a minimum of 3-years or more. The report highlighted that the 2-year, 56-credit M. Arch. degree program, mainly designed for our BED graduates, substantially limited the sourcing of other graduate candidates. Post- hurricane Maria conditions, the island's financial crisis, and recent hikes in graduate credit costs decreased enrollment to the 2-year Master's program. At the time, many BED graduates were either not inclined to continue to graduate studies or opting to leave the island to pursue graduate studies in continental USA or elsewhere. The 2-year M.Arch Program depended solely on our BED students' completion of 131 credits (to fulfill the NAAB Student Performance Criteria SPC). Although still dependent mostly on our BED students, the program changes make it both more attractive to them with the reduced amount of credits (from 56 to 37), and the time reduction to obtain the degree.

The resulting curricular change proposal consisted of updating the 2-year Master's degree track. To achieve this, the proposal included a revised 4 BED + Track 1.5 year M.Arch (5.5-year in total) route and also the creation of the 3.5-year Master's degree. The reason for the 1.5 Track Master's degree was to add market advantage in relation to the local competition (a 5-year bachelor degree-professional program), and to make the Graduate program more attractive by reducing the completion time (from 2 years to 1 year plus one semester). The creation of the 3.5 Track program was directed at: 1) revising and institutionalizing the 1.5 Prep Program, and 2) expanding, and diversifying the student profile. Whereas Track 1.5 relied on participation from our BED students, Track 3.5 opened the door to anyone with any bachelor's degree from an accredited institution. The minor changes in the BED, made it possible to shorten the Master's degree credits, thus its completion time, without compromising the quality of the education. This change also shortened the period to enter the labor market.

The goal with these two proposed routes was to make the School of Architecture of the UPR the best option for any student from Puerto Rico, the Caribbean, Latin America and Spanish-speaking students from the United States who wish to study architecture at an accredited and Spanish-speaking institution.

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

Program Response: The course sequences conforming the curriculum (Design, History/Theory, Technology, Structures and Practice) are continuously reviewed in terms of their structural coherence as well as on their effectiveness, based on measured results at different levels. The need to properly coordinate all the components sequences and most particularly, those inherent to the professional performance of the School's graduates has been subject and focus of continuous review, discussion and experimentation pursuing the best possible integration of related fields (building technology, services and structure) into the



design process. To this regard, different faculty members are de facto members of the different academic subject matter committees. Each of these committees meet periodically to monitor their efficiency in covering specific material within courses based on NAAB program and student criteria, and to coordinate the topic congruence and continuity between courses.

UPRSoA has the following resources to relate course assessment to curricular development based on NAAB and UPRRP curricular compliance requirements: two Campus offices with assessment expert personnel overseeing compliance with student learning assessment standards; an effective digital tool, called the Online Learning Assessment System, or OLAS, that provides analytical and statistical insight in relation compliance with the three year, and annual established assessment plans; a UPRSoA Dean of Academic Affairs and Program Coordinator led ad hoc committee tasked with periodic reviews of OLAS provided information; and periodic Subject material, Program coordination, and Curriculum Committee assessment meetings.

The 2018 Master's degree in Architecture substantive changes based the new curriculum and course proposal on NAAB SPC compliance (table matching courses with all of the existing NAAB SPCs- once 2020 SPCs were published, 2021 revisions included new course creations, again matching courses with all of the SPC compliance), and the 2018 Self Assessment Report. Since launching the revised BED program and substantive changes in the Master's program, each course's content compliance with SPCs is reviewed at the end of each semester. Our Ad hoc Student Learning Assessment committee created new appraisal rubrics to meet the 2020 NAAB criteria and they were programmed into OLAS.

As aforementioned, the Student Learning Assessment Plan is carried out by both a campus wide effort as well as by our own UPRSoA Deanship. The Campus office responsible for guiding and reviewing assessment tools, domains, and standards is the Student Learning Assessment Office, OEAE, an office incorporated into the Institutional Research and Assessment Division, DIIA (in Spanish) in 2019. The DIIA works closely with and is led by the campus wide Dean of Academic Affairs. Within the UPRSoA, this assessment is led by the Associate Dean of Academic Affairs, in collaboration with both the undergraduate and graduate program coordinators.

The DAA/DIIA/OEAE institutionalized campus wide undergraduate domains as revised in 2019 and which the UPRSoA BED curriculum's content completely achieves are: Information literacy skills, Effective communication skills, Content knowledge, skills or dispositions, Research and creation, Critical thinking, Logic and mathematical reasoning, Social responsibility, and technology.

The institutionalized campus-wide graduate domains revised in 2019 that our graduate curriculum's course content completely achieves are :Information literacy skills, Effective communication skills, Content knowledge, skills or dispositions, Research and creation, Critical thinking, and Social responsibility.

The <u>UPRSoA's rubrics</u>, programmed into OLAS, which allow us to assess our courses by measure of the Campus and 2020 NAAB Student and program domains and criteria each semester are: Design Thinking, Design Process, Research Techniques, Visual Representation, Research Project, Coherence and integration in design, Community Restoration Project, Construction practices, building technical knowledge and skills, Sustainability Strategies / Environmental Systems for Elementary Design, Design III & IV Sustainability Strategies, and Professional Practice, <u>particular criteria</u> of the discipline of architecture and required in the NAAB accreditation process.

The process by which the University and the UPRSoA's Faculty and Dean assesses Student Learning is as follows: the UPRSoA's Academic Affairs Dean in coordination with the



Undergraduate program coordinator and the Graduate program coordinator prepares and submits to the DIIA a student learning assessment three-year goal plans per program (most recent are the 2019-2022 and 2022-2025). In addition, a <u>yearly plan</u> is prepared before each academic year, and an <u>end of year analysis report</u> is produced.OLAS produces quantitative data. Each end of semester, the professors of assessed courses fill out rubrics assigned to their courses into OLAS.

If results do not meet University established scoring targets, then transformative actions or improvements are to be discussed at UPRSoA Faculty and Deanship levels as well as submitted to the DIIA and implemented upon approval.

Qualitative end of semester course assessment occurs through the UPRSoA'a pre- mid- (if applies)-end of semester's various academic subject committee meetings. End of semester committee meetings assess academic performance and compliance with established course syllabi. At the end of 2021, the end-of-semester <u>qualitative assessment</u> set in motion minor course/curricular sequence reorganization changes to the Track 3.5 (See 4.2.5 Master of Architecture). AY 2022-2023 is the first year to implement the changes. <u>2022 assessment</u>, after one year of changes, led to further changes. Effectiveness of the changes will be assessed according to our assessment procedures. Further annual, three-year, and at the end of 2022-admitted cohort graduation (in AY 2024-2025) assessment ensues.

Besides the course contents, the actual means and methods for course implementation are also subject to continuous audit in the UPRSoA. Particularly, courses which are complementary to the main sequence, and alternative courses intended to be credited as a main sequence course, are customarily reviewed with regards to the mechanics of its implementation, and modified as necessary. Design studios, which are necessarily taught on an expert-criticism basis, will often involve a level of subjective judgment. The effectiveness of teaching and learning in these courses is also closely monitored on an individual course basis.

Specifically, the Design Committee, oversees the longest and most fundamental sequence in the curriculum, holds frequent meetings to discuss and coordinate the content of the different course sections in each year. Besides, specific meetings between the faculties of adjacent courses (first/second, second/third,) are held to ensure that the topics along the three-year instructive sequence duly follow the order, complexity and intensity of discussion. The meetings between contiguous years allow for a much needed check and balance on the continuity of themes from one year to the next, as well as specific discussion on the profile of the student arriving and leaving each design level.

As part of the School's continuous self-assessment procedures the rubric is continuously revised and calibrated to better suit the specific requirements of each particular studio.

At the end of each semester, professors complete the self-assessment of their courses. These reflections conclude in adjustments in teaching strategies, the integration of new and more dynamic pedagogical instruments and the updating of the content of the courses that will be taught in future semesters.

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: The instances that are involved in setting curricular agendas and initiatives of both programs are:

Associate Dean of Academic Affairs: Coordinates all academic processes including international exchange programs and proposes faculty hiring to the Dean. Acts as Interim Dean when the Dean is traveling and may represent her at the Campus Academic Senate. The main duties for the Associate Dean consist in working with the Dean on supervising and coordinating the establishment, revision, and implementation of the academic policies in the UPRSoA. The Associate Dean works with the Dean on subjects related to the planning, implementation, and assessment of ongoing and projected academic programs as well as on special issues connected to academic aspects of sensitive nature involving academic administration and/or Faculty, Also, the Associate Dean collaborates in the development of new program offerings and coordinates the creation and revision of courses. The Associate Dean advises the Dean on activities inherent to the academic work, such as: recruitment of personnel; defining the academic loads; institutional assessment; continuous education; admissions; professional improvement of the Faculty; recruitment, admission, retention of students; plans for the development of programs; library; promotions, tenures, and leaves of the Faculty. The Associate Dean also acts as a liaison between the Undergraduate and Graduate Programs Coordinators, and promotes the academic and intellectual collaboration with other academic institutions locally or outside Puerto Rico.

The Graduate Program Coordinator: In collaboration with the Dean, this position shares a responsibility for establishing the philosophy, mission and objectives of the Graduate Program. The Coordinator directs the academic affairs of the Graduate Program, enforces its regulations, and advises candidates for admission and graduation. The Coordinator must establish the necessary administrative procedures to guarantee compliance with all Program processes. The Coordinator is both an ex-officio member and president of the Graduate Program Committee, and advises the Dean on the recruitment and hiring of new faculty members, and once hired, advises them on all matters pertaining to the successful undertaking of their docent duties.

The Undergraduate Program Coordinator: In collaboration with the Dean, this position holds the responsibility for establishing the philosophy, mission, and objectives of the Undergraduate Program. The Coordinator directs the academic affairs of the Undergraduate Program, enforces its regulations, and advises candidates for admission and graduation. The Coordinator must establish the necessary administrative procedures to guarantee compliance with all Program processes. The Undergraduate Program Coordinator is also responsible for counseling undergraduate students with an interest in pursuing graduate studies. The Coordinator is both an ex-officio member and president of the Undergraduate Program Committee, and advises the Dean on the recruitment and hiring of new faculty members, and once hired, advises them on all matters pertaining to the successful undertaking of their docent duties.

Master's Degree Program Committee: The committee is made up of five (5) members: the Master's Program Coordinator, three (3) members elected one by each Academic Subject Matter Committees, and one (1) student representative chosen by and amongst the regular students of the Program. This committee is responsible for the academic content of the Program and will advise the Dean on new candidate admissions. The committee will submit, for the consideration and approval of the Faculty, the norms, procedures and evaluation instruments corresponding to the admission of new candidates to the Program, develop and timely submit to the Faculty descriptive plans of the admission policy. The Faculty will be informed of the result of the admissions process at the last Faculty meeting of the academic year. It will evaluate the School's curriculum, its content, and sequence. It will initiate and advance its revisions. The committee will advise the Dean on any matters related to academic aspects and evaluate proposals for research and make suggestions about them. It will act as a liaison between the Program, the General, and the Academic Subject Matter Committees. It will ensure compliance with the responsibilities of the different committees for academic subjects. It will review, coordinate and integrate the plans and programs of the

different Academic Subject Matter Committees. It will be in charge of evaluating and validating the Master's level courses taken in other recognized educational centers leading to the degree of Master of Architecture. It will work together with the Bachelor Program Committee as a broad committee to establish the academic policies of academic, curriculum, and research affairs.

Bachelor Program Committee: This committee is made up of nine (9) members: the Coordinator of the Bachelor Program, three (3) members elected by and amongst the BED professors, one (1) representative for each Academic Subject Matter Committee chose by and amongst its members and two (2) student representatives elected by and amongst the regular students of the Program. It will be responsible for the academic content of the Program. It will advise the Dean on Program candidate admissions. It will submit, for the consideration and approval of the Faculty, the norms, procedures and evaluation instruments corresponding to the admission of new candidates to the Program, develop and timely submit to the Faculty descriptive plans of the admission policy. The Faculty will be informed of the result of the admissions process at the last Faculty meeting of the academic year. It will evaluate the School's curriculum, its content and sequence. It will initiate and advance its revisions. The committee will advise the Dean on any matter related to academic aspects and evaluate proposals for research and make suggestions about them. It will act as a liaison between the Program, the General, and the Academic Subject Matter committees. It will ensure compliance with the responsibilities of the different committees for academic subjects. It will review, coordinate, and integrate the plans and programs of the different Subject Matter Committees. It will be in charge of evaluating and validating the bachelor level courses taken in other recognized academic institutions leading to the Bachelor's degree in Environmental Design. It will work together with the Master Program Committees as a broad committee to establish the academic policies of the academic, curriculum, and research affairs.

Academic Affairs, Curriculum, and Research Committee: The committee is composed of all the members of the Master's Program and Bachelor Program Committees, and the Associate Dean. The committee's roles and responsibilities are: to design the appropriate procedures to ensure that the philosophy, goals, and objectives of the School are followed in the respective academic program curriculum; to establish the procedures that handle research development in the School; to act on matters of academic nature, and in extraordinary situations, to act on matters pertinent to any of the Subject, Program, and Teaching Support Committees.

Academic Subject Matter Committees: The UPRSoA has the following four Academic Subject Matter Committees: Design; Technology & Structure; and History & Theory. These three committees are composed of faculty that teaches at least one course on the subject or that has a specialty in the area, and a student representative. The role and responsibilities of these committees are: to formulate and review a philosophy, goals, and objectives specific to the subject, in harmony with the philosophy, goals and objectives of the School, the Campus and the University; to formulate, coordinate, and continuously supervise the academic program of the subject matter, in harmony with the philosophy, goals and objectives of the School, the Campus and the University; to constitute a vital forum; and to exchange information on course development, goals and achievements with the members of the committee, and the School community. They will guide and assess any member of our community with course development.

The creation of a new academic program or substantive changes of an academic program must be in harmony with the Campus' Strategic Plan. To carry out the process of creating a new program or a substantive change, the faculty needs to develop a proposal according to the guidelines established by the University of Puerto Rico. This proposal, in turn, must be approved by a series of university bodies: the Academic Affairs, Curriculum, and Research Committee, our Faculty, the DEGI (CEGI), the Academic Senate, the Administrative Board.



and the University Board and Governing Board. Once approved, the proposal must be submitted to the Board of Postsecondary Institutions, JIPs (in Spanish) for final approval (<u>Graduate Academic Program Creation Flowchart</u>). All programs will be evaluated, following the procedures established in the UPR's <u>Certification 45 (2019-2020)</u>, <u>Program Assessment Flowchart</u>, <u>Academic Program Periodic Evaluations Regulation</u>.

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: UPRSoA Faculty professors come from diverse specialties and areas of expertise. (See Faculty Curriculum Vitae), Our Faculty offers courses, both in the Bachelor's and Master's Programs. For professional courses, the School employs Faculty members who hold advanced degrees and licensure in their fields of specialization. Our design studio professors are licensed Architects (in Puerto Rico these have to be members of the CAAPPR), or hold a professional or post professional graduate degree in Architecture. Structures matter course professors are licensed engineers who belong to the College of Engineers and Surveyors of Puerto Rico, CIAPR (in Spanish) or hold a professional graduate degree in engineering. For technology, history and theory areas, a doctoral level degree is preferred. Over 80% of our faculty members are either licensed in their field or have a PhD. The highest earned degrees of the Faculty members in their field are as follows: Academic degrees: nine (9) Ph.D., twenty-eight (28) MArch, and one (1) D Des.S. As for professional licenses: thirty-two (32) are licensed architects, sixteen (16) are certified architects, three (3) are licensed engineers, and two (2) licensed planners. Eight (3) faculty members hold other professional certifications: two (2) LEED, and one (1) Project Management. In addition, some UPRSoA faculty also hold architecture degrees combined with another academic degree such as: urban design, industrial design, arts and education, art history, technology, urban planning, graphic arts, law, business administration, engineering, and structures studies. Our Faculty holds degrees from the following list of places: Puerto Rico, Mexico, Chile, United States, Spain, England, France, and Italy.

Although the number of professors varies depending on the academic offer each semester we have a total of approximately 50 to 55 professors, some full-time (with full academic load-12 credit hours), and some part-time (anywhere from 2 to 11 credit hours). Of these, 15 are tenured, one is tenure-track, and between 35 to 40 are part or full-time professors with an annual or semester service contract.

The Tenure and Tenure track professors have a full-time teaching load of 12 academic credits, and 37½ hours of service, and must comply with all the responsibilities established in their contractual letters which include, engaging in: quality teaching, research and creation, dissemination and publications, and other university services such as faculty and committee meetings. An example of a regular work week for a full time professors who teaches design studio as follows: twelve hours (equivalent to 9 academic credit hours) are spent teaching the design studio, three hours (equivalent to 3 academic credit hours) spent teaching another course, fifteen hours spent in course-preparation, six office hours spent at the university for student appointments, and four and a half hours spent in other committee of faculty related meetings or work. Professors who carry out research projects can substitute up to 50% of their academic load with investigation work, upon approval.



The part-time or full-time non-permanent faculty is hired on an annual or semester to semester basis to provide teaching services. The proposed candidates must meet the minimum academic requirements as outlined by the institution. The contract load of a professor with part-time appointments only establishes teaching credit hours.

Since 2019, five (5) professors from the School of Architecture have retired. Three retired from the design and history teaching areas, and two from the SIH Library. In 2016, two (2) new faculty positions were awarded and in 2021 another teaching position was awarded. Due to the fact that only 32% of the faculty are tenure or tenure track professors, they carry a high burden to cover all of the: student mentoring, committee participation, and research requirements of our School. In May 2022, four additional teaching positions were approved, which once hired, we hope will help balance the academic, research, and service load of each member of the Faculty.

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: In 2008, the School gave its faculty member, Dr. Anna Georas Santos, the task of researching the best way to establish a Professional Practice Internship – IDP – for both undergraduate and graduate students. In 2009, NCARB and the School's administration started a closer coordination in the process of defining the role of an Educator Coordinator within the School. In 2011, Anna Georas was named the School's Educator Coordinator, now School's Licensing Advisor (LA). The Internship was started in the Fall semester of the academic 2011-2012. Since then, she has participated in two of NCARB's Coordinator Conferences in Chicago and has assumed the challenge of informing the entire academic community as to the Path to Licensure. The School has consciously assumed a progressive role in the process of increasing path-to-licensure awareness and, in so doing, has integrated a hands-on Professional Practice Internship (now Professional Experience Internship - iXP) to the overall academic experience. The school has a multi prong approach to the responsibilities of a Licensing Advisor's guidance of our students in their path to licensure:

Keeping informed

- In 2016, the LA assisted NCARBs LA Summit in Chicago and was joined by the school's Student LA.
- In 2017, the LA assisted NCARBs LA Summit in Chicago. The LA was a panelist in the breakout session, The Right Fit: Job Searching and Recruiting.
- In 2019, the LA applied for and was selected to attend the NCARB Scholars in Professional Practice in Connecticut.

Advocacy for a student licensing advisor

- In 2015, promoted the designation of a Student Licensing Advisor with the AIAS chapter of the school.
- In 2016, developed a position description for a Student Licensing Advisor and recommended an election process.
- In 2016, the school's first Student Licensing Advisor attended NCARBs LA Summit in Chicago.

Professional experience internship, iXP (in Spanish) and orientation services It's primary goals are to:



- PREPARE the student for CV development and job interviews
- FACILITATE competitive pairing of students and participating firms
- GUIDE the register of professional experience hours towards licensure
- CREATE awareness of the importance of Community Service.

In August 2020, the iXP became a graduate core course and was assigned a TA. As part of the iXP, enrolled students prepare Illustrated CVs with the support of the professor and TAs, assist job interviews, and compete, as well as the firms for interns, for a semester-long paid internship at the participating firms. The students are required to open their NCARB Record and register a minimum of 80 hours. They are also required to complete a minimum of 80 hours of community service under the Licensing Advisor's supervision.

In August 2021, the iXP was given an office, an institutional email, and two TAs to attend students during office hours or by appointment. The TAs support the iXP enrolled students as well as the school's entire academic community, offering guidance in portfolio/CV development, opening an NCARB record, and registering hours towards licensure. Yearly live Facebook presentations are offered (2021, 2022) detailing the Path to Licensure to the school's academic community. Presently, the iXP office also helps pair candidates when firms send notifications of available positions.

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

Program Response: The School has provided opportunities for professional development to both faculty and staff by means of funding and continuous education seminars. Both the School and the University promote the development of Faculty, staff, and administrators, by offering opportunities for advanced studies, seminars, training activities, and various modalities of leave of absence. These include leave without pay, leave with salary for educational or public service, and leave without pay with financial aid, especially for advanced studies. An additional important employee benefit at the University is the right to study for free anywhere within the Institution. This includes any of the academic programs within the eleven campuses of the University system. Several members of our academic community have taken advantage of these possibilities. Also, our staff is allowed time to participate in an array of on-campus seminars and professional activities organized by the Administration.

The School actively promotes Faculty participation in professional development activities as a means of human resource development. We have sponsored travel opportunities, conferences, and lectures such as ACSA regional, annual, and international meetings, to many faculty members through availability of such funds in the School's annual budget.

The School has created and actively supports several institutes and centers for research. These include the UPR FAB LAB, CIUDAD Urban Think Tank, the Community Design Studio, Klumb Center, LAAB, the AACUPR, and CIDi.

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: The Student Affairs Office offers students an array of services throughout the lifespan of our students' academic career which aim to foster their academic experience while nurturing a healthy lifestyle. The Student Affairs Office has an open door policy. The Dean of Student Affairs and Officer are available for drop-ins, scheduled in-



person and virtual meetings with students. The Office also created a <u>website catering to</u> <u>active/enrolled students' needs</u>. For ease of use, students can add the site to their cell phone's home screen. Some of the services provided by the Student Affairs Office include the following:

Academic advising at the Students Affairs Office services include but are not limited to:

- Outreach recruitment efforts for Undergrad and Graduate School Programs
 - Dean of Student Affairs every semester works on scheduling promotional and recruitment visits and workshops to homeschoolers, public, and private high schools.
 - The Student Affairs Office hosts regular on-campus and virtual Open Houses for both Undergrad and Graduate level during Fall and Spring semesters.
 - The Student Affairs Office also schedules Portfolio Making workshops for Undergrad and Grad admissions purposes.
- Admissions counseling
 - Year long, students are welcome to either schedule an orientation meeting or drop-in for admissions counseling and a facilities tour.
- Admissions and transfers
 - Provides requirements <u>for admission</u> for both Undergrad, Graduate M.ARCH 1.5 & 3.5 Tracks.
 - Provides orientation and paperwork for transfer students (from other institutions) and Intra-University students (from UPRRP) Undergrad and Grad program and accepts transfer credits from other legitimate institutions of higher learning.
- Academic evaluation for undergrad and graduate degree candidates / also for reenrollment process
 - The Dean of Student Affairs and Officer of Student Affairs prepares academic evaluations for students with the following circumstances:
 - Students applying for readmission to our program after one or more semesters absence
 - Upon request for re-enrollment
 - Have requested graduation at the Registrar's Office.
 - Students who receive federal loans or FAFSA and are at fault with the stipulated conditions. In this case students are advised to apply for <u>academic progress revision</u>, a process in which they explain reasons for not having met their <u>financial aid conditions</u> so they may be considered and not be penalized for being at fault.
 - Students who at the end of Fall or Spring semester did not approve 50% of enrolled credits.
- Offers guidance to register and drop/withdrawal courses as well as to counsel about additional minors or majors.
- Provides guidance for students seeking alternate graduate studies and/or post graduate studies, local or abroad.
- Acts as a liaison between administration and student body
 - o Creates, coordinates and promotes student activities and governance
 - o Promotes student clubs and organizations
 - Supports and assists with the Student Council Election process
- Provides orientation on exchange programs and course validation.
 Students are encouraged to participate in our exchange program for a term of one or two semesters. The University holds exchange agreements all over the world with over 200 college institutions. In order to start the application process, students are referred to the International Relations Office.
- Surveys: development and administration of surveys as helping tools to assess and improve our program.
- Financial aid orientation on:



- o Undergraduate level
- o Graduate Level
- In terms of academic advising the Student Affairs Office works side by side with:
- Central Administration's Student Affairs Office
- o Student Advocacy Office
- o Campus Student regulations manual
- Student Counseling Department (DCODE)
- o Office for Students with Disabilities (OSEI)
- International Relations Office

Personal advising and mental well-being The Student Affairs Office responds to the growth needs of students as far as college life goes, offering such services as assertiveness training, conflict resolution, self-esteem development, career planning, and personal growth experience. Some of the services in response to personal advising and mental well-being are:

- Mediate conflicts such as: student-professor, student-student, student-employee.
- Refer students with academic or personal challenges to the Student Counseling
 Department (DCODE) when their needs require the attention of professional help
 such as psychologists, psychiatrists or social workers. Follow-up to those students.
- Evaluate academic records of the students to identify possible conflict areas, interests and needs.
- Help students in the analysis of their needs, interests, aptitudes, abilities, work experience, and lifestyle.
- Provide guidance to students with vocational indecision or other and refer to the proper resource at the university such as:
- Student Counseling Department (DCODE)
- Surveys in order to keep check and balance over students' needs and update our student profiles.
- Acts as a facilitator to promote good communication between the students, the faculty and the administration.
- Coordinate, collaborate and participate in official student activities.
- Periodical meetings with students take form as Open Forums between administration and student body to encourage communication between parties.
- Offer orientation regarding the obligations and rights of students as well as professors according to the academic norms and regulations of the Institution.
- Coordinate student services for students with special needs in conjunction with the Office for Students with Disabilities
- Collaborates with the Coordinators and the Undergraduate Programs regarding conflicting situations that negatively affect the academic performance of the students.

In terms of personal advising and mental well-being the Student Affairs Office works side by side with:

- Student Counseling Department (DCODE)
- Office for Students with Disabilities (OSEI)

Career guidance The iXP offers career guidance at any point of the student's academic career. It is most important for prospective architects to learn and understand the path to licensure and know when to start the process, how to develop a resume and portfolio, and how to secure an internship or job. IXP created a <u>page</u> to orient students on NCARB Licensing Advisor, AXP, and ARE guidelines.



Students who seek other career paths at the Student Affairs office are also given guidance. After a brief interview, a meeting is scheduled. Resources, references, and recommendations are then offered.

Job placement Internships and job opportunities are often channeled through the iXP. Most often architectural firms make contact regarding internships and/or job opportunities at which point the Administration refers them to the <u>iXP office</u>.

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: As mentioned before, diversity, in its most basic connotation implying ethnic diversity, is intrinsic to our historical and socio-demographic condition. Puerto Rico is an island whose population's heritage comes from centuries of mixing cultures and redefining a Puerto Rican condition. In our political context, as part of the U.S., our population, including our student body, is almost entirely composed of what is considered minorities in the continental U.S. –Hispanic or Latino, African-American, Caribbean, and women. We have developed the DEI Plan to promote and implement actions that guide Diversity, Equity and Inclusion, and updated the Studio Culture document, whose last revision had been in 2007.

Human resources: In the context of Puerto Rico, a diverse faculty is one that reasonably reflects the demographic characteristics of our general population. The UPRSoA, in its beginnings, was predominantly male. However, over the past decade, the School has taken on the responsibility of recruiting women and supporting their academic development. This Deanship has focused on increasing the percentage of women in teaching to reach 50%. For the academic year 2021-2022 we reached 45%.

Percentage of women in teaching at the School of Architecture

	•	•		
Academic Year	Women	Men	Total	Woman Percent
2014-15	14	43	57	25%
2015-16	18	37	55	33%
2016-17	12	33	45	27%
2017-18	7	33	40	17%
2018-19	12	35	47	26%
2019-20	15	34	49	31%
2020-2021	18	28	46	39%
2021-2022	24	29	53	45%

Our Professors come from various ethnic backgrounds although the majority are Hispanic and Latin American. While most of the professors are Puerto Rican, in the past years up to the present we have had Venezuelan, Colombian, of Greek descent, Italian, Spaniard, Cuban and Dominican citizens in our faculty.

While the student body at the UPRSoA is an academically select group, they are a good representation of the Island population. Taking into account our specific diversity conditions, the entire school body may be considered part of individual or collective minority groups. Both urban and rural populations are represented, and students from all socio-economic backgrounds can be found at the School. A balance exists among students who have graduated from both public and private high schools. Nonetheless, decisions have been

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made to give students all the tools necessary to excel in their admission process in an effort to ensure social equity and promote diversity. Targeted to identify other talents, the admissions process has reincorporated the acceptance of students through a personal portfolio admissions process. This was done in order to give applicants with weaker academic accolades an opportunity to be admitted to the School by way of showcasing their graphical and creative prowess.

The August 2021 Student Profile, an annual census held by the School, states that 60.4% considered themselves mixed race, 29.2% white, 6.7% black, and 3.7% other. While most of our students are local, the UPRSoA has consistently received international exchange students from the Caribbean, Latin America, the United States, and Europe. At Graduate level, Track 3.5 is a conscientious effort to offer a second path to our M Arch Program for students who are interested in but do not have a design-oriented background. This program has positively resulted in more School diversity as students from different educational or professional backgrounds are now being admitted. On the other hand, the age ranges of our students now fluctuate between 18 and 65 years, and the majority come directly from high school, and obtain a bachelor's degree in Environmental Design while another smaller group comes from bachelor's degrees in other disciplines. Most of our students are full-time students, but the amount of students who hold jobs while studying has increased. Also, the 2021 DIIA data show that the school's student enrollment is made up of 62% women. The School's student body demographics is representative of the rest of the Río Piedras Campus population.

The administrative staff of our School is divided into academic and non-academic professionals. Presently, our staff composition is 65% female and 35% male of Puerto Rican, Cuban, and Italian descent. 16 non-academic staff members work in the Dean's Office, the SIH Library, AACUPR, the Computer Center, and the UPR FAB LAB. 62% of this group are women. The School enjoys a respectful and collaborative work environment. We promote that each employee participates and is heard in decision-making, and on the other hand, we recognize the achievements and actions of the staff to build a relationship of trust and kindness at work.

Physical resources: As a result of the pandemic, the classrooms were equipped to offer virtual classes, laptops were acquired to be able to lend students and teachers scanners, interactive screens and peripheral equipment on a need-base. The School is equipped with desks for left handed students in classrooms. The Campus incorporated the Unisex Restrooms Project into UPRSoA; gender neutral bathrooms that provide a safe, private, and gender inclusive facility. The initiative permanently transformed existing first floor bathrooms to accommodate all genders. The physical facilities provide for the various student groups and organizations, faculty and staff unions to meet to carry out activities that promote diversity, inclusion, and freedom of expression and their right to congregate.

Financial resources: The University and UPRSoA were founded specifically to promote social and economic mobility among under-represented groups in Puerto Rico. Our recruiting and admissions process are not only blind to financial position, but proactive in targeting students from low income communities where a higher education previously has been out of reach. The Río Piedras Campus Financial Aid Office provides services to meet the financial needs of students through the following programs: Scholarship, Study and Work, Student Loans (Federal), at the undergraduate and graduate level, for all students who meet the requirements, exist so that anyone can obtain a university degree. 90% of our students receive financial aid. As the economic fallout of the COVID-19 pandemic continues, low-income students may struggle to pay for housing, food and books, the UPR distributed the largest allocation of federal funds to attune students' basic needs.



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 UPRRP Campus guarantees equal opportunities to both professors and staff regarding recruiting and employment. The Campus does not exclude anybody from participation or benefits, nor does it discriminate against any person for reason of age, race, sex, color, place of birth, social origin or condition, sexual orientation, physical or mental handicap, and political or religious beliefs. The University of Puerto Rico must comply with the provisions of the law Title IX of the Education Amendments of 1972 (Title IX) that prohibits discrimination in the programs and activities of educational institutions of all levels that receive funds federals. Everyone, students, employees, and visitors at federally aided institutions is protected by Title IX, regardless of gender, affective orientation, gender identity, full-time or part-time status, disability, race, or national origin in all programs and educational activities of the institution to which they belong or aspire to belong.

UPRSoA Recruitment Plan

In our School of Architecture, all interested candidates for recruitment have equal opportunity to learn, teach, or work. The UPRSoA Faculty Recruitment Plan is based on the goals and objectives outlined in our Development Plan for 2018-2023, which in turn, are consistent with the aspirations and routes of the Campus. Both plans promote diversity, equity, and inclusion in the UPR System. In particular, our 2021 Recruitment Plan was designed in response to the following relevant situations:

- Increased student enrollment at both the undergraduate and graduate levels.
- New academic programs created at the baccalaureate and graduate levels.
- Changes in the current programs with greater emphasis on research and creation as an essential task that accompanies the teacher.
- A new diverse student profile as a result of curricular changes and the creation of new programs.
- Significant reduction of tenure faculty due to retirements and frozen positions.

Also, the decisions to formulate this plan are based on academic excellence, institutional need, workplace diversity, and equity to meet the requirements of the NAAB accreditation:

- Academic excellence: Strengthening institutional academic quality and excellence to raise the intellectual potential of the academic community.
- Research and creative work: Strengthening research and creation focused on critical issues in society. Search for external funds for the institution.
- Institutional need: Improvement of the conditions and fulfillment of the Institution's
 goals through professional experience and knowledge according to the profiles of the
 candidates who will be part of the teaching staff. Contribute to the economies of the
 institution and of Puerto Rico.
- Diversity: Recruitment of human resources from diverse backgrounds, ethnicity, gender, to provoke ideas based on a broader discussion. Similarly, to create nondiscriminatory environments, open to diversity and intellectual challenge.

Since 2014, three professors have been recruited following our accustomed diverse driven recruitment process. The third and upcoming round of recruitments to occupy 4 faculty positions will follow the same principles, goals and objectives outlined. The UPRSoA will hire the best candidates who meet the plan's expectations and faculty profile. The goal for the next five years is to reach 60% tenured professors and 40% full-time non-permanent faculty.



On the other hand, the process of recruiting non-faculty staff is critical due to the current university system fiscal crisis. Alike Faculty, no staff positions openings are available. Although the need for personnel is necessary to support teaching and research and to offer better services to students and faculty, it has not been possible to hire personnel. Therefore, the School has worked on a reclassification and redistribution plan of tasks for the existing employees. These have received bonuses and salary increases as a result of their reclassification. Albeit the best efforts, the UPRSoA continues with a need for additional personnel to maintain and improve services.

Faculty and Staff Demographics

DIIA statistics show a recent significant reduction in UPRRP employees. The number of teaching and non-teaching employees in 2016 was 3,289, 52% of which were women. In 2022 the number dropped to 2,538, while the percentage of 52% women remained steady. In the last five years, the UPRRP has seen a 23% decrease in employees. Meanwhile, in the UPRSoA, the number of non-teaching employees has been reduced from 21 to 16 employees. However, it is worth noting that our student enrollment has remained at 400-425 students in recent years. An increase in student enrollment is projected with the opening of new academic programs. It should be noted that the number of professors at the School has not been reduced in the last five years, fully meeting the teaching needs of the academic offer. However, the number of professors with positions continues to drop from 22 in 2014 to 16 in 2021, due to retirements.

The results have revealed the significant presence of women in a profession that has historically been related to the masculine. The data of the last six years of the DiiA on the student profiles of the university system expose this. The percentage of women who enroll in the architecture career is higher than that of men. From the latest information obtained from the 2020-2021 academic year, it appears that 61% of enrollment at undergraduate level and 66% at the graduate level were women.

Similarly, women exceeded the degrees conferred at the Baccalaureate level and at the Graduate level in the last five years, reaching 67% in 2019-2020 in the first and 58% in the second in that same year. Both results declare that the presence of women in the academic programs of the School of Architecture of the University of Puerto Rico is comparable and even higher in numbers than that of men.

Currently, although we speak simply of increases in numbers, these actually represent winds of transformation in the ways of thinking, access to information and changes in social and cultural paradigms that, little by little, and with a lot of effort, have been achieved. Unfortunately, this rhythm sometimes picks up speed and sometimes stops, especially in the professional world that is more distant from equality, hierarchy and salary justice.

However, it should be noted that also from the academy, the teaching positions occupied by women have been increasing, although not at the same rate as the student body. Our School began with a group of teachers that excluded the female presence. Currently, 45% of the faculty at the School are women versus 61% - 66% of female students. This may represent an increase, albeit slow, in the work environment for the next few years. As we mentioned before, 62% of the non-faculty staff are women.

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.

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Program Response: At our School of Architecture we have the commitment and responsibility to continue educating about what architecture is. This duty extends to different levels, and local and international populations. The Dean of Student Affairs of the UPR School of Architecture has been given the task of establishing a Student Recruitment and Dissemination Plan (revised in March 2021), with the purpose of educating the population regarding what architecture is and the role it plays in our society. At the same time, it approaches a profile of individuals who may be interested in studying architecture to make it their profession and life career. Since the beginning of the 2016-2017 academic year, the Deanship of Student Affairs, in charge of the Assistant Dean of Student Affairs, Arch. Anixa González, has been working on establishing an annual protocol that includes a description of the initiatives, the calendar of the activities to be carried out year after year, and the evaluation of its effectiveness. This plan has had positive effects, reflected in a recurring increase in enrollment at the undergraduate level from 60 to 89 students admitted for the 2017-2018 academic year, 85 students in 2018-2019 and 83 students in 2019-2020, 87 in in 2020-2021, 90 in 2021-2022 and 93 in 2022-2023. This, despite situations beyond our control such as the university strikes, Hurricane María and the current pandemia that disrupted our country.

The general objective of this student outreach, Recruitment and Dissemination Plan is to promote and publicize our discipline of architecture and recruit the best students for the undergraduate and graduate academic programs of the School of Architecture of the University of Puerto Rico, Rio Campus. stones. The specific objectives of this Plan are:

- Promote the importance of our profession at public level.
- Educate about what the programs offer and eliminate obstacles so that those interested in our profession are part of our academic community.
- Identify populations, profiles and characteristics of potential students for academic programs.
- Define effective recruitment strategies to be visible to students and create an environment that promotes dialogue and the exchange of information.
- Plan outreach and recruitment events according to defined profiles and strategies.

As part of efforts to maintain a robust and diverse enrollment, we have established partnerships with public schools of the Island. We visit and offer talks in public schools with the aim of spreading the discipline and recruiting talented candidates to be admitted to the School. We have identified schools with underserved, high-poverty, and higher percent Black populations to host talks and encourage interest in our profession. In addition, our Architecture Summer Camp for high school students, created since 2004, has the objective of offering young people interested in art, design and architecture academic experiences related to the discipline. Every summer the camp offers scholarships to low-income students interested in the discipline of architecture.

Once we increased student's enrollment, adjustments were made to the admission and selection processes for new students. The group of new students is divided into 60% by the General Application Index, IGS (in Spanish), 20% students who come from other faculties of our university or other institutions and 20% by portfolio. This last group has an IGS lower than the established one, therefore, we periodically evaluate their academic performance to, if necessary, provide them with adequate learning support or tutoring services. Our School has a social and academic responsibility to help ensure equal opportunity, equitable educational participation, and equitable outcomes by meeting the various needs of all students.

Recruitment efforts at the undergraduate level are evident at the graduate level. 75% of our bachelor students apply for our Master of Architecture at Track 1.5. With the creation of Track 3.5, for students who come from other bachelor programs, enrollment at the graduate level



increased by 20%-25%. As part of the graduate-level recruitment plan, we announce this route in other faculties of the Campus and the UPR System, we hold Open Houses twice a year, and we regularly hold virtual orientation meetings for admission to the program through Teams.

Once recruited, we carry out activities to strengthen and support our academic community. The sense of self-worth and belonging is nurtured when students enter the UPRSoA, as the selection process is highly competitive. They understand, upon entering, that they are part of an academically elite group. Realizing that self-esteem and self-worth are important characteristics that at times require significant nurturing, the Institution employs professional counselors available to the students.

In order for students to receive the tools and facilitate the teaching-learning processes, academic mentoring has been channeled for emotional and academic support. In recent years our students have experienced unfortunate situations such as hurricanes, earthquakes and the pandemic, added to personal situations to which youth are exposed. Through the Student Development Counseling Department, DCODE (in Spanish), professional help services are offered to students aimed at satisfying their study, vocational, personal and family needs.

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: Both the Campus and the School of Architecture are committed to providing our Faculty and students with a positive and respectful learning environment. To achieve this goal, the School of Architecture has created and implemented policies that define the way in which this learning culture takes place. Every member of our School has access to the documents that regulate those policies through our website. The University of Puerto Rico is governed by federal, state, and institutional laws and regulations to further Equal Employment Opportunities & Affirmative Action. These are:

Office of Compliance and Audit of the University of Puerto Rico

Oficina de Cumplimiento y Auditorías – Universidad de Puerto Rico (uprrp.edu)
Provides support, coordination and assistance in compliance efforts throughout the University Campus with respect to federal and state laws as well as institutional regulations. The Office also intends to promote the highest standards of ethical conduct for those who represent and act on behalf of the institution. The Office works closely with each unit to build on existing compliance structures such as:

- Promote a culture of compliance and ethics both in the Faculties and in the administrative areas of the Institution.
- Coordinate compliance and reporting efforts including: reporting, policies and procedures, and contact information for those with innate or designated primary compliance responsibility.
- Assist the different units in the development and implementation of training on the relevant areas of compliance according to the functions of their unit.
- Review changes in federal and state legislation, notify the responsible units and coordinate efforts to temper our regulations in accordance with said changes.
- Assist in the identification of faults or compliance requirements regarding university policies. Serve as support or facilitator to the units in the efforts to correct the deficiencies indicated by internal or external auditors to the Campus.



Title IX

https://www.uprrp.edu/2021/09/recordatorio-sobre-las-nuevas-regulaciones-de-la-ley-federal-de-titulo-ix/

The University of Puerto Rico must comply with the provisions of the law Title IX of the Education Amendments of 1972 (Title IX) that prohibits discrimination based on sex, in the programs and activities of educational institutions of all levels that receive federal funds. It is a federal law that was enacted in 1972 to ensure that staff and students in educational institutions are treated fairly. Everyone, students, employees, and visitors at federally aided institutions is protected by Title IX, regardless of gender, affective orientation, gender identity, full-time or part-time status, disability, race, or national origin in all programs and educational activities of the institution to which they belong or aspire to belong. To ensure compliance with the provisions outlined above, contained in Title IX, the Río Piedras Campus of the University of Puerto Rico has designated a Title IX Coordinator as the main contact and responsible for the preparation, adoption and compliance of the dissemination of this policy.

Equal Employment Opportunity

Igualdad de Oportunidades en el Empleo – Universidad de Puerto Rico (uprrp.edu)

The public policy of the government of Puerto Rico and the United States seeks to ensure that no employee or applicant for employment be discriminated against on the basis of race, color, national origin, sex, religion, age, veteran status, disability, and genetics information. This public policy is supported by the Constitution of Puerto Rico and by extensive local and federal legislation, which expressly prohibits discrimination based on gender in employment. The Office of Equal Employment Opportunities ensures that the Río Piedras Campus of the University of Puerto Rico complies with these laws.

<u>Disponibilidad de Plan de Acción Afirmativa 2021-2025 – Universidad de Puerto Rico</u> (uprrp.edu)

Law No. 212 of August 3, 1999, as amended, known as the Law to Guarantee Equal Employment Opportunities by Gender, requires the Río Piedras Campus of the University of Puerto Rico (UPR) to prepare an Affirmative Action Plan. It includes all the policies of the UPR System and the Río Piedras Campus that guarantee equal employment opportunities and prevention of gender violence.

plan-accion-afirmativa-2021-2025-UPR-RP.pdf (uprrp.edu)

Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (20 USC § 1092(f)), originally known as the Campus Security Act, is enforced as required by Federal Law. Our student services personnel, including the Dean of Students and Student Affairs Officer, are required to attend Jeanne Clery Act training seminars. All faculty and administrative personnel are required to complete a minimum of ethics courses and presentations. Institutional policies regarding safety are readily made available to students and security measures presentations are given every semester including student activities such as Freshmen welcome events. https://tituloix.uprrp.edu/index.php/que-es-la-ley-jeanne-clery/

UPRRP Handbook for Undergraduates Programs (2016): Summarizes diverse aspects regarding the rules, regulations and services that influence the students' everyday life in our School. This regulation has the purpose of exposing the rights and responsibilities of students as members of the academic community. The regulations establish the necessary structures that grant an effective participation of the students in the university dynamics, and a series of rules of engagement directed to foster a positive interaction within their community. https://www.uprrp.edu/wp-content/uploads/2017/05/CATALOGO-VERSION-FINAL-mayo-2017-rev..pdf



UPRRP Handbook for Graduate Programs (2020-21): Summarizes diverse aspects regarding the rules, regulations and services that affect the progress at the Graduate Program. A revised version of this document was produced in 2021.

Certificación Núm. 95, Año Académico 2019-2020 del Senado Académico, Articulates and regulates the review of the Academic Policy for Graduate Studies at the Río Piedras Campus. http://graduados.uprrp.edu/wp-content/uploads/2022/06/cert-95-sa-2019-2020-1.pdf

UPRRP Faculty Manual (Manual del Profesor in Spanish) — Dean's Office for Academic Affairs - Río Piedras Campus. This manual serves as a source of information and reference for the integration, knowledge and performance of teachers as members of this university community. As part of it, the rights and obligations of faculty towards students and the institution, as members of a learning community, are presented. MANUAL-DEL-PROFESOR-DAA.pdf (uprrp.edu)

UPR General Student Regulation (2017) These Regulations have the purpose of exposing the rights and duties of students as members of the academic community, establishing the necessary structures for the most effective participation of these in their university life and instituting the rules that best enable the daily coexistence of students among themselves and with other members of the community. RGE Comp Abril 2017.pdf (upr.edu)

UPRSoA 2018-2023 Development Plan: In addition to outlining the path to follow for five years, it stresses the importance of a healthy learning environment to provide a rich community that can foster collaboration, interdisciplinary learning and creative actions.

UPRSoA Faculty Regulation (2006) of the Rio Piedras Campus: they regulate the rights and duties of our Faculty and have provisions regarding the duty of the faculty to clearly instruct their students on the goals, evaluation methods, and, any other specifications pertinent to their courses. They also provide for faculty and student representation on all instances of curricular planning and definition of academic policies in the School.

UPRSoA Graduate Program Regulation (2020): They define the requirements and procedures to be followed by the students throughout their graduate studies at the School.

UPRSoA Studio Culture Manual (2022): This document summarized the School's policies regarding Studio Culture, including the Vision & Mission of our School. It delineates the values that should inform Studio Culture, including the rules and regulations that already apply to the Design Studio dynamics. It promotes better practices of time management and lists the different services that support studio work. More important of all, this document clearly expresses the interest of our Institution in establishing a healthy learning environment that we consider has to be the core and reason of our Studio Culture.

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: The UPRSoA building was built in 2004, so it complies with current regulations and building codes. However, minor changes have been made to the spaces to improve physical conditions for a barrier free building. The Campus has several support offices for the university community with different physical and/or mental abilities.

With the support of the Office of Services for Students with Disabilities, OSEI (in Spanish) compliance with the rights of people with disabilities is ensured, guaranteeing their equal



participation and access to the services, programs and activities available to the university community in general. https://estudiantes.uprrp.edu/servicios-al-estudiante/osei/

Among the services offered by OSEI are:

- Evaluate and recommend reasonable accommodation services or modifications for students with disabilities in the classroom.
- Intercede in conflict situations in relation to reasonable accommodations or modifications.
- Coordinate early enrollment process for students with disabilities.
- Specialized transportation for students with disabilities within the Campus and its surroundings.
- Coordinate services of sign language readers and interpreters.
- Offer conferences, workshops and orientations to the university community on issues related to people with disabilities.
- Refer students with disabilities for academic and vocational counseling or guidance.
- Acquisition of equipment, technology and assistance to facilitate their learning processes.

The Department of Counseling for Student Development, DCODE (in Spanish) is attached to the Deanship of Students of the University of Puerto Rico. DCODE is a multidisciplinary team of professionals with specialized academic preparation in Counseling, Social Work and Psychology and with licenses to practice our respective professions in Puerto Rico. Has the mission of offering a professional help service to students aimed at satisfying their study, vocational, personal and family needs. https://estudiantes.uprrp.edu/departamento-deconsejeria-para-el-desarrollo-estudiantil/

Among the services offered are:

- Individual and group counseling
- Individual and group psychotherapy
- Support groups
- Administration and interpretation of inventories of vocational interests
- Workshops on topics related to: Emotional Well-being,
- Strategies for academic success
- Career guidance and counseling services (Guidance on academic offerings from universities and internships and on financial aid for students in or outside of Puerto Rico)
- Guidance on applications for entrance exams and placement to graduate programs (EXADEP, TOEFL, GRE AND GMAT)

In case of any controversy or situation that affects the performance or violates the rights of this population, the campus has the office of the student attorney, this office advises students on their rights and duties, seeks creative solutions to disputes with other instances of the Campus, and directs the processes to deal with said controversies in the corresponding instances.

The Campus has an Employee and Immediate Family Support Program, PAE (in Spanish) available for faculty and staff. It is the public policy of the Commonwealth of Puerto Rico to ensure the comprehensive health of public servants and their immediate families. For this reason, Law No. 167 of August 11, 2002 was approved. The creation PAE was created to comply with said law, and with the goal of preventing, identifying, and properly managing the entire range of situations that cause occupational problems. PAE assists in the process of educating, preventing, and promoting healthy lifestyles for both the worker and his or her immediate family. https://www.uprrp.edu/wp-content/uploads/2015/10/boletin-octubre-2015.pdf



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: Studio-Based Learning Spaces or design studios are divided between undergraduate and graduate building wings. The UPRSoA encourages the integration of all Master's program students (Tracks 1.5 & 3.5), for this reason, the design studios are located in the same space. All of the design studios are located on the second floor, along with support facilities, faculty offices, and other research centers. Each one has individual spaces for students and areas for jury and critique.

The Graduate Program has five traditional studio spaces located in the graduate wing of the building. Each studio receives natural lighting from the north façade, each one has twelve (12) workstations, walls for presentations and juries, a kitchenette and lockers. In addition, we have a biotropical architecture design and research workshop with space to make models and eight (8) workstations. The graduate wing also has ten (10) workstations for students working on thesis or individual projects, and two seminar rooms. The Tom Marvel Hall (970 square feet) is a jury room for the Graduate Program and also an area for smaller conferences and faculty meetings. The Undergraduate wing is an open floor space that has 16 design studios with fourteen (14) workstations each, divided by partition walls. The halls and the central space are used for pin-ups and juries. In both graduate and undergraduate wings, entry doors are equipped to comply with all life safety and universal access requirements, and the mechanical elevator provides access to the second floor. However, due to the design studios being located on the second floor, classroom 105 on the first floor is furnished with drafting tables to convert it into an accessible design studio in case it is necessary to offer a class with someone with a disability.

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: With the pandemic, a large number of spaces at UPRSoA are designed as an interactive learning space. The spaces are multifunctional and flexible and are transformed according to the pedagogical and academic needs that are required. In them, lectures, workshops, distance courses and even juries and pin-ups can be offered.

Classrooms and Seminar rooms Six (6) 750 square foot classrooms (a total of 4,500 SF) on the first level and two (2) 800 square feet seminar rooms in the Graduate wing on the second level are equipped with computers, screens, projectors, speakers, cameras for online courses. These resources allow professors to record classes while they share and interact in real time with students. For face-to-face classes it is equipped with a desk for the professor and 30 students' desks for both right, and left-handed students.

Jesús Amaral Auditorium (2,125 square feet) has a capacity of 150 people. In 2022, its projection technology and lighting system was updated to include hybrid teaching/broadcast capacity. Classes, conferences, and curricular and extracurricular activities take place here.

Tom Marvel Hall (970 square feet) is a jury room for the Graduate Program and also serves as an area for smaller conferences and faculty and students' meetings. It is equipped with two interactive panels, computers and cameras.



Santiago Iglesias, hijo Library (11,500 square feet) is the only specialized architectural library at the University of Puerto Rico and houses the largest collection in the Caribbean. The SIH Library includes study and reading rooms, classrooms, multi-media room, and a copy center. The former slide room was transformed into a collaborative learning space, as a result of a joint experience between third year architecture students and graduate students on a course of library administration. Workshops and lectures about research development, strategies and information competencies for both Undergraduate and Graduate programs are held in the SIH Library.

University of Puerto Rico's Architecture and Construction Archive, AACUPR (in Spanish) (14,000 sf approx.), founded in 1986, holds 114 collections pertaining to the work of architects, landscape architects, engineers, contractors, photographers, and artists. The rescue, conservation and dissemination of the architectural values of Puerto Rican heritage is the AACUPR's mission. It also houses a repository of historical documents: drawings, photographs, art, and scale models from the 20th century to the present. The administrative offices, two seminar rooms, a podcast studio and library, conservation lab, and workroom with large tables to review plans and documents are on the first floor while the entire second floor of the archive houses the repository.

UPR FAB LAB (1,300 square feet) provides the adequate tools, technology, and personnel for making, prototyping and researching in an academic environment. It focuses on providing a collaborative platform with the ability to host architects, engineers, designers, makers, researchers, students, and innovators both from our institution, as well as external community collaborators in a center for project development. The UPR FAB LAB houses the following tools and technology: 3d printers, vinyl cutters, laser cutters, CNCs, and manual tools to facilitate research, creation and invention by supporting a multidisciplinary and collaborative environment in and around the Rio Piedras Campus.

Computer Laboratory (1,980 square feet) has two classrooms with 20 computers, PCs and Macs, each one. In these classrooms, professors offer courses in Geographic Information System (GIS), Virtual Reality (VR), Rendering (3-D), Computer Aided Design (CAD), Computer Aided Engineering (CAE) and Graphic Design programs. (Computers software: AutoCAD, Revit, SketchUp Pro, Rhinoceros, Adobe CreativeCloud (Photoshop, InDesign, Illustrator, Acrobat), Enscape, Microsoft Office (Word, Excel, PowerPoint), NX, CREO, Lumion, Etabs, SAP200). These classrooms are available to the student when there are no classes, during regular office hours.

ESMAT (400 square feet) is a multidisciplinary laboratory dedicated to the investigation of materials and structural components, based on practical, and interactive experience. It has a wide collection of local and international products and access to the international Material Connection database.

All these teaching spaces are provided with built-in media resources. The UPRSoA technology support staff, in conjunction with the Division of Academic and Administrative Technologies - DTAA, manages the in-college resources and coordinates to maintain our classrooms.

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: Our faculty has multiple options at our physical facilities for meeting with students for research, mentoring, and advising. Twenty-five (25) professors' offices (50 square feet each) are located in the undergraduate wing of the second level. Sixteen (16) of



these offices are assigned to tenure and tenure-track professors, and the rest are shared between full-time and part-time non-permanent professors. Conferences and offices of the Dean's Office or the Students Affairs Office, can also be used by professors to hold meetings. It should be noted that many of the meetings are successfully being held virtually. On the other hand, the Professional Experience Internship Office, iXP (575 square feet) (professors and teacher assistants) offers support services to undergraduate and graduate students to promote the professional experience and to facilitate the path to licensure.

Some professors have their research spaces equipped with the necessary equipment according to the research they carry out. Some of these spaces are:

Biotropical Architecture Environmental Laboratory, LAAB (2,400 square feet), focuses on capitalizing on the strategic geographical location, and the climate of Puerto Rico. It includes four essential facilities: wind tunnel, heliodon, troposphere, and the Biotropical Architecture Design and Research Workshop.

Center for Design Research, CIDi This center occupies 2,000 square feet of the UPRSoA. Facility includes areas for researchers, desks, storage, and other office furniture. Equipment available include an Extech MO50 Compact Pin Moisture Meter, an Extech IR250 Mini IR Thermometer, Extech RH390 Psychrometer, a Flir Infra-red cam, and twoMicroBio MB2 Bioaerosol Sampler units and one calibration kit. Additionally, the center has available a first generation HoloLens, three Oculus Quest VR, two Asus V500C computers, one IBM ThinkPad desktop computer with a processor i7-3770r and a HP VR Backpack computer with 8th Gen Intel® Core™ i7 processor and NVIDIA RTX™ GPU and harness. Additionally, we have access to the cluster of computers at the High-Performance Computer Facility at the University of Puerto Rico, with both the hardware and applications necessary to analyze nextgeneration DNA sequencing data (QIIME, MG-RAST, FLASH, Topiary Explorer, MetaPhlAn, PICRUSt, and LEfSe).

Center for Interdisciplinary Urbanism, Environmental Design and Development - CIUDAD (575 square feet), is the urban culture and sustainability think tank offering complementary academic perspectives. This area has three (3) individual offices for professors attached to this center.

The SIH Library, the AACUPR and the UPR FAB LAB are also spaces for professors to conduct their investigation, depending on the research focus. Each of these areas have individualized spaces to work and the technological resources and information technologies to do research, according to their line of investigation.

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

Program Response: In addition to the aforementioned physical resources, technological resources are added, both encouraging pedagogical innovation by providing a wide range of teaching spaces and the latest technology to enhance them. In the last three years, UPRSoA has implemented the Green Initiative, promoting the generation of less waste and better use of the available resources, transitioning the UPRSoA from the use of printing paper to digital presentations. This enables a more collaborative workspace, a better track of the design process, an easier platform to interact and include multimedia resources, and remote participation.

The federal funds granted as a result of the pandemic lockdown allowed the acquisition of equipment and technology to adjust the courses to the change from face-to-face to distance learning mode. The classrooms, auditorium and studios were equipped with remote teaching and broadcast equipment that will allow the UPRSoA to offer additional teaching-learning



options and new instructional tools. In addition to these resources, support and services were provided to faculty and students through the Instructional Technology and Distance Education, TIED (in Spanish) for distance learning courses. The University of Puerto Rico established the continuity of distance learning academic offerings, using alternative platforms and methods supported by technology. The TIED staff participated in all related efforts to facilitate the transition of the faculty from face-to-face to distance courses and were called to participate in a Campus committee for these purposes. http://bibarquitectura.uprrp.edu/index.php/tied/

Technological Resources

Digital Printing Lab, LID (in Spanish): The Digital Printing Laboratory is an academic resource for both faculty and students. This serves as a classroom, workshop area, and study area. The Laboratory has computers that have the MAC OS or Windows Operating System.

The computers are connected to the University network and the Internet, which allows academic procedures such as course selection, enrollment payment and information search on the network to be carried out. The LID has word processing programs, computer design programs such as AutoCad and Revit, computer engineering programs such as Pro/Engineer, and three-dimensional (3D) rendering programs such as SketchUP, Rhino, and 3-D Max. In addition, the LID has a system for digitizing documents, photos, negatives or films and a team of black/white and color printers for printing the work of the students of our courses. LID is open until 9:00 pm. It has ten (10) PCs and four (4) printers, three (3) 42" plotters and one (1) oversize laser printer.

Our IT Coordinator (LID manager) is the liaison between the campus IT Department, Division of Academic and Administrative Technologies, DTAA (in Spanish), and the Central Office of IT, Central Administration Information Systems Office, OSI AC (in Spanish). The emails and accounts to access the computers and the wireless network are created and managed by the DTAA. They also create the accounts for visitors upon request of the Dean's Office. The institutional benefits and license access are managed by the OSI AC. Other services and programs licenses are managed by our local servers, managed by our IT Coordinator.

	UPRSoA's Hardwar	e Resource Inven	tory	
Library		AACUPR	1 TV (Mobile)	
Room 1	1 TV (Wall)		1 Viewsonic Projector (Mobile)	
Room 2	1 Viewsonic Projector (Ceiling)		Platform scanner (large format)	
Room 3	1 Infocus Projector (Mobile)			
	Slides and negatives scanner			
CIDI	1 Promethean Interactive	207		
	Display	Room A	1 Promethean Interactive	
	1 Infocus Projector (Mobile)	Room B	Display	
	1 Dell Backpack Computer		1 Promethean Interactive	
	(VR)	Room C	Display	
			14 PC Dell	
ESMAT	1 Promethean Interactive		1 Infocus Projector (Ceiling)	
	Display		14 PC Dell	
Seminar Room	1 Promethean Interactive Display	Jury Room	2 Promethean Interactive Display	
Classrooms Room 101	1 Infocus Projector (Ceiling)	FabLab Conference Room	1 TV (Mobile) 1 TV (Mobile)	



1 Dell PC **Equipment's** 4 TV (Mobile)

Room 102 1 Infocus Projector (Ceiling)

Storage 1 Infocus Projector (Mobile)

1 Dell PC 2 Promethean Interactive

Room 103 1 Infocus Projector (Ceiling) 2 Profine interactive

Display (Mobile)

Inlocus Projector (Celling)

1 Dell PC
Room 104 1 Infocus Projector (Ceiling)

1 TV (Mobile)

Room 106 1 Infocus Projector (Ceiling)

Room 105 1 Infocus Projector (Ceiling)

1 Dell PC

Cyber Presence

Our main web page has UPRSoA up-to-date information. Other support areas also have their web pages like the SIH Library, AACUPR, FabLab, CIDi. We also have a presence in social media with Facebook and Instagram pages.

Escuela de Arquitectura http://www.ea.uprrp.edu/ https://earq.uprrp.edu/

FabLab https://www.fideicomisoarquitectura.org/fablabupr

AACUPR http://aacuprservicio.blogspot.com/

Biblioteca Santiago Iglesias, hijo https://bibarquitectura.uprrp.edu/

CIDi https://cidi.online/

Facebook https://www.facebook.com/EArquitecturaUPR Instagram https://www.instagram.com/uprarchitecture/

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: During the pandemic lockdown, the UPRSoA was offering all its courses online. The classrooms were equipped with the necessary broadcast technology to offer courses in our facilities. Online library services were offered, as well as those of the AACUPR, and the cycle of conferences was held through Facebook Live, with a larger audience and international reach. Support was given to the faculty for the acquisition of hardware and software to offer the courses from their homes and they were supported in the design of the online courses. Similarly, surveys were conducted to identify needs in the student community and provide the necessary equipment to take classes from their homes. In January 2022 we return to offering courses in face-to-face mode with only 5% of online or hybrid courses. For these courses that are carried out in distance mode, we have the technology and physical resources to offer them. The recent remodeling of the Jesús Amaral Auditorium integrates updated technology to offer virtual conferences.

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: For the past century, UPR has built a rich legacy of education, research, and cultural contributions while serving as the Island's principal source of socioeconomic upward mobility. UPR strives to provide high-quality education and create new knowledge in the Arts, Sciences, and Technology. However, serious financial and management challenges threaten to put this vital mission at risk. The UPR has to address academic curriculum optimization, declining enrollment, infrastructure and maintenance needs, operational inefficiencies, and liability



management. To lower the financial burden on the Commonwealth, the Central Government started to reduce appropriations to UPR in 2017. Since FY2017, Central Government appropriations to the University have been reduced ~\$427M. For FY2023, appropriations make up 48% of total operating expenditures, which is down from nearly 70% before the first Fiscal Plan. UPR has been proactively diversifying its sources of revenue and managing unsustainable costs working towards a stronger and more sustainable University (Proposed Fiscal Plan for the University of Puerto Rico Fiscal Years 2023-2027).

The budget of the Río Piedras Campus has been reduced from \$203,807,671 in 2010-2011 to \$170,504,286 in 2021-2022, this implies a reduction of 16%. Despite these dramatic cuts, the budget of the UPRSoA ranged between \$4.2M and \$3.7M in the last 5 years. This FY2022 we received the same operating budget as the previous year. Although in recent years travel and equipment budgets have been impacted, our operating budget has remained unaffected due to additional funding in other items.

Comparative Yearly Revenue & Expenses since 2014

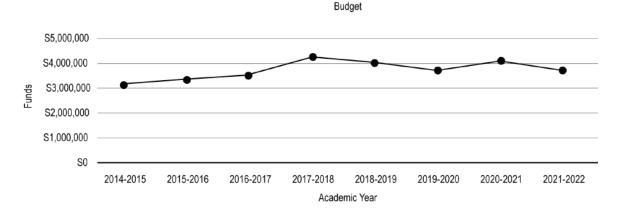
The UPRSoA has operated for the past five years with the following annual budget assigned by the University administration:

Institution	al Funds								Non- Recurring Funds	
Year	Salaries	Library	AACUPR	Travel Expenses	Equipment	Visiting Prof.	Others	Subtotal	(CARES II, CRRSSA Y ARP)	Total
2008-2009	\$3,280,938.21	\$329,864.69	\$215,695.79	\$24,873.46	\$7,847.95	\$16,377.72	\$223,851.54	\$4,099,449.36	,	\$4,099,449.36
2009-2010	\$3,055,892.44	\$396,233.39	\$287,698.85	\$21,319.32	\$6,369.76	\$16,132.61	\$191,319.56	\$3,974,965.93		\$3,974,965.93
2010-2011	\$3,040,093.57	\$387,059.64	\$267,308.38	\$21,912.04	\$15,463.98	\$16,877.10	\$197,964.57	\$3,946,679.28		\$3,946,679.28
2011-2012	\$2,995,335.87	\$394,097.23	\$267,783.64	\$39,002.83	\$21,306.51	\$16,457.42	\$253,902.06	\$3,987,885.56		\$3,987,885.56
2012-2013	\$3,123,477.26	\$441,578.45	\$245,318.29	\$19,898.36	\$18,379.36	\$12,215.07	\$163,830.60	\$4,024,697.39		\$4,024,697.39
2013-2014	\$3,123,477.26	\$441,578.45	\$245,318.29	\$19,898.36	\$18,379.36	\$12,215.07	\$163,830.60	\$4,024,697.39		\$4,024,697.39
2014-2015	\$2,281,326.00	\$426,411.00	\$230,240.00				\$233,400.00	\$3,171,377.00		\$3,171,377.00
2015-2016	\$2,429,781.00	\$426,936.00	\$230,240.00	\$50,000.00			\$233,400.00	\$3,370,357.00		\$3,370,357.00
2016-2017	\$2,474,157.00	\$421,532.00	\$370,214.00	\$20,300.00	\$10,000.00		\$233,400.00	\$3,529,603.00		\$3,529,603.00
2017-2018	\$3,249,501.00	\$545,208.00	\$226,646.00				\$233,400.00	\$4,254,755.00		\$4,254,755.00
2018-2019	\$3,228,912.00	\$588,174.00	\$103,399.00	\$5,000.00	\$37,869.00		\$90,160.00	\$4,053,514.00		\$4,053,514.00
2019-2020	\$2,982,942.00	\$552,908.00	\$100,927.00	\$2,500.00	\$37,869.00		\$70,160.00	\$3,747,306.00		\$3,747,306.00
2020-2021	\$3,069,422.00	\$462,032.00	\$103,299.00				\$68,373.00	\$3,703,126.00	\$372,413.15	\$4,075,539.15
2021-2022	\$2,648,365.00	\$462,032.00	\$103,299.00				\$9,300.00	\$3,222,996.00	\$562,907.41	\$3,785,903.41

^{**}It includes the alternatives of non-recurring funds, for the allocation and acquisition of equipment for the UPRSoA. This budget line manages to equalize and meet part of the operational expenses not contemplated in the institutional budget.

In the last eight years the total allocated budget has been \$29,988,354.56 for an annual average of \$3,748,544.32, maintaining a very low standard deviation.





Capital Investment per Student

As stated before, the UPRSoA budget has remained steady for the past five years. In contrast, the other professional schools of Río Piedras Campus (School of Law and School of Planning) have experienced budget cuts of 28% and 29%, respectively, during the same periods.

On the other hand, while the budget has remained stable, the enrollment has increased by 14%, compared to 2014. This results in a lower cost per student. It should be noted that the cost per student in the School of Architecture is significantly lower than the cost per student in the other two professional schools of the Río Piedras Campus.

Capital Investment per Student

		Total Students	Budget Assigned per
Professional Program	Budget	Registered	student
2021-2022			
Architecture	3,785,903	437	8,633
Law	6,239,650	534	11,685
Planning	884,387	91	9,719
2020-2021			
Architecture	4,075,539	399	10,214
Law	7,006,236	541	12,951
Planning	762,696	88	8,667
2019-2020			
Architecture	3,747,306	357	10,497
Law	8,010,016	590	13,576
Planning	745,918	70	10,656
2018-2019			
Architecture	4,053,514	349	11,615
Law	8,633,533	623	13,858
Planning	1,243,978	63	19,746
2013-2014			
Architecture	3,250,079	376	8,644



External Funds

Year	Project or Research Funds	Granted Funds				
2016-2017	7 Nomination of the Ladies' Residence Building to the National Register of Historic Places					
2017-2018	Taking a Breath After the Disaster: Homes, Mold and Heath in Fafter Hurricane Maria Displacements and collective memories: Time, space and culture.					
2018-2019	PSC Building Capacity: A Collaborative Undergraduate STEM Program in Resilient and Sustainable Infrastructure					
2019-2020	Evaluation for preservation and conservation of the Rare Books Coll of the Santiago Iglesias Library, son of the School of Architecture	ection \$9,938				
2020-2021	Wicked Colonial Nostalgias	\$5,000				
TOTAL	SIX (6) PROJECTS	\$820,351				
Law	8,258,844 693	11,917				
Planning	1,017,690 73	13,941				

External Funds

For the past five (5) years our UPRSoA has advanced in the search for external funds that also promote research and new knowledge development. This management and effort have contributed to our financial well-being and contributed to the fulfillment of the program, administrative and academic, goals.

Trust for the School of Architecture

The UPR School of Architecture's Trust is a non-profit organization with the mission of promoting and supporting the current and future development of our school. The Trust's goal is to support the academic programs, its administration and faculty, the school's facilities, student services, and community outreach. Established in 2002, the Trust became inactive and without Trustees in 2006. In 2017, the Trust was reactivated with a new Board of Trustees and has since become an important pillar of the UPRSoA. Funds raised through donations, fundraising activities, and through its short-term courses and workshops provide a secure and agile source for necessary and urgent material purchases of materials or payments for repairs or services. Purchases and payments through the Trust curtail bureaucratic and onerous University processes. In the last three years, the Trust has generated income of approximately \$100,000 from workshops and seminars, impacting more than 400 students, professionals and the general public.

According to the budgets granted in previous years, we can demonstrate that we will also have the support and financial resources to support student learning and achievement during next term accreditation. Despite budget cuts at the UPR System and Río Piedras Campus levels, the administration has given us a stable and balanced budget in recent years.



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: The UPRSoA has equitable access to information and architecture literature, as well as appropriate visual and digital resources that support our academic offers (Bachelor of Environmental Design and Master in Architecture - Track 1.5 & Track 3.5) and research in architecture. The School has two primary sources of information: The SIH Library and the Architecture & the Construction Archive of the University of Puerto Rico, AACUPR.

SIH Library Physical Collections and Resources

The Santiago Iglesias Hijo Library, is on the first floor of the building and occupies a central location, which facilitates accessibility. Besides traditional information resources, it has a wellequipped Visual Resources Section that is in process of services transformation to a virtual and physical media common to enhance collaborative and participating learning using library resources. The SIH Library information resources collections offer access to over 60.219 Items that support the academic research in architecture and professional education in architecture Information Resources. The resources in these collections are distributed in electronic as well as physical format and include topics such as: architecture, art, technology, urbanism, landscape design, visual communications, professional practice, sustainability, design, architecture history, urban planning, fine arts, history preservation, acoustic engineering & structural engineering. Besides the acquisition of complete collections on the work of important architects, theory and criticism of architectures, and, recently the SIH Library has been emphasizing on urbanism, visual culture and gender issues related to the discipline. The SIH Library also encourages the enrichment and strengthening of Puerto Rico's cultural heritage. As a result, it actively promotes the acquisition of important material about Puerto Rican and Caribbean architecture. The Vision, Mission and Values that encourage our planning activities are described in both the Library's Web Page and in our Strategic Plan. In addition to the current collection that covers most of the practical, theoretical and historical aspects of the discipline relevant to our curriculum, the SIH Library contains other special collections, users also have access to various related collections at the Main Campus Library.

Reference Collection-This collection is composed of dictionaries, encyclopedias, yearbooks, guides, directories, atlases, bibliographies and indexes. Its purpose is to answer general questions needed when starting a research project. The collection is located on open shelves for easy access. These materials do not circulate outside.

Circulation collection- This service is for the priority use of students and professors of the School of Architecture, as well as active members of the College of Architects of Puerto Rico. These books are the only ones that can be borrowed for use outside.

Reserve Collection - The informational resources located in this section are those that teachers set aside for use in their courses. Their use in the classroom is limited. Occasionally, books and photocopies that are the property of professors are reserved. Material owned by a teacher is circulated outside only with the professor's consent.

Journals - This collection comprises 565 magazine titles, of which 162 are active. These journals come from the United States, Latin America, Europe and Japan, among others. Old or out-of-print journals are on microfilm deposited at the Center for Access to Information and Audiovisual Resources. To access the content of the journals, it is necessary to use the Avery Index to Architectural Periodicals and compare the results with the List of Journals available at the Circulation desk or on the web page /. http://bibarquitectura.uprrp.edu/wp-content/uploads/2021/08/PubPer2020.pdf



Thesis & Projects Collection – Integrated by research works (Master's thesis, final projects and doctoral dissertations) by students and professors of the School of Architecture (UPRRP), as a requirement for obtaining the University degree. Due to copyright regulations, reproduction is restricted and loans are made only for internal consultation.

Special Collection- It consists of very valuable books whose publication is out of print or recently acquired books whose value, content and topicality make them susceptible to being lost. These books are not loaned out of the SIH Library and their use in the room is controlled. This section is also the repository of the Puerto Rico Collection, the Thesis Collection of the School of Architecture and the Juvenile Collection.

Vertical Archive - Consists of materials such as brochures, flyers, maps and newspaper clippings of Puerto Rico on architecture and related topics. The user may request the list of topics at the Circulation desk. (Digital Collection project see SIH Library Assessment section)

Rare Books Collection - This collection includes old books, out-of-print publications, reprints of old books, folios and large books. The oldest book in this collection is I Quattro libri deli, Architectura (1601) by architect Andrea Palladio. The collection has a separate space, and its materials may only be used in these facilities. Henry Klumb's book collection is located in this section.

Electronic Information Resources- Despite budget cuts in recent years, the BSHi offers access to electronic resources specializing in architecture, art, and related subjects. These resources are grouped into the following categories: for images resources, we have the database Archivision Digital Research Library; for publications in full text, we have the database's Art & Architecture Complete, Avery Index to Architectural Periodicals and Dissertation & Thesis Global; in terms of full text & audiovisual content, we have access to Building Green Suite; and for ebook resources we offer access to databases De Gruyter, Digitalia Hispánica, EBSCO eBooks Collection, Ebook Central, E-Libro, ProQuest One Academic, T&F eBooks, Wiley Online Library. The electronic information resources can be accessed by faculty, students, and staff through the library's website, both on and off campus at http://bibarquitectura.uprrp.edu

Institutional Repository - The Digital Repository at the University of Puerto Rico - DiRe@UPR is a digital data storage place that houses the scientific production and creative work of the UPR. The DSpace platform provides access to documents in different formats created by UPR professors and students. The purpose of this is to share and promulgate the intellectual production of the UPR, which generates prestige for the institution, provides a systemic projection, increases the visibility of the work generated, both locally and internationally, and gives open access to knowledge. Currently, the Director of the SIH Library is the person responsible for making accessible the resources submitted to the Repository.

Architecture & Construction Archive of the University of Puerto Rico (AACUPR)

AACUPR is a research unit within the School of Architecture with a clearly established vision and mission. AACUPR aspires to lead in the conservation, documentation, and research of Twentieth-century architecture in Puerto Rico and the Caribbean within an interdisciplinary and collaborative framework. AACUPR's mission statement is geared to the conservation of Twentieth century built environment in Puerto Rico through the rescue, conservation, arrangement and description, accessibility of architectural and construction drawings and to contribute to the education of architectural students, architects and general public on the values of our built environment. Due to its academic context this mission has been enlarged, and AACUPR now also endeavors to increase existing documentation of buildings and urban areas by developing its own drawings, surveys, and reports.

As a research center focused on knowledge management, dissemination is a seminal part of AACUPR's work. The Archive actively organizes exhibits, conducts research, publishes two



series, and works toward nominations of significant properties to the National Register of Historic Places. The AACUPR has also organized congresses, conferences, and educational projects.

Content, Extent & Format of Collections

AACUPR occupies approximately 14,000 sq. ft. of the School of Architecture building. On the first floor are the administrative offices, seminar room, library, conservation lab and workroom. The second floor (7,000 sq. ft.) is the repository of documents and drawings plans. To date, AACUPR holds 114 collections pertaining to various categories. Some of the most notable collections are: Pedro de Castro, Antonín Nechodoma, Rafael Carmoega, Pedro Méndez, Toro-Ferrer, Henry Klumb, Amaral & Morales, Hunter Randolph and Robert Prann; sugar industrial towns such as those of the Aguirre, Fajardo and Guánica power plants and institutions such as the University of Puerto Rico, among others. The AACUPR also guards collections that document a unique building. Examples of this are the El Falansterio and Capitolio de Puerto Rico collections.

All the organized collection is accessed through the University's catalog in the following address: http://hip.upr.edu:85/ipac20/ipac.jsp?profile=aac- or through AACUPR's blog in http://aacuprservicio.blogspot.com/.

The Archive has an ongoing program of digitizing images which, when ready, will be linked to the records online. All of the organized collections are available for review in the Archives facilities. http://aacuprservicio.blogspot.com/

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: The SIH Library and Archives personnel and visual resource professionals are readily available to guide students and faculty in their critical research endeavors in the context of professional practice and lifelong learning. The personnel support different levels of research activities, both from our community at the School and from other programs at the University in order to conform to the goals and pensum of our institution. It is also used extensively by the profession to support their preparation for licensure examinations, as well as their professional endeavors.

The SIH Library staff is involved in the students' integral academic and future professional development, in the areas of research and creative activity sponsored by faculty and/or students, and in the development of a unified academic vision. These objectives are realized by the expansion of access to resources in a fully developed collection, and by the organization of talks, conferences organized as part of the duties of the Information and Research Competencies Program. The SIH Library is accomplishing its goals and services, in spite of its limited staff.

Staff

The SIH Library is staffed by a single librarian who also serves as the SIH Library Director and AACUPR Administrator. The current director, Nathalie González Torres has fifteen years of experience as a librarian, a professional background in cataloguer, preservation and conservation officer, Metadata librarian, Information literacy and grant writing, and library director on private and nonprofit organizations. González has a Bachelor in Industrial Microbiology, a Post-Bachelor's Certificate in Documents and Archives Management (American Library Association's Accredited, ALA), and a Master's degree in Library Sciences (ALA).

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The SIH Library has no librarian in other areas like Cataloging, Information Literacy and Reference user services. Besides that, the director offers that service with the collaboration of other employees that have the experience and academic preparation on Information Sciences.

The University requires that auxiliary librarians possess a Bachelor's degree. At this moment, Mr. Carlos Morales-Fiol, Auxiliary Librarian II, has Bachelor's degree in Social Sciences and completed the Master's courses in Economy. Also, he starts a master degree in Information Science. Mr. Alberto J. Faris, Auxiliary Librarian I, has Bachelor's degree in Environmental Design and a Bachelor's degree in Graphic Design. Ms. Ruth M. Carrión, director's secretary, has a Bachelor's degree in Secretarial Sciences and a Master's degree in Information Science. Mr. Hector J. Abreu Abreu, Academic Computing Coordinator, has a Bachelor's degree in Commercial Advertising, a Post-Bachelor's Certificate in Electronic resources analyst, a Master's degree in Information Science and Master's degree in Academic Computing.

The SIH Library is accomplishing its goals and services, in spite of its lack of staff. Budgetary cuts have been affecting the information access and reach for access to the new acquisition that the SIH Library acquired through the last two years but can't be accessed to the student and faculty.

AACUPR administrative structure is composed of a Director (currently the same person who manages the SIH Library), Ms. Nydia Vigil, Administrative Assistant, has a Bachelor of Arts in Elementary Education, Mr. Luis Raúl Rodríguez, Academic Computing Coordinator, has a Bachelor in Business Administration and a Master in Educational Computing, and two Archivists, Ms. Elena Orozco, has a Bachelor of Fine Arts, and a Post-Bachelor's Certificate in Documentos and Archives, and Madeline Ramos has a Bachelor of Arts with a concentration in Labor Relations. The Deanship has been working on the application for a Research Director position for AACUPR but has not been able to secure funding for the position.

Services

The SIH Library has access to international networks through the Internet and through other database reference services, such as the Avery Index, Art and Architecture Complete, Archivision, and Building Green, among others, through our webpage. There are updated reference publications that provide quick consultation services. The staff is encouraged to provide personal guidance in the use of library resources. The reference and circulation sections are a joint. Circulation staff is in charge of the directional and basic reference consultation, but students are oriented to use professional librarian's services in case of more complex information inquiries.

Since its inception, SIH Library has carried out its library training work from different approaches. In 2009, the Information and Research Skills Program was launched, serving students and faculty in the School of Architecture's undergraduate and graduate programs. Five instructional modules were created for the development of information and research competencies, following ACRL/ALA standards.

In addition to traditional reference services and bibliographic instruction, librarians have offered workshops and lectures on topics such as: online public catalog, Avery Index to Architectural Periodicals, Art & Architecture Complete, information resource search and

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retrieval, evaluation, plagiarism, copyright, etc. In addition, the librarians provide individual guidance to students who are in the process of selecting research topics to develop thesis, dissertation or thesis proposals. They provide guidance in the search and use of information resources in different formats (printed and electronic), such as indexes, databases and other resources that support the academic and research work of the School of Architecture.

Services since pandemic lockdown

This recent worldwide pandemic event, where information literacy services were limited, the SIH Library worked on remote information literacy modules and courses to meet the new trends of distance learning and the highest standards of educational evaluation, contributing once again to the academic excellence of our faculty. The medium that will be used for this information literacy course will be Moodle - named ArchiLit. It will include modules such as; Information search (Databases, Internet and Criteria for evaluating information), Writing module for research projects (Copyrights, Chicago style writing),

The AACUPR and the SIH Library added to its framework of services the virtual reference program through LibChat. It is divided into two services: asynchronous (via email) and synchronous (via chat). The online BSIH consultation services section http://bibarquitectura.uprrp.edu/index.php/servicios-bsih-enlinea/. The photographic and postcard collections that were in archival quality boxes, now are in our web page with described metadata and easy access for all our users. This collection is named Digital collection.

The SIH Library, which supports the faculty and its development, increased its remote services in a recording room and future information literacy sections. The room was equipped with tables and a projection screen to achieve the goal of fulfilling distance education in the pandemic era. During the pandemic Instructional Technology and Distance Education, TIED (in Spanish) was the support to faculty and students for distance learning courses. The University of Puerto Rico established the continuity of distance learning academic offerings, using alternative platforms and methods supported by technology. The SIH Library and AACUPR staff participated in all related efforts to facilitate the transition of the School's faculty from face-to-face to distance courses and were called to participate in a Campus committee for these purposes. For more details, http://bibarquitectura.uprrp.edu/index.php/tied/

Our Virtual Library is the main tool for information dissemination. It provides a complete description of services, hours of operation, calendar of activities and also access to database services, online catalog and links related to the field of architecture. The SIH Library staff uses social networks and the Virtual Library page to inform graduate students and faculty about new books related to their research area of interest. The Virtual Library is designed so that all students, professors and the university community can remotely access the services as if they were physically in our facilities. Some of the services that are included are: Policies of services, personnel in charge of our library (contacts), Services, Collections of eBooks, Digital Collections, thematic guides of investigation; reference, format of redactions (Chicago style), Guides on right of author, virtual Reference with established synchronous and asynchronous schedule (it is described later in detail). See details on; Virtual Library Services

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To fulfill the heritage of preserving unique collections that are of great value to the architecture and those who protect it, the SIH Library staff submitted several proposals to protect the collection that was withdrawn for the needs of our faculty and unforeseen by the pandemic. Specifically, In recent years the SIH Library has submitted proposals to the National Endowment for the Humanities (NEH) for evaluation and improvements for the conservation and preservation of the rare book collection, which was successfully approved and certified by a specialist in the aforementioned collection. Continuing with the purpose of improving the quality and conservation of the collection, a second proposal was submitted to the NEH for the acquisition of rare book shelves which is still pending approval of the proposal.



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: In order to promote an understanding of the accredited professional degree (M.Arch) by students, parents, and the public, the School of Architecture of the University of Puerto Rico has all information about the programs on the school website with all program information in accordance with NAAB requirements.

URL: Official School Website https://earg.uprrp.edu/

URL: NAAB Accreditation section under the ESCUELA menu https://earg.uprrp.edu/escuela-2/naab/

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: 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 UPRSoA have the following documents available in the school website:

All the required documents can be accessed directly using the following URL: https://earg.uprrp.edu/escuela-2/naab/

- A direct link to the Conditions for Accreditation, 2020 Edition (https://earq.uprrp.edu/wp-content/uploads/2020/06/NAAB.pdf) can be found at the school website, NAAB Accreditation Section.
- b) A direct link to the Conditions for Accreditation at the time of the last visit (2014) (https://earq.uprrp.edu/wp-content/uploads/2019/04/Final-Approved-2014-NAAB-Conditions-for-Accreditation-2.pdf) can be found at the school website, NAAB Accreditation Section.
- c) A direct link to the Procedures for Accreditation 2020 Edition (https://earq.uprrp.edu/wp-content/uploads/2021/08/2020-NAAB-Procedures-for-Accreditation.pdf) can be found at the school website, NAAB Accreditation Section.



d) A direct link to the Procedures for Accreditation in effect at the time of the last visit (2012) (https://earq.uprrp.edu/wp-content/uploads/2022/05/2012-NAAB-Procedures_Amended_Final-for-Publication-072413.pdf) can be found at the school website, NAAB Accreditation Section.

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: To assist students, graduates, alumni, and others as they seek to develop an understanding of the larger context for architecture education and the career pathways available to graduates of our accredited program, the UPRSoA have the following list of links to Professional Organizations and other reference material that will form part of the student's path towards licensure and development within the profession. The link to the School's website is the following:

URL: https://earg.uprrp.edu/enlaces-externos/

In the external reference section (ENLACES EXTERNOS) all members of our community can find links to the websites of the following organizations:

Professional organizations from Puerto Rico:

 Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR) URL: https://www.caappr.org/

The CAAPPR is an organization dedicated to promoting architecture and landscape architecture for the benefit of Puerto Rico, defending, and representing members of our professions.

The American Institute of Architects, Puerto Rico Chapter (AIAPR)
 URL: https://www.aiapr.com/

AIA - Puerto Rico Chapter of the AIA. It is a non-profit corporation incorporated in the Commonwealth of Puerto Rico in 2004 and chartered by the Institute in 1966.

Junta Examinadora de Arquitectos y Arquitectos Paisajistas de Puerto Rico
URL: https://www.estado.pr.gov/juntas-examinadoras/arquitectos-y-arquitectos-paisajistas

This government entity, created under the Department of State, has the objective of guaranteeing that professionals are morally and professionally trained to render a quality service, the protection of life, health, property, and promote the general well-being of the public. The Board imposes requirements for registration, licensing, renewals, and completion of continuing education. The requirements apply to all professionals, local or foreign, who intend to practice and practice in Puerto Rico.

Fundación por la Arquitectura (FxA)

URL: https://www.fxapr.org/

The Foundation for Architecture of Puerto Rico (FxA) is a nonprofit cultural organization with a 501(c)(3) designation, which focuses on promoting the appreciation of architecture, landscape architecture, and design through an array of community events and programs.

Professional organizations from US

The American Institute of Architects (AIA)



URL: http://www.aia.org

The American Institute of Architects: Based in Washington, D.C., the AIA has been the leading professional membership association for licensed architects, emerging professionals, and allied partners since 1857. With nearly 300 state and local chapters, the AIA serves as the voice of the architecture profession and the resource for our members in service to society.

The American Institute of Architecture Students (AIAS)

URL: https://www.aias.org/

The American Institute of Architecture Students (AIAS) is an independent, nonprofit, student-run organization dedicated to providing unmatched progressive programs, information, and resources on issues critical to architecture and the experience of education. The AIAS aims to promote excellence in architectural education, training, and practice; to foster an appreciation of architecture and related disciplines; to enrich communities in a spirit of collaboration; and to organize students and combine their efforts to advance the art and science of architecture.

Association of Collegiate Schools of Architecture (ACSA)

URL: http://www.acsa-arch.org

The Association of Collegiate Schools of Architecture: ACSA, unique in its representative role for schools of architecture, provides a forum for ideas on the leading edge of architectural thought. Issues that will affect the architectural profession in the future are being examined today in ACSA member's schools. The association maintains a variety of activities that influence, communicate, and record important issues. Such endeavors include scholarly meetings, workshops, publications, awards and competition programs, support for architectural research, policy development, and liaison with allied organizations.

National Council of Architectural Registration Boards (NCARB)

URL: http://www.ncarb.org

The National Council of Architectural Registration Boards (NCARB) is a nonprofit corporation comprising the legally constituted architectural registration boards of the 50 states, the District of Columbia, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands as its members. Its mission is to collaborate with licensing boards to facilitate the licensure and credentialing of architects to protect the health, safety, and welfare of the public.

Construction Specification Institute (CSI)

URL: https://www.csiresources.org

Founded in 1948, CSI is a national not-for-profit association of more than 7,000 members dedicated to improving the communication of construction information throughout continuous development and transformation of standards and formats, education and certification of professionals to improve project delivery processes.

• <u>U.S. Green Building Council</u> (USGBC)

URL: https://www.usgbc.org/

The U.S. Green Building Council is a non-profit organization that promotes sustainability in building design, construction, and operation. USGBC is best known for its development of the <u>Leadership in Energy and Environmental Design</u> (LEED) green building rating systems.

In addition to the links to professional organizations, the school website also offers a curated list of other reference material that is relevant to the architectural community in general but targets the concerns of young professionals and students alike.



These references can also be found on the External References section at the school website URL: https://earq.uprrp.edu/enlaces-externos/

- Where to study architecture? https://studyarchitecture.com/
- Architecture Registration Examination (A.R.E) https://www.ncarb.org/pass-the-are/start
- A.R.E 5.0- Architecture Registration Examination Handbook (2020) (PDF) https://www.ncarb.org/sites/default/files/ARE5-Handbook.pdf
- IDP Guidelines (2020) (PDF) https://www.ncarb.org/sites/default/files/AXP-Guidelines.pdf
- Path to Licensure: How to make your experience count. Orientation by Anna Georas Santos PhD. (Video) https://www.youtube.com/watch?v=qdtJEHsqrYY
- Path to Licensure: How to make your experience count (PDF)
 https://drive.google.com/file/d/195tcRfBmfWNB0K1KYBOzupvJPXNzoGlc/view?fbclid=lw
 AR3-L3i29XoFIXJS39XcwUJFAL557Rr4A_vgAAqw5i-z8W8sqvnhKWoQxtA
- Una imagen vale más que mil palabras: Estrategias de estudio para la reválida (A picture is worth a thousand words: Study strategies for the A.R.E) Prof. Saritza Martínez (Video). https://youtu.be/ah6qf347arl
- Code of Ethics and Professional Conduct (CAAPPR)
 https://docs.pr.gov/files/Estado/Juntas%20Examinadoras/Arquitectos%20y%20arquitectos%20paisajistas/Codigo Etica.pdf
 https://www.caappr.org/profesion/codigo-de-etica/
- AIAS: Studio Culture: Stories and Interpretations (PDF)
 https://www.aias.org/wp-content/uploads/2016/08/Studio-Culture-Stories-and-Interpretations.pdf
- Continuing Education Manual (Examining Board of Architects and Landscape Architects of Puerto Rico) (PDF)
 https://www.caappr.org/servicios/educacion-continua/
 https://docs.pr.gov/files/Estado/Juntas%20Examinadoras/Arquitectos%20y%20arquitectos%20paisajistas/ManualEducacionContinua.pdf

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:

- 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: To promote transparency, we have available in our website all the reports and communications with NAAB since the last visit. The School have the following documents available to all students, parents and faculty in the school website under the NAAB Accreditation tab:

URL: https://earq.uprrp.edu/escuela-2/naab/

a) NAAB Program annual reports:

2014: https://earq.uprrp.edu/wp-

content/uploads/2019/09/NAAB ARS Part 1 UniversidadDePuertoRico 2014.pdf

2015: https://earq.uprrp.edu/wp-

content/uploads/2019/09/NAAB ARS Part 1 UniversidadDePuertoRico 2015.pdf

2016: https://earq.uprrp.edu/wp-

content/uploads/2019/09/NAAB ARS Part 1 UniversidadDePuertoRico 2016.pdf

2017: https://earq.uprrp.edu/wp-

content/uploads/2019/09/NAAB ARS Part 1 UniversidadDePuertoRico 2017.pdf

2018: https://earg.uprrp.edu/wp-

content/uploads/2019/09/NAAB ARS Part 1 UniversidadDePuertoRico 2018.pdf

2019: https://earg.uprrp.edu/wp-

content/uploads/2021/08/NAAB ARS Part 1 UniversidadDePuertoRico 2019.pdf

2020: https://earq.uprrp.edu/wp-

content/uploads/2021/08/NAAB ARS Part 1 UniversidadDePuertoRico 2020.pdf

2021: https://earq.uprrp.edu/wp-

content/uploads/2022/05/NAAB ARS Part 1 UniversidadDePuertoRico 2021.pdf

- b) There are no responses to any Plan to Correct nor any NAAB responses to the Program Annual Reports since the last team visit.
- c) NAAB 2014 Visiting Team Report (PDF) https://earq.uprrp.edu/wp-content/uploads/2019/04/INFORME.ACREDITACION.NAAB .2014.pdf

In November 2019, the Dean Mayra Jimenez submitted to the NAAB board of directors a Substantive Changes Proposal for the Master of Architecture Graduate Program. A link to the proposal document is available in this section of the School Webpage and a link to the NAAB Substantive Changes Approval Notification.

Substantive Change Proposal for the Master of Architecture Graduate Program (PDF) https://drive.google.com/file/d/1Bcs_qwVmbspWtJN77HWTFvGa6DXDvpcM/view?usp=s https://drive.google.com/file/d/1Bcs_qwVmbspWtJN77HWTFvGa6DXDvpcM/view?usp=s https://drive.google.com/file/d/1Bcs_qwVmbspWtJN77HWTFvGa6DXDvpcM/view?usp=s https://drive.google.com/file/d/1Bcs_qwVmbspWtJN77HWTFvGa6DXDvpcM/view?usp=s https://drive.google.com/file/d/1Bcs_qwVmbspWtJN77HWTFvGa6DXDvpcM/view?usp=s https://drive.google.com/file/d/1Bcs_gwVmbspWtJN77HWTFvGa6DXDvpcM/view?usp=s https://drive.google.com/file/d/1Bcs_gwVmbspWtJN77HWTFvGa6DXDvpcM/view?usp=s https://drive.google.com/file/d/1Bcs_gwVmbspWtJN77HWTFvGa6DXDvpcM/view?usp=s https://drive.google.com/file/d/1Bcs_gwVmbspWtJN77HWTFvGa6DXDvpcM/view?usp=s https://drive.google.com/file/d/1Bcs_gwVmbspw] <a href="https://drive.google.com/file/d/1Bcs_gwVmbspw] <a href="https://drive.google.com/file/d/1Bcs_gwVmbspw] <a href="https://drive.google.com/file/d/1Bcs_gwVmbspw] <a href="https://drive.google.com/file/d/1Bcs_gwVmbspw] <a href="https://drive.google.com/file/d/1Bcs_gwVmbspw] <a href="https://drive.google.com/file/d/1Bc

NAAB Substantive Change Approval Notification (PDF) https://earq.uprrp.edu/wp-content/uploads/2021/08/NAAB-acreditacion-PG-UPR-Substantive-Change-Letter-April-2020.pdf

d) The Architectural program reports of the last visits: Architectural Program Report 2007 (Revised February 2008, PDF) https://earq.uprrp.edu/wp-content/uploads/2019/09/APR-2007.pdf



Architectural Program Report 2013/2014 (PDF) https://earq.uprrp.edu/wp-content/uploads/2019/04/APR-2013-w-Appendix-2014.pdf

e) The visiting team reports: 2008 visiting team report (PDF): https://earq.uprrp.edu/wp-content/uploads/2019/09/APR-2007-VISITING-TEAM-REPORT.pdf

2008 Visiting team report (Outlined, 2012, PDF) https://earq.uprrp.edu/wp-content/uploads/2013/11/NAAB-2008-VTReport-Outlined-2012-3.docx

2014 Visiting Team Report (PDF): https://earq.uprrp.edu/wp-content/uploads/2019/04/INFORME.ACREDITACION.NAAB .2014.pdf

- f) There are not program's optional responses to the Visiting Team Report
- g) There are no correction plans
- h) NCARB A.R.E Pass rates can be found on the NCARB tab under the ESCUELA Menu at the school webpage.URL: https://earq.uprrp.edu/escuela-2/vgtkgyk/

Link to the A.R.E- 4.0 pass rates: https://www.ncarb.org/pass-are/are5/pass-rates/pass-rates/pass-rates/are4-pass-rates-school

Link to the A.R.E- 5.0 pass rates: https://www.ncarb.org/pass-are/are5/pass-rates/are5-pass-rates/are5-pass-rates-school

i) Regarding the statements and policies on learning and teaching culture, the school webpage contains a REFERENCE section where parents, students, and others can find the following resources that outline the official policies of the school, procedures and teaching culture:

The Reference section: URL: https://earq.uprrp.edu/reglamentos/ Under this tab, website visitors can find: Plan de Desarrollo de la Escuela de Arquitectura, Universidad de Puerto Rico, 2018-2023 (Development plan for the School Of Architecture, University of Puerto Rico, 2018-2023) (PDF) https://earq.uprrp.edu/wp-content/uploads/2019/04/REV-PDEA-12.0.pdf

Plan de respuesta en casos de emergencia para la Escuela de Arquitecutra (Emergency Response Plan for the School of Architecture) (PDF) https://earq.uprrp.edu/wp-content/uploads/2020/02/Plantilla-Plan-de-Respuesta-en-Casos-de-Emergencias-2020-LRLArquitectura-Revisado-MCO-1.pdf

Guía de Procedimientos para Intercambios y Viajes de Estudio de la Escuela de Arquitectura (Guide of Procedures for Exchanges and Study Trips of the School of Architecture) (PDF) https://earq.uprrp.edu/wp-content/uploads/2020/09/Guia-Procedimientos-Intercambios-y-Viajes-EA-18-julio-20193.pdf

Manual del Estudiante de la Escuela de Arquitectura (Student Manual, School of Architecture, approved September 29, 2021) (PDF) https://drive.google.com/file/d/1Kw6apPmFYZr4kQvPSNGL3fZ7yQSiZ6iJ/view?usp=sharing

Reglamento del programa Graduado (Regulations of the Graduate Program) (PDF) https://drive.google.com/file/d/1D_jdhZoMvOxS34t_bnhRJ8JUH9Smx0x/view?usp=sharing



Cultura de Taller (Studio Culture) (PDF) https://drive.google.com/file/d/1xCHYGgQZrN4OyE98tAM5DhS0FUCQTrMA/view?usp=s haring

j) The School of Architecture of the University of Puerto Rico, constantly works to foster an environment in which its entire community, regardless of race, ethnicity, creed, origin, sex, age, physical ability, or sexual orientation, can develop their abilities in an inclusive and equitable environment that thrives on the diversity of its members.

The official School statements and policies regarding diversity, equity and inclusion are found under the ESCUELA menu on the item named DIVERSIDAD, EQUIDAD E INCLUSIÓN.

This section can be directly accessed using the following URL: https://earg.uprrp.edu/dei/

In the same section, students can also find the School of Architecture DEI plan, a document that describes the specific steps that the School has taken during the last decades to promote diversity, equity, and inclusion. This plan also sets specific diversity goals for the upcoming years.

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
- 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:

- undergraduate and graduate candidates can find all the information required for the admission process at the Campus Admission page: https://www.uprrp.edu/english/admissions/
 - The admission form for the undergraduate program can be accessed using the following URL: https://admisiones.upr.edu/
 - The admission form for the graduate program can be accessed directly using the following URL: https://app.applyyourself.com/?id=upr-grad
- b) The Admission requirements for both undergraduate and graduate programs can be found at the School Page under the ADMISIONES (admissions) menu:
 - Undergraduate admission requirements, portfolio requirements, and evaluation criteria for the portfolios can be accessed using the following URL: https://earq.uprrp.edu/admisions/requisitos-bachillerato/.
 - Graduate admission requirements, portfolio requirements and guidelines can be accessed using the following URL: https://earq.uprrp.edu/gr-g/

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- c) The process for evaluating the content of non-accredited degrees can be found on the admission page to the graduate program on the following URL: https://earq.uprrp.edu/gr-g/. These two documents linked on that page explain to prospective candidates the process of evaluation and admission: Requirements to apply for admission by UPR Transfer
- d) Requirements and forms for applying for financial aid can be accessed using the Campus website, specifically using the following URL: https://estudiantes.uprrp.edu/asistencia-economica/

Graduate students can find additional information and opportunities of financial aid and scholarships at The Dean's Office of Graduate Studies & Research (DEGI) using the following URL: http://graduados.uprrp.edu/estudiantiles/becas-y-ayudantias/.

A list and descriptions of the main sources for financial aid is available also on our School website: https://earq.uprrp.edu/admisions/ayudasbecas/. Additional information and requirements regarding scholarship opportunities catered specifically to our School students can be found at the School website using the following URL: https://earq.uprrp.edu/oportunidades-de-becas/

e) The University of Puerto Rico is set on a policy of diversity and inclusion as stated in the University Institutional Policy Regarding Equal Opportunities

"The Río Piedras Campus of the University of Puerto Rico guarantees equal opportunities to its applicants for employment and admission to study...the Campus does not exclude from participation, nor does it deny benefits, nor does it discriminate against any person by reason of age, race, sex, sexual orientation, color, birth, origin or social condition, physical or mental disability, or political or religious ideas."

Regarding the admission process our candidates are admitted based on their academic performance and/or portfolio, allowing for students from diverse backgrounds to be considered on equal grounds. The recruitment process is based solely on the academic or artistic merits of the candidate hence the diversity of our community.

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: Despite the current economic situation of Puerto Rico, tuition costs at the University are very reasonable: \$157 per credit at the undergraduate level and \$215 per graduate credit. Students can access the information concerning updated tuition fees at the school page, and they are updated regularly based on the current applicable University Certification. The information can be reviewed using the following link: https://earg.uprrp.edu/admisions/costo-de-matricula/

The University offers an array of resources online and in person that will guide the students in the process of finding financial aid.

- A Financial Aid Counselor is assigned by the Financial Aid Office to each student for personalized guidance (https://estudiantes.uprrp.edu/asistencia-economica/).
- Students can track their financial aid status through their student account at the UPR Portal: https://portal.upr.edu/



- As mentioned in section 6.5 (d), students have available an array of online resources and tools to find opportunities for financial aid.
- A Net Price Calculator is also available at the Campus website: https://www.uprrp.edu/netpricecalc/npcalc.htm

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: The University provides a breakdown of tuition and fees for potential students and the subject is discussed at the orientation week at the beginning of each semester. Furthermore, students have the information permanently available at the School Website: https://earg.uprrp.edu/admisions/costo-de-matricula/.

At the orientation at the beginning of the fall semester, incoming students receive a list of required studio materials, and necessarily general supplies. In addition to that, the Technical Service Coordinator of the School circulates a list of minimum specifications recommended for the computers so that students can invest in equipment capable of running the required software. In any case, up to date computers with the required software are available for the free use of the students at classrooms 207-C and 207-B.

Regarding the required textbooks, each professor specifies the required textbook in the course syllabus and at least a copy of the book (paper or digital) must be available at the SIH Library in case that it is needed as a reference.