## APROCA

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Pontifical Catholic University of Puerto Rico School of Architecture Bachelor of Architecture [181 Credit Hours]

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### SECTION ONE: PCUPR ARCHITECTURE PROGRAM

### I.1.1. HISTORY AND MISSION

The Pontifical Catholic University of Puerto Rico (PCUPR) is a co-educational non-profit private institution of higher education with bonds to the Catholic Bishops Conference of Puerto Rico. It was founded in Ponce (the second largest city in Puerto Rico) in September 1948 under the guidance of the Puerto Rico's acting Bishop at the time, and was affiliated with Catholic University of America in Washington, DC. The university was incorporated by the Board of Regents of the University of the State of New York and granted an absolute charter as an institution of higher learning with programs leading to academic and professional degrees. It was accredited in 1948 by the Council of Higher Education of Puerto Rico (now the Puerto Rico Education Council) and in 1953 by the Middle States Association of Colleges and Secondary Schools. In 1959 a center was established in Arecibo, located in the northwestern part of the island; in 1960 another center was established in Mayagüez on Puerto Rico's west coast. Both Arecibo and Mayagüez became branch campuses in 1986. Established as a teacher-training college, the University has grown to become a comprehensive institution with 157 academic programs that offers 13 associate, 73 bachelors', 36 masters', 8 doctoral degrees, 10 professional certificates, and a degree in law as well as 9 binaries and 6 combined programs.

PCUPR was canonically established in 1972 and granted the title of Pontifical in 1991. This distinction officially ratified the authenticity of the university as a genuine Catholic institution of the Church. As a pontifical university, the institution must adhere to the dogmas and teachings of the Holy Roman Catholic Church as expressed by the Holy See and the Sacred Congregation for Catholic Education. Based on Ex Corde Ecclessaie, issued by Pope John Paul II as an apostolic constitution on Catholic higher education, and most recently on the documents produced in the Catholic Bishops Conference held in Brazil in 2007, "The mission of Pontifical Catholic University is to honor and promote the life and dignity of the human being as well as to educate him/her in accordance with the values of the Gospel and the disciplines of current scientific knowledge in order to build a better local and global community."

The method by which the University accomplishes the mission is "by means of a dynamic, critical, and creative educational encounter, framed around Christian amity and committed to the quest for answers and solutions to the issues of culture and to the challenges of the Puerto Rican, Caribbean, and global realities, within a peaceful and harmonious environment." The university cultivates the distinctive disciplines according to their individual principles and methods, maintaining academic freedom in an open and honest dialogue with faith. In this manner, it aims



to form righteous men and women with the capacity to assume responsibilities in society and to stand before the world as loyal witnesses of their faith.

Market trends have led to significant curriculum development in the areas of technology and research, as evidenced by the inauguration of the School of Architecture (2009) and the Center for Teaching and Research in Biotechnology and Agro-Biotechnology (2011) and the creation of the Institute of Distance Learning for online education courses and resources.

The creation of the program of Architecture traces back to early in 2007, when Mr. Abel Misla-Villalba (who in 2009 became the Founding Dean) and a small group of local professionals pondered amidst uncertainties brought forth by the economic, social, and political structures in Puerto Rico. Involved within the realms of the public and private sectors, as well as academia, discourses gave way to the need to have a well-established, coordinated venue to further examine issues on communities, urban settings, design culture and overall character of the social realm. The creation of a new academic platform became an imminent mandate, parting from an innovative approach, but within an already established structure that could provide support, resources and a solid platform. The PCUPR, as the single largest academic institution in southern Puerto Rico, and with a complete academic offering and strategic alliances with both the public and private sectors, became that sought partner.

A proposal for the new School of Architecture was drafted by Mr. Misla-Villalba, Javier De Jesús-Martínez and Pedro A. Rosario-Torres (who in 2010 became the Program Director), and presented to Rafael Hernández-Colón, former Governor of Puerto Rico and member of the Board of Trustees of the PCUPR. The mission stated was, and still is, "to forge a new strategic architect, planner, thinker and entrepreneur in an interdisciplinary environment; one within which the understanding of the territorial and urban complexity, as well as the regional and global economic dynamics, can operate with advanced technologies and knowledge to guide sustainable investments and interventions." Unanimously favored by all members of the Board, an Implementation Committee was created to oversee and promote the proposed architecture program to fruition, chaired by the former Governor. Following the program's philosophy of establishing its operations within Ponce's urban fabric, the historic Forteza building was selected and acquired by the university. Nested along the perimeter of Ponce's Main Plaza, and within the Historic District, Forteza was rescued from abandonment and given its proper respect, filling its promise of fortitude and timelessness.

As a preamble to our School of Architecture's formal inauguration, and marking the birth of the new program, an Architecture Summit was organized and held on September 4th, 2009. The event was titled The Currency of Ideas: Forecasting New Climates for the Exchange of Cultural Capital and included seven internationally renowned architects and educators. With a technological



platform second to none in the Caribbean, and a vision deeply rooted in innovation and the practical implementation of technology, the PCUPR School of Architecture was officially inaugurated on September 14th, 2009. Since then, the Program has opened dialogues between widespread disciplines through a well-established experimental ecology, providing the groundwork for graduates capable of developing free enterprise, with capacity for professional and intellectual growth, and a vision beyond the stereotypes of the profession.

In 2012, the Associate Dean, Mr. De Jesús-Martínez, assumed the position of Interim Dean with a leadership that was characterized by advancing the research, multi-sectorial and entrepreneurial agenda of the School. During his tenure, the implementation of the research initiatives produced proposals such as Route 123: Agro-touristic Corridor (an initiative for the US Housing and Urbanism Department), and alliances between the program and respected companies like CEMEX, Grupo Carmelo and AkzoNobel. Under the Interim Deanship of De Jesús-Martínez, the School formally completed its first curricular cycle, and with it, the first four graduates from the program in 2014.

Entering into a new era and academic cycle, Architect Luis V. Badillo-Lozano was officially designated to the position of Dean for the PCUPR School of Architecture in 2015. His leadership brought the program's first curricular revision, a strengthening of the outreach initiatives (stateside and international) and the transformation of the School in the architecture profession's hub for the South and West Regions of Puerto Rico. Under the Deanship of Architect Badillo, the School was initially accredited by the National Architectural Accrediting Board with distinction.

### I.1.2. LEARNING CULTURE

Institutional educational competencies and skills are aligned to the mission, vision and goals, and are reflected in the institutional learning outcomes. The eight competencies established by the institution as expected learning outcomes upon graduation are to:

- o Demonstrate openness and religious knowledge as fostered by the Catholic Church
- o Employ critical thinking and creative techniques for solving problems
- o Apply effective communication skills to express ideas, opinions, and emotions in order to maintain interpersonal and collaborative relations effectively
- o Demonstrate respect for diversity of values, cultures, and points of view, as well as tolerance for ambiguity and openness to change
- o Apply ethical principles to cultural and human responsibilities when confronting challenges in one's personal, family, community, and professional life



- o Utilize diverse qualitative and quantitative methods when confronting problems requiring the search for truth
- Manage information and technology appropriately; employing conflict management skills

Learning culture, as pertaining the School of Architecture's mission and vision, requires a cognitive paradigm that breaks the passive model of conductive education and reinforces vertical learning in a multidisciplinary manner. The program achieves this through the Experimental Unit paradigm. They formulate a new pedagogical synergy that guides the academic, research, operational, cultural and social trends of the education of architecture through a multi-sectorial and transdisciplinary platform rooted in cooperation and the exchange of information.

Knowledge not only occurs from the student-professor relationship; it is multidimensional to the effect that each member of our community is considered a source of knowledge, experience, wisdom and innovation. It is multidimensional because it considers society and the cities as laboratories, fields of action and destiny of our explorations and our new knowledge. Our students are encouraged to expand their range of learning activities through participation in professional and community organizations, the institutional honor society and team sports, among others.

The openness of our Program's educational framework is guided by constructive relationships and a satisfactory interaction. The PCUPR School of Architecture drafted a document written by the students, adopted by the program, and relying on:

- o Respect towards the valuation of diversity
- o Dignity towards work and the valuation of the person
- o Prudence in the valuation of time
- o Solidarity in the valuation of the needs and aspirations of each individual
- o Leadership and social commitment in the valuation of cultural constructs
- o Reuse, reduce and recycle as the valuation of a sustainable educational environment
- o Equanimity in the valuation of exercising critical judgment
- o Tolerance towards differences in the valuation of the fellow
- o Promotion and dissemination in the valuation of the individual, collective and multisectorial findings and research contributions
- o Cultivation of imagination as the valuation of an open, interdisciplinary and multisectorial creative process
- o Cooperation and collaboration as the valuation of a social exercise

At the beginning of each semester, the Studio Culture Policy is electronically distributed to faculty, students for comments and approval. Once revised, a printed copy is placed at the entrance of all design studios and classrooms of the School.



The PCUPR School of Architecture believes that a new Strategic Architect and leader shall emerge from an environment of unrestricted knowledge, but with an ethical postulate that allows interactions to occur in a manner worthy of our Institution, and to the community which it serves. An educational environment in which human respect and ethical exchanges are the foundations of a trustful peer relation, and where the curriculum maps academic behavior to the benefit of the trans-disciplinary exchange, catalyzing cross-pollination, and fertilizing innovation.

The PCUPR facilitates and promotes a climate of respect for cultural and social diversity. Its mission statement recognizes that as an institution it is responsible for creating a better local and global community. Within its vision, it is committed to searching for solutions related to the cultural realities not only of Puerto Rico but that of the Caribbean and the world. This climate of respect is an effort evidenced by all our academic and institutional organizations and offices.

### I.1.3. SOCIAL EQUITY

The PCUPR maintains an affirmative action employment program which is audited every year and which assess the recruitment process of all its Academics Units, including the School of Architecture. Our University does not discriminate on the basis of race, ethnicity, creed, national origin, gender, age, physical ability or sexual orientation. Also, it does not require any employee or candidate for employment (faculty or administrative), nor any student or student applicant, to disclose his or her sexual orientation. Potential applicants for admission, administrative positions or faculty positions are considered based on qualifications.

While provisions to 42 U.S. Code § 2000 (Section E-2) allow certain exceptions on hiring practices for religious based educational institutions when said institutions are "in whole or in substantial part, owned, supported, controlled, or managed by a particular religion or by a particular religious corporation, association, or society, or if the curriculum of such school, college, university, or other educational institution or institution of learning is directed toward the propagation of a particular religion.", the PCUPR is compromised with equal opportunity hiring practices and denounce "discrimination against any individual with respect to his/her compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, sex, or national origin".

According to Section 2, Article 4, of 1990 "Ex Corde Ecclesiae" Apostholical Constitution by which the PCUPR abides, "the responsibility for maintaining and strengthening the Catholic identity of the University rests primarily with the University itself. While this responsibility is entrusted principally to university authorities (including, when the positions exist, the Chancellor and/or a Board of Trustees or equivalent body), it is shared in varying degrees by all members of the



university community, and therefore calls for the recruitment of adequate university personnel, especially teachers and administrators, who are both willing and able to promote that identity. The identity of a Catholic University is essentially linked to the quality of its teachers and to respect for Catholic doctrine. It is the responsibility of the competent Authority to watch over these two fundamental needs in accordance with what is indicated in Canon Law". All faculty, administrators and staff, at the time of their appointment, are to be informed about the Catholic identity of the Institution and its implications, and about their responsibility to promote, or at least to respect, that identity. Those who belong to other Churches, ecclesial communities, or religions, as well as those who profess no religious belief, are to recognize and respect the distinctive Catholic identity of the University.

The PCUPR also recognizes and abides by the requirements of 41 CFR 60-300.5(a), agreeing to "take affirmative action to employ, advance in employment and otherwise treat qualified individuals without discrimination based on their status as a disabled veteran, recently separated veteran, other protected veteran, or Armed Forces service medal veteran in all employment practices". Any and all processes regarding veteran students and employees are managed through the PCUPR Office of Veterans Affairs.

Consistent with the institutional mission and goals, many other services and strategies have been implemented to meet the needs of the diverse student body by providing support and guidance to traditional as well as non-traditional students who are older, have disabilities, are foreign, and partake in distance learning, among others.

The Institutional Office of Services with People with Disabilities (OSPI, for its Spanish acronym) has the objective to offer a favorable environment for the intellectual, physical, social, and psychological development of persons with disabilities. It recognizes the equality of and dignity of all human beings under the law. Coordinated through the Vice-presidency of Student Affairs, OSPI provides services for an average of 136 students per year. It can also provide services for faculty and staff, as required. Within our School, the Program Director works with each individual case in coordination with OSPI and is responsible for providing students and/or faculty with disabilities all the services available.

The Institution has established the procedures that are to be offered to the person with disabilities, the guarantees to be addressed and may receive (according to ADA law and any other law), and the reasonable accommodations (as defined under Section 504 of the Rehabilitation Act) according to the specific condition. OSPI reasonable accommodation processes require the person to provide medical evidence of his/her special condition in the institutional office. After receiving said evidence, OSPI shall evaluate the evidence presented and generate a document, directed towards all faculty assigned to the student in the semester or, in the case of an employee



(faculty and/or staff), to the respective supervisor, where any and all reasonable accommodations shall be outlined. HIPPA rules shall preclude the document to include the nature of the special condition, just the reasonable accommodation required. Reasonable accommodation shall not alter course content or evaluation methods. Students with disabilities shall confront the same intellectual and academic requirements set forth by course syllabus.

OSPI has capabilities to provide technological assistance to persons with disabilities through specialized equipment such as:

- o Chroma SVGA Image Amplifiers
- o Reading Edge Xerox Imaging System
- o HOVRS—Hands on VRS
- o Braille scanner/printer
- o Dedicated specialized workstations for the visually impaired
- o Ergonomic mobiliary and equipment

The PCUPR also actively promotes women candidates for administrative and faculty positions to submit resumes and applications for hire when positions are available. Departments requiring personnel submit the position requirements to the Human Resources Office for official analysis and subsequent postings. Academic departments submit the position requirements to the Vice-presidency of Academic Affairs. In both cases, once approved, an employment summons is drafted with all the position requirements and details. The official employment summons template includes the institutional policy on equal opportunity employment, and invites "all qualified women to submit".

For better accommodation of the students and/or faculty requirements, our program has been constantly revising the scheduling of courses in term of weekdays and times assigned. This initiative has provided new opportunities for faculty to broaden their academic participation within the School. Also, it has benefited students that commute from other municipalities to take their classes and the ones with special needs.

### I.1.4. DEFINING PERSPECTIVES

All throughout the basic curricular experience, our students are exposed to an inclusive array of academic wealth of options accompanied with the unwavering support of a "well-rounded" faculty composed of architects, historians, preservationists, engineers, landscape architects, urban planners, lawyers, developers and experts in computater design and digital representation.



Five Perspectives, that in conjunction with the NAAB Student Performance Criteria and a working innovative paradigm, provided the basis for our interdisciplinary (within the School) program. Our School of Architecture strives to provide a platform for broad student and faculty experience. The School's approach to the "Five Perspectives" requires promoting active participation by both faculty and students throughout three focus tracks: Academic Exploration, Curricular Amplitude, and Real-world Exposure.

### A. COLLABORATION AND LEADERSHIP

The curricular "ecosystem" formulated for the PCUPR School of Architecture promotes academic collaboration within two interwoven perspectives, the internal interdisciplinary approach, and the external transdisciplinary approach. Students are empowered to select, based on their area of interest, from a broad range scope of knowledge areas through the pairing of the Experimental Unit offer (24 credits Minor Degree) requirements through an interdepartmental coordination in the following manner:

Experimental Unit	Institutional Affiliate
Architectural Representation (ARAR)	Fine Arts Department
History & Theory (ARHT)	History Department
Adaptive Conservation and Preservation (ARAC)	History Department
Sustainability & Technologies (ARST)	Environmental Sciences Department
Structural Framework and Assemblages (ARSF)	Physics/ Mathematics Department
Landscape, Ecology and Environment (ARLE)	Biology Department
Urban Scapes and Communities (ARUS)	Social Sciences Department
Legal & Administrative Awareness (ARLA)	Social Sciences Department
Development Assessment, Entrepreneurship and Feasibility (ARDA)	College of Business Administration



Directly related to the perspective of Collaboration and Leadership, our School has systematically expanded the offering of lectures, conferences and other kinds of activities (promoted and/or supported by the School) focused in integrating the community aspirations. Most of the previously mentioned Initiatives are open to three different types of participants:

1) The general public, 2) The professional community and, 3) our Students and Faculty. Among other, we should mention:

- o Ponce Abre sus Puertas
- Ponce Místico
- Repensando Ponce
- Todos por Ponce (initiative for the community)
- VA Ponce Clinic common areas improvements
- Ponce's Parking Day
- Ponce Playa Rain Gardens Alliance
- Resistir y Sobrevivir (CAA Initiative for the community)

### B. DESIGN

It is precisely due to the interdisciplinarity nature of our Program which is part of our academic DNA, that we effectively approach the challenge of forming architects with a clear understanding of the multidimensional process that operates while pursuing a design solution.

The program engages interdisciplinary by means of the Experimental Units: ARHT History & Theory, ARAC Adaptive Conservation & Preservation, ARST Sustainability & Technologies, ARSF Structural Framework & Assemblages, ARLE Landscape, Ecology & Environment, ARUS "Urban-Scapes" & Communities, ARLA Legal & Administrative Awareness, ARDA Development Assessment, Entrepreneurship and Feasibility

Our pedagogical strategy promotes the Exploration, Experimentation and Application of knowledge with the idea of shaping a visionary professional always in search of adding net real value to the Design Problem Proposed Solution. Our School postulates that the range and depth of the academic structure are integral to the forming of new architects, through the rigor of the fundamentals of architectural practice as well as the development of alternative and complimentary markets. Exploration emphasizes on quantity and quality of knowledge in all relevant thematic areas within the Program. Experimentation builds upon exploration in the search for alternative postulates, variations and new creations. It is our belief that by exposing students to these opportunities we contribute to the development of leadership. The Application seeks to develop an interest in pursuing new developments, projects or ideas.



### C. PROFESSIONAL OPPORTUNITY

One of the Program's goals is to engage its context through ideas and resolving of issues at a global scale while dealing with those that are most pressing on the local realm. The idea behind this is to keep student exploration nested in reality without compromising the possibility for innovation and prepare students for their insertion into a local network of professionals with an innovative perspective.

In addition to that effort, and as the pre-eminent initiative for the inclusion of students within the realities of professional practice, the School has instituted and appointed the Intern Development Program (AXP) Education Coordinator (Architect Pilarín Ferrer-Viscasillas) as required by NCARB and NAAB. The AXP in the PCUPR School of Architecture aims to:

- Hold different and separate orientation meetings including student leaders and student organizations
- Invite regional practicing architects who can shed light on the importance of this
   Program and the "essential role" they have in its successful implementation.
- Follow up on individual basis on all those interested students to facilitate their entrance into the Program.

Student enrollment and participation in AXP has grown substantially in the past years. Enrollment is now over 30% of the entire student population, and many are actively registering experience within the AXP modules through collaboration and extracurricular office experience.

The PCUPR School of Architecture proactively pursues and sponsors lectures related to the practice of architecture. The AXP Education Coordinator continuously throughout the academic year presents seminars on AXP guidelines and student registrations. See section I.2.1 for additional examples of activities that embark on the perspective of architectural education and the profession from traditional to contemporary views, as well as student engagement in professional environments:

In March of 2015, the CAAPPR, a lawfully chartered and required professional entity for Architects and Landscape Architects in Puerto Rico, announced that a second location would be added to serve architecture and landscape architecture professionals in the southern and western regions of Puerto Rico. The PCUPR School of Architecture was chosen as the home base for CAAPPR, thus providing immediate and available support to professionals in this area. This close proximity also allows students to engage professional practice at an early stage prior to internship and professional licensure.



In the field of regulatory development and implementation, the Legal and Administrative Awareness Experimental Unit (ARLA) provides students with one of the primary sources of information and collaborations through the implementation of courses, lectures, special projects, and strategic alliances with local, state and federal agencies responsible for the regulatory environment to which most graduates will eventually be subjected to in professional practice, be it in the private or public sector. The ARLA Experimental Unit also provides students with the understanding and framework provided under professional agencies such as CAAPPR (*Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico*) and Puerto Rico State Board of Examiners for Architects and Landscape Architects, of which acting and former Presidents are or have been included within the School's faculty since 2009.

Graduates from our Program will also have an awareness of regulatory practices within other fields of expertise via participation in other Experimental Units. They shall attain awareness on issues such as: preservation and conservation, building codes and regulations, public policy, land use, development, and energy efficiency, as well as systems of incentives in place by government agencies to promote issues not yet in regulatory status. These tools, along with the skills acquired in the design realm, allow the students to acquire tangible expertise within the fields and themes brought forth through the Experimental Unit proposed as integral components of the Program (See section I.2.1 for lectures on this topic).

### D. STEWARDSHIP OF THE ENVIROMENT

The protection and conservation of natural resources, the enjoyment of sceneries and natural habitats, the recuperation of brownfields, the consolidation of green infrastructures in our cities, the development of advanced technologies to protect the environment, and the design/implementation of buildings and public spaces with high environmental and aesthetic qualities are some of the challenges that contemporary societies encounter. The Academy, through innovative programs, must educate professionals with the capacity of integrating their knowledge in vanguard solutions.

Responsible design solutions should strive to be appropriate, cost effective, environmentally friendly and aesthetically pleasing. Architects have an ethical and moral duty towards the creation of sustainable and community oriented urban environments, with the preservation of our natural landscape and resources. Contemporary sustainable architecture is evolving and we must stay abreast of the latest developments, learn about traditional construction methods and use of local materials, and know that infrastructure takes up space and must be included and coordinated with other trades from the very beginning for the successful completion of a project.



Our Program has put a particular emphasis in making aware our students of their responsibility as architects on caring and protecting the environment and on producing projects environmentally sensitive manly thru two of our Units ARST Sustainability & Technologies and ARLE Landscape, Ecology & Environment.

### E. COMMUNITY AND SOCIAL RESPONSIBILITY

Our school seeks to achieve regional empathy and landscapes of common good as the backbone of its academic, social, cultural and economic proposal for the southern region of Puerto Rico. By directly connecting to the region and city of Ponce, the school promotes the symbiotic relationships between public service, being a good citizen, and being a good architect."

The School of Architecture's involvement in public good and the community stems from the mission of the PCUPR. "To honor and promote life and dignity of the human being, as individuals and within a community," this is viewed as a necessity rather than a possibility. Notable among the collaborative initiatives aimed at common good are the strong collaborative ties that the School has with the Municipality of Ponce, the "Patronato Castillo Serralles," the "Instituto de Cultura de Puerto Rico," "Colegio de Arquitectos de Puerto Rico," "Casa del Veterano de Juana Diaz," among other. The PCUPR School of Architecture has partnered with these organizations in many aspects; most notably, student involvement with the design and construction work.

While many initiatives relating to public good come from the academic realm, and in many cases informally, the PCUPR School of Architecture reinforces and structures the public good perspective through the International Relations, Development and Community Outreach Coordinator. The IRDC Coordinator is directly responsible for seeking, coordinating, structuring and assessing many of the initiatives, Memorandums of Understanding, and projects involving the School of Architecture and the community.

Most recently we create "La Clinica de Asistencia Arquitectonica" (Clinic for Architectural Assistance CAA) offering a workshop (open to the public in general at no cost) regarding correct materials selection, good construction details and methods. The CAA is a pivotal Initiative part of our institutional response in support to the community urgent reconstruction needs, due to the devastation caused by hurricanes Irma and Maria.



### I.1.5. LONG RANGE PLANNING

Below we list most of our School's long-term plans, subdivided in the four suggested subjects. We formulated these plans in order to timely meet future needs. To properly identify our goals and priorities we began by extrapolating from the present challenges and current needs, charting out a path to the future we want to achieve.

### 1. Objectives for student learning

Both the Institutional Operational Plan and the Mission & Vision statement within the School delineate our Program's Students Learning Objectives. The Institutional objectives and strategies are aligned within eight (8) priority areas:

- o Integration of Faith and Life
- Attention to the Needs of Students
- Curricular Revision
- Human Resources
- Technological Infrastructure
- o Physical Infrastructure
- Administration and Finances
- Research Culture

### 2. Data and information sources used to inform the development of these objectives

The PCUPR School of Architecture complements the Institutional Long Range Plan with departmental specific activities, resources, time-lines and indicators (both qualitative and quantitative) as required for achieving success in the priority areas established by the Institution. We are constantly monitoring our courses and other academic activities to verify their alignment with our objectives and priorities. We have two general meetings with our faculty, one at the beginning of each semester (a general assembly) in which we notify where we are, this is also an opportunity to go over the School's priorities and how we are going to accomplish them.

The other general meeting (a round table gathering) occurs at the end of each semester, it is an open exchange of experiences, an analysis of what is working, what needs to be modified and if there is any other strategy that we might need to put in place. In addition to the previous, we also have smaller more specific meeting with the professors assigned to the Experimental Units. We also have meetings with the students in general (at least two per semester) and separate meetings with the students' leaders. In addition to the above, on every academic year, the students evaluate our entire faculty (including the Dean and the Program Director). The results are shared with each faculty member privately, particularly



with those that the students perceive that are not properly complying with the institution's objectives.

### 3. Role of long range planing in other programamatic and institutional planing initiatives

Long-range planning to the benefit of the perspectives relative to regulatory and professional realms is handled directly within the School. We strive to make sure that the objectives defined by our long-range planning, permeates into all our School's Academic Initiatives and Activities. Our faculty and students participates of our School's Vision and Mission and our constant search for academic Excellence, these shared goals are all aligned with our University's eight (8) priority areas. The NAAB Visiting Team will be able to confirm this assertion by reviewing our School's Progress since the last NAAB Accreditation Visit, and how what happened in the last few semesters and what is happening, now responds to the objectives that we consistently pursue.

### 4. Role the five perspectives play in long range planning

Most priority areas of the Institutional Operational Plan are aligned with the majority of the five perspectives. The objectives set forth by the "Integration of Faith" and "Research Culture," "priority areas clearly establish the basis for the School's perspective on "Community and Social Responsibility". The same relationship can be assessed with the "Professional Opportunities" and the "Attention paid to the needs of the students" priority level. "Design" is clearly related to our latest "Curricular Revision", the same happens with "Stewardship in relation to our responsibility towards the Environment" both of which correspond directly to the academic and of student perspectives within NAAB.

### I.1.6A PROGRAM SELF ASSESSMENT

As part of the institutional structure of the PCUPR, each Academic Program is evaluated by the Institutional Assessment Office (OAI, for its Spanish acronym). This office includes the Data and Support Recollection Center (CADA, for its Spanish acronym) which works with the data and information recollection and analysis processes generated during the implementation of the academic assessment plans. Also, it advises the members of the assessment committees of the academic units and it services the processes with review, preparation or modification of the assessment instruments.



The OAI was established to promote the leadership and the support in the development and supervision of the effectiveness of the institutional assessment model. It provides support for the continuous bettering of all the areas of the university's community through educational activities and orientation of the assessment and accreditation requirements, amongst others. Also, as a live and academic service community committed with the full realization of the human being in all its dimensions, the institutional assessment project promotes the development and complete fulfillment of the students.

The PCUPR School of Architecture, in key with the requirements of the OAI, has appointed a faculty member a part of the Institutional Assessment Committee (CAI, for its Spanish acronym) as a representative for the Program. As a foundation for the execution of its functions, this board refers to the Guide for the Assessment of Academic Units provided by the institution, including the following themes:

- o Institutional Assessment Project (PAI, for its Spanish acronym)
- o Academic Assessment Process
- o Student Apprenticeship Assessment
- o Role of the Institutional Assessment Office and the Institutional Assessment Committee
- o Role of the Units Assessment Committees
- o Functions of the Unit Assessment Committee's President
- o Implementation of the Unit's Assessment Plan
- o General steps to guide the Assessment Process
- o How to prepare the Unit's Assessment Plan
- Compile the data and sharing the results: interpreting the evidences and implementing the changes and the improvements
- Utilize the nourishment to make changes
- o Procedure for form developing
- o Instruments for the assessment of courses
- o Instruments for the assessment of academic programs
- o Other instruments for the assessment of academic progress

To ensure the fulfillment of the mission established for the program, and in its pursuit of academic, administrative and professional excellence, the School relies profoundly on student assessment of the Program and the Facilities. For this purpose, the School established Form 10-ARQ as a yearly evaluation questionnaire submitted to the students during the spring semester to provide insight on the operations, and serving as the promoter of reinforcement or bettering for future administrative actions. The implementation of the document was approved by the OAI



and established as part of the Program's assessment policy. The form was designed to allow congruence with the requirements established by the NAAB to respond to the Five Perspectives.

The instructions for the questionnaire provides students with a confidential venue for expression, and the instructions included with it ask for a responsible, objective and sincere assessment in a scale of five levels (0=Does not Apply, 1=Fail, 2=Poor, 3=Satisfactory, 4=Good, 5=Excellent). The questionnaire includes forty (40) questions and/or statements divided into eight main categories. Students are asked to evaluate the Program in the following areas:

- Academic offering in terms of technology, methodology, diversity, structure and environment
- 2. Response to NAAB's five perspectives
- 3. Administrative structure and operations in terms of leadership, demeanor, disposition, ability to manage situations and diligence
- 4. Activities and events in terms of quantity, quality, diversity, cultural/social dimension and relevance
- 5. Facilities in general and in terms of schedule, security, maintenance and availability of personnel as required
- 6. Library in terms of schedule, availability/demeanor of personnel, quantity of primary resources (i.e. books), quantity of supplementary resources (i.e. magazines) and atmosphere
- 7. Multimedia and data network in terms of schedule, availability of personnel, professional capacity, variety of hardware, and costs
- 8. Fabrication Laboratory in terms of schedule, availability of personnel, professional capacity, variety of hardware, and costs

As for the faculty, to measure their fulfillment, the School utilizes the Apprenticeship Assessment Techniques Manual, provided by the OAI, and the Faculty Evaluation by Program Director, a document provided by the Vice Presidency for Academic Affairs (VPAA). Also, the Program has implemented a faculty assessment project conducted by the students with the use of Form 5 (Faculty Evaluation by Students). This is also an institutional evaluation document required for Full-time and Part-time faculty by the VPAA for each course, each semester. The following are the 21 topics in which the students assess the performance of the faculty:

- 1. Encouragement towards achieving the institutional mission
- 2. Professionalism in the execution of duties and responsibilities
- 3. Respect demonstrated towards students
- 4. Utilization of the course syllabus for the accomplishment of the course objectives
- 5. Knowledge of the material taught



- 6. Organized presentation of learning materials
- 7. Diversity of teaching strategies
- 8. Clarity in the communications of ideas
- 9. Encouragement towards critical and analytical thinking
- 10. Opportunity to ask questions and clarify doubts
- 11. Effectiveness towards promoting student participation in class
- 12. Utilization of appropriate and updated bibliographical and technological resources
- 13. Effectiveness in the utilization of the course contact hours
- 14. Diversity of evaluation methods
- 15. Clarity of the criteria for evaluation
- 16. Clarity and precision in the writing of exam questions
- 17. Promptness towards the notification of grades (a maximum of two weeks from the examination)
- 18. Impartiality towards grading, utilizing the criteria as established in the course syllabus
- 19. Availability to attend students' academic needs
- 20. Regularity and punctuality

The inclusion of additional topics and/or questions responds to institutional revisions of self-assessment procedures, curricular revisions, and recommendations from accreditation agencies. On the other hand, to ensure the fulfillment of the mission established for the program, at the end of each semester the faculty meets in a roundtable format to assess their performance and that of their students. For its part, the administration of the School has implemented a structured system of weekly meetings for the constant evaluation of the student body and the academic personnel.

Lastly, the Program carries out a periodic Academic Progress Assessment Report referred to the Institutional Finances Committee, the Bursar's Office and the Economic Assistance Office. This report aims to collect and project numerical data of the entire student body that makes up the enrollment of Bachelor of Architecture Program. The purpose is to frame the management direction initiatives and projects to be implemented for the subsequent years, ensuring the perennial continuity of triumphs at institutional level. The long-range planning process, including the establishment of the budget for subsequent academic periods proposed each year to the Vice Presidency for Finances and Administration, is a participative activity informed by the aforementioned assessments including all the components within the School.



### I.1.6.B CURRICULAR ASSESSMENT AND DEVELOPMENT

The academic program of the School has established a curricular review process, in accordance with the regulations established by the University, by instituting a Departmental Curricular Committee. This committee is represented by the various sectors of the architectural discipline, and composed by the Library Director, Operations Manager, the Experimental Units Coordinators, and the Capstone Year Coordinator. Together, they collaborate with the Dean, and Program Director in the review and updating of curriculum, identification of human and fiscal resources, and the development of research and field experiences.

The committee is in charge of making recommendations regarding Student Performance Criteria and thematic elements to be adjusted in the curriculum. As for the educational environment in the School, the Dean and the Program Director provide their expertise towards competitiveness in the exercise of academic practice. From the decisions made, both the Experimental Unit Coordinators and the Capstone Year Coordinator work with faculty towards the goal of making sure that every working platform in the School reaches an encumbrance in philosophical and practical discourse of the profession.

A high quality college education is the goal of all institutions of higher education. To achieve this goal, universities must assess their academic, student and administrative services. For this extent, the PCUPR has established its Strategic Plan. In this document, the Vision of the Priority Area #2, Attention to the Needs of the Student Body, states the following:

"Recognizing that students are the focus of the University, all expectations to achieve comprehensive quality training and obtain a degree from the institution, within a reasonable time, will be met through effort, collaboration and commitment of all university bodies."

Achieving the following institutional goals and objectives will contribute to the stated vision:

- o Increase retention of students enrolled, by effectively addressing their needs
- o Establish streamlined administrative processes to meet the needs of students
- o Determine the level of satisfaction of our students with the educational and administrative operations of the institution

It is in terms of determining the level of satisfaction of our students that the School has administered its questionnaires obtaining the following results per the presented topic:



Academic Environment	Agree	Disagree	Neutral
The academic environment is conducive to learning.	76.13%	3.60%	20.27%
Academic Environment - Most satisfaction	Agree	Disagree	Neutral
Academic counselors help identify the means and resources with which achieve educational, personal and career goals.	93.75%	0.00%	6.25%
Faculty provides an educational environment that facilitates learning.	87.50%	0.00%	12.50%
Faculty demonstrates mastery of the courses they teach.	87.50%	0.00%	12.50%
Academic Environment - Least satisfaction	Agree	Disagree	Neutral
Extracurricular activities contribute to students' personal and professional development.	62.50%	6.25%	31.25%
Faculty provides guidance on selecting courses for enrollment.	62.50%	18.75%	18.75%
Faculty uses different methods to assess learning.	62.50%	6.25%	31.25%

Diverse areas (including main campus)	Agree	Disagree	Neutral	Not used
Student Services	57.89%	6.61%	20.41%	15.09%
	46.96%	7.29%	26.31%	
Physical Facilities				19.44%
Activities	45.24%	7.14%	27.38%	20.24%
Communication and Information Services	56.07%	14.02%	17.20%	12.71%
Academic Services	61.80%	5.62%	18.73%	13.85%
Support Services for Teaching	37.23%	4.79%	33.34%	24.64%

As for the teaching in the academic program, since its foundation year the students have been given the task of evaluating their faculty through the use of Form 5 (previously mentioned). The global results per academic year, using a 0 to 100 average scale (100 being the highest), are as follows:



Academic Year	Courses Evaluated	Average
2009-2010	18	83.71%
2010-2011	43	83.02%
2011-2012	52	84.47%
2012-2013	56	88.27%
2013-2014	31	86.09%
2014-2015	78	88.15%
2015-2016	84	89.21%
2016-2017	123	90.83%
2017-2018 (Fall Semester)	60	93.22%
Totals	545	87.44%

In term of the graduates' assessments, the Institutional Alumni Office handles the administration of surveys and questionnaires. A survey to be administered to our graduates was scheduled for the month of May.

For its institutional requirements, the PCUPR has established very methodical self-assessment processes for the evaluation of its curriculum and faculty. The Institutional Curriculum Committee, composed by the Provost, high-level academic administrators and Deans, leads the efforts toward constructing better academic offerings and constantly reviews existing programs. On the other hand, the Vice Presidency for Academic Affairs (VPAA), as part of its extensive duties, is in charge of evaluating the complete teaching staff of the institution, including the faculty of the School of Architecture.

For the faculty assessment, safeguarding the personal dimension that characterize the individual teaching practice of each professor, the VPAA has always emphasized in the necessity of addressing the institutional mission, vision, pedagogical model, educational philosophy, organization, and curriculum as an integral component of each course. As with any complex procedure, it is founded on principles that contribute the basis for the Institutional Process for Faculty Assessment. The following is a list of the founding principles:

- o The assessment must be a complete and continuous process in the entire University
- o All members of the institutional community must participate: students, faculty and administration staff
- o It has to be done periodically. The assessment process will be completed annually.



- o The fundamental purpose of the faculty assessment is to promote improvement and professional growth of the entire teaching staff in all of their academic areas
- o The assessment is the instrumental process for institutional decisions of: contract renovations, promotions, tenures, and other personal benefits.
- o Faculty assessment must be founded on an institutional setting of trust and confidence
- o The assessment must be sincere, honest, respectful, and producer of commitment, change and improvement in the teaching strategies
- o The critical self-assessment is an essential component in the process for it to succeed
- o All the information related to the assessment process (procedures, forms, and results) must be accessible to the faculty



### SECTION TWO: PROGRESS SINCE THE PREVIOUS VISIT

### 1. CONDITION NOT MET IN OUR LAST VISIT

### A.4. Technical Documentation

"While there is evidence that most of the areas in this criterion are covered, no evidence was found that students prepared outline specification documents that are referenced in architectural studio drawings found in ARAD 301 and ARST 201. Furthermore, no evidence was found in student work for ARAD 302, which was the studio marked in the SPC matrix as satisfying the criterion."

### Corrective Action Implemented:

Since fall 2016 (the semester immediately after receiving the VTR) we included, as part of our Program, a new Core Course (ARST 302) dedicated exclusively to reinforce and better train our students in the production of Construction Documents (both, technical drawings and other documentation including Specifications outline). Since then we have been closely monitoring this Course students' work, to guaranty that now we are meeting this accreditation condition.

### 2. CAUSES OF CONCERN

"The economic situation vis-à-vis the continuity of offerings of the program. The program's ability to maintain a rich curriculum, a diverse faculty with different types of practices and experience in the field, and a high-tech collection of resources in view of the island's economic situation, which is affecting current and potential students and their families."

### Response to Causes of Concern:

The challenging economic situation that Puerto Rico has been facing close to a decade now, is affecting all kinds of social activities including academia. Nonetheless we must emphasize that our School keep counting with a solid backing from our University and as a clear example of every single year since last visit our budget is higher than our previous year budget activity even with the mentioned economic constraints. We have also internally adopted some strategies to reinforce the feasibility of our Program. We have been putting in place some Initiatives, in order to stabilize an adequate students' population which is our main source of income. These are:



- 1. Improving and making our program more flexible and attractive.
  - In order to keep improving our academic offer, and knowing that many of our graduates might opt to practice the profession in another stateside location different from Puerto Rico; since fall 2016 we have included as part of our General Studies mandatory requirements, a third English course (an advance commercial English course) that will help our students become a fully bilingual architects, adding another positive competitive edge to their profile.
  - The Program has made two reductions in the total amount of credits required to complete the degree. Previous to the last visit, the Program required 192 credits program. As of this document, reduction to 185 credits, and a second reduction to 181 credits have been achieved.
  - We are facilitating our students' academic progress by eliminating the mandatory connection between the Design Studios (ARAD) and the Digital Laboratories (ARAR), making exception to the ARAD/ARAR 101 and the ARAD/ARAR 420 combinations (First and last studios in the sequence. Until fall 2016, students either PASSED or FAILED both courses. Under the revised protocol, students can proceed to the following Digital Lab (ARAR) even in the case he or she fails in approving their Design Studio. (It does not work the other way around).
  - O We are promoting and facilitating that students registered in the other two Campuses (Arecibo & Mayaguez) of our own University so they can to start taking some of our 1st Year Basic Career Core Courses, by finding a place for them on Sections scheduled for Mondays and Fridays. This strategy allows them to take the rest of their mandatory general education classes during the week, closer to their hometown, reducing students' housing costs and allowing them to have a softer transition from High School lifestyle, to the demanding architectural studies routine.
- 2. Reinforcing the local promotion our academic offer making many more highschool students aware of our Program even beyond the south and southwest Regions of Puerto Rico (which are historically our main zone of influence). We have created a staff position which is mainly dedicated to New Students' Recruitment. Mr. Job Bonilla Rosas (school's alumni) visit schools, participates in carrier days, has organized several "School's Open Houses" participate on Regional and Island-wide Career Fairs, and is constantly following-up on any "pre-candidate" that contacts us asking for any basic information.



3. To increase student enrollment and retention, we have implemented a Program which deals with the academic and cultural transition that experimented our 1st year students which. This is the group where we experiment the highest levels of academic frustration. Prof. Ligia Saldaña Martorell was named Coordinator for the "Initial Career Experience" program. Prof. Saldaña interacts thru a well-structured Activities Program with those students from the first three (3) Program's semesters. The idea is to provide a friendly personal support and help them with their daily student's life situations. This includes not just their academic experience with courses and/or professors, but also day to day experiences with housing, city life experience, and their cultural transition coming from a "semi-analog" life style to our high-tech "digital" environment. Not to be overlooked, the changes that many who come from a rural background, to our unavoidable urban, context experience are also part of the issues dealt with and support that our students have access to.

### 4. BECOMING A REGIONAL ACADEMIC DESTINATION.

We have been working hard and rigorously to make the EA- PCUPR by its academic quality the best and top academic alternative in the Caribbean Basin. Towards that initiative:

- We have been recruiting top local professionals
- We are increasing our International Alliances. Prof. Lorna Baez Amely, together with Dean Badillo, have dedicated much energy and effort in increasing and reinforcing our School's international offer.
- We are continuously organizing local and International academic events such as design competitions (W.A.T) and workshops (RE-THINKING PONCE).
- We are inviting renowned international speakers.
- We are increasing and reinforcing our International and National Alliances with other Schools and Architectural Programs (Catholic University of Nicaragua / San Pablo CEU at Madrid, Spain / Universidad Iberoamericana de Sto. Domingo / PUCMM, Santiago de los Caballeros, Dominican Republic / La Salle University, Sonoma, Mexico. Among other, not yet in place but in progress)
- 5. EXPANDING AND IMPROVING OUR CUTTING EDGE TECHNOLOGY Since its inauguration our School has been distinguished as the most technologically advanced Architectural Program in Puerto Rico and the Caribbean Basin. This has been single out as one of our most distinctive, attractive and strongest attributes. We do not hesitate in constantly invest in new technology both hardware and software in order



to remain ahead of regarding our regional colleagues (for detailed information of technological resources and new acquisitions since the last visit, please refer to I.2.2 PHYSICAL RESOURCES)

6. NEW ACADEMIC OFFER - ASSOCIATE DEGREE IN DIGITAL GRAPHIC DESIGN. We are submitting for approval with the intention to commence as soon as fall 2018 or no later than spring 2019, a new 2-Year Associate Degree in Digital Graphic Design academic program. With this new offer we are projecting a total of 57 new students (sustained enrollment after second year). This new Program will represent new income in academic enrollment and will also optimize the use of our facilities through operational cost sharing with the present architectura. Reducing our operational cost will help to reinforce the economic viability of our Program. Currently, as of Febriary 2018, the Program proposal was presented to the Board of Trustees and the University's Curriculum Committee, gaining official approval from both bodies. The University protocol know provides for a presentation to the University Senate for final approval and implementation.



### SECTION THREE: COMPLIANCE WITH THE CONDITIONS OF ACCREDITATION

### I.2.1. HUMAN RESOURCES AND HUMAN RESOURCE DEVELOPMENT

Interdisciplinary dialogue and multi-sectorial knowledge are the conceptual basis for the curricular ecosystem of the PCUPR School of Architecture. The School offers an academic integration of diverse branches of knowledge that impinge on design and planning, expanding from the micro towards the macro. This innovative paradigm is the alternative to the weathered academic models based on one-topic specialization and disciplinary separation, focusing on the pure architectural perspective over holistic exploration, experimentation and implementation.

For these reasons, professionals with thorough theoretical and practical knowledge of different topics within the practice of architecture have been appointed to head theme specific Experimental Units and facilitate the concepts and new progressive tendencies of their areas of expertise. The following is a list of such the Coordinators:

- o Mr. Alejandro Mieses-Castellanos (Architectural Representation ARAR)
- Prof. Magda Bardina-García (Adaptive Conservation and Preservation ARAC)
- Arg. Pilarín Ferrer-Viscasillas (Sustainability and Technologies ARST)
- Arq. José Pagán-Parés (Structural Framework and Assemblages ARSF)
- Ms. Tamara Orozco-Rebozo (Landscape, Ecology and Environment ARLE)
- Ms. Lorna Báez-Amely (Development Assessment, Entrepreneurship and Feasibility ARDA)
- o Arq. Manuel de Lemos-Zuazaga (Capstone Year Experience)
- Arq. Ligia Saldaña-Martorell (Initial Career Experience)

The procedures related to the recruitment, selection, and appointment of full and part-time faculty at the PCUPR Ponce Campus and its extensions are found in the Statutes, Faculty Manual, and other documents approved by the Board of Trustees and the University Senate. The authority to appoint faculty resides in the President, who delegates this power to the Vice-President for Academic Affairs. The Associate Vice-President for Academic Affairs, who logs Equal Employment Opportunity and Affirmative Action data, initially acknowledges all applications received.

These applications are then sent to the corresponding Program or Department Director, which compares the candidate's academic experience and background with departmental needs. According to established norms, the Director consults a departmental committee of faculty members with rank concerning the candidates who will be recommended for the teaching position. In addition to academic preparation, emphasis is also given to the moral and ethical



principles inherent in the candidates whose qualifications are reviewed by the Delegate for the Institutional Mission. Deans receive recommendations from the Program or Department Directors and forward them with their approval to the Vice-President for Academic Affairs.

Promotion and tenure policies are stated in the Faculty Manual and are based on the requirements of academic degree, academic excellence, and fulfillment of duties as well as years of service. The PCUPR rank designations for full time faculty are as follows (from lower to higher): Instructor, Assistant Professor, Associate Professor and Professor. Each full-time faculty member with academic rank may be considered for tenure at the beginning of his/her twelfth year of active service in the university. Faculty involvement in the revision of rank and tenure policies and procedures occurs in the University Senate. Presently, the Rank and Tenure Committee of the University Senate is involved in gathering data through a faculty survey regarding the possible revision of these policies.

Starting in August 2017, one full-time instructional faculty with Rank (Instructor) has been active in the School of Architecture roster.

Name: Magda Bardina-García

### Courses Taught:

Courses ra	ugnt.
ARAD 201	Analytical Design Studio I
ARAD 202	Analytical Design Studio II
ARAC 101	Fundamentals of Historic Preservation and Conservation
ARAC 201	Preservation Techniques, Methods and Strategies for Building Systems
ARAC 301	Conservation Planning Strategies and Policies
ARAC 401	The Economics and Finances of Historic Preservation
ARAC 402	Cultural and Heritage Tourism
ARAC 430	In the Path of Lime: Origin, Handling, Performance and Application of Lime in
	Buildings (Travel Study course in Cartagena, Colombia)
ARUS 201	Territorial and Urban Public Policy in a Global Society

### **Educational Credentials:**

- o M.Arch., University of Puerto Rico, Rio Piedras, P.R. 1989
- Participant-UNESCO Workshop and Course on Monument Techniques: Roofing,
   Carpentry and Masonry, National University of Haiti 1984
- o B.E.D., School of Architecture, University of Puerto Rico, 1983
- Participant Preservation Institute of the Caribbean, University of Florida/
   Interamerican University of Puerto Rico, San German, Puerto Rico, 1983



### **Teaching Experience:**

- Full Time Instructional Faculty (Instructor), School of Architecture, Pontifical Catholic University of Ponce, P.R., 2017-present
- Adjunct, School of Architecture, Pontifical Catholic University of Ponce, P.R., 2009-2017
- Coordinator, ARAC Experimental Unit, PCUPR School of Architecture, 2009present

### **Professional Experience:**

- o President, Atelier 66 CSP, Ponce, Puerto Rico, 2003 present
- o Consultant, Urban Development Office, Municipality of San Juan 1999 2003
- o Director, Historic District, Municipality of Ponce, Puerto Rico 1992 1998
- Director, Historic District, Puerto Rico Cultural Institute, Ponce, Puerto Rico 1990
- Consultant, Historic District, Puerto Rico Cultural Institute, Ponce, Puerto Rico 1988-1990
- Conservation Trust of Puerto Rico, San Juan, Puerto Rico 1986 1988
- o Designer and Historic Preservation Consultant, Beatriz Del Cueto & Assoc.

### **Selected Publications and Recent Research:**

- "Ponce Abre sus Puertas" Ponce, Puerto Rico 2014
- "Simposio: Hacia una Nueva Visión de la Preservación Histórica: Siglo XXI" Ponce, Puerto Rico 2012
- o Investigation, Documentation & Assessment of Historic Value, Puerto Rico
- o International Symposium on Conservation of Monuments, Campeche, México
- o International Symposium on Conservation of Monuments, Heritage and Tourism
- International Symposium on Conservation of Monuments 1991
- Lecture: The Revitalization of the historic center of Ponce: Reuniting with their natural environment

### **Licenses/Registration:**

Puerto Rico Registered – AIT Certifícate 1294

Faculty members from different colleges and departments have been actively involved in the curricular revision process initiated by the Institutional Commission for Curriculum Revision. A specific three-year project supported by a grant from the U.S. Department of Education and the Fund for Post Secondary Improvement (FIPSE) has given faculty the opportunity to further improve the teaching/learning encounter. This project includes the integration of constructivist principles, assessment, and technology to teaching strategies, enabling the university to move



towards a more student-centered environment in which technology serves to further enhance the educational encounter.

Adjunct Faculty employment process at the PCUPR begins with the posting of openings according to the projected curricular needs of the Program. Job description and minimum requirements are provided by the Program to the university's Human Resources Office, which checks for correctness, completeness and reviews against institutional EEO/AA policy. Once the Job Announcement is approved, it is published externally via web and print through several job boards, newspapers and email listings (AIA-PR, CAAPPR). Submittals are received for a specific timeframe, usually two weeks, at which point the process is closed and all Employment Forms and documentation provided by candidates is scrutinized against the minimum requirements. All documents verified and approved by the Human Resources Office are submitted to the Dean for further scrutiny by the School's Dean and Program Director.

Once all qualified candidates have been selected, the documents are routed to the three-member Departmental Hiring Committee, composed of two Full Time Faculty members and, currently, the Operations Manager for the Program. Interviews, either personal or via conference call, are conducted by the Departmental Hiring Committee without the intervention of the Dean or the Program Director. Candidates are assessed by means of a standardized questionnaire which seeks to provide the Committee with a profile (knowledge academic and administrative processes, alignment with the institutional mission and vision, teaching experience, and other evaluative criteria specific to the program) and then submits its findings and evaluations to the Dean and Program Director for further action and final decision. For the Faculty Matrix, please refer to Section IV.8 Faculty for the link to the document.

Faculty development occurs through constant exposure to the School's inter-disciplinary character and collaborations, as well as Program promoted conferences, lectures, seminars, continued education, and special academic projects. Over the three two years, the School has sponsored and provided the following conferences and lectures:

11/18/2015 The Message of Architecture Phenomenological Medium

Speaker: Mabelle Plascencia

Conference on the phenomenological effect of building materials and

structures (ARST Experimental Unit).

11/23/2015 Global Entrepreurship Week Conference

Speaker: Dr. Javier Monllor-

Conference on strategies and best practices to ideate and develop a new

business idea (ARDA Experimental Unit).



11/30/2015 Article 1483 and the practice of Architecture in Puerto Rico

Speaker: Joel Montalvo-Bonilla, ESQ.

Conference on construction law and Article 1483 of the Puerto Rico ....

(ARLA Experimental Unit).

03/19/2016 50<sup>th</sup> Anniversary of the Ponce Art Museum

Speakers: Luis Badillo-Lozano (Dean) & Selected Faculty

Presentation on the design, construction and legacy of the Ponce Art

Museum building and it's designer, Edward Durell Stone.

06/12/2016 FLPD Medal presentation and award

Speaker: Luis Badillo-Lozano, Dean

Conference on the life of Francisco Porrata-Doria, architect for the Forteza Building, and first student recipient of the design excellence

medal in his name.

06/17/2016 Faculty Workshop: Digital Natives

Speaker: Dr. Jaime Ortiz-Vega

Conference on the pedagogical skills and techniques to educate & reach

the digitally-native Generation Y and Generation Z students.

09/07/2016 My Books Lecture Series:

The State of Architecture at the Beginning of the 21st Century

Presenter: Luis Badillo-Lozano, Dean

Presentation of the book documenting the March 2003 conference convened by Bernard Tschumi as a forum for the discourse of various

topics.

10/05/2016 My Books Lecture Series:

Architecture as Space: How to Look at Architecture *Presenter: Pedro Rosario-Torres, Program Director* 

Presentation of the 1974 edition of the book by Bruno Zevi.

11/04/2016 My Books Lecture Series:

The Shape of Green

Presenter: Pilarin Ferrer-Viscasillas, ARST Coordinator

Presentation of the book by Lance Hosey.



11/09/2016 Universal Design and the User Perspective

Speaker: Mauricio Lizama

Conference on inclusive landscape architecture and accommodating

functional diversity. (ARLE Experimental Unit)

12/17/2016 My Books Lecture Series:

Beyond the City

Presenter: Manuel De Lemos-Zuazaga
Presentation of the book by Felipe Correa.

02/01/2017 My Books Lecture Series:

**Urban Accupuncture** 

Presenter: Ricardo Miranda-Perez

Presentation of the book by Jaime Lerner.

03/01/2017 Synthesizing the Gaseous State

Speaker: Alejandro Mieses-Castellanos

Conference on software development in the architectural/urban research realm, including the analysis of naturally occurring

environmental variables. (ARAR Experimental Unit)

Professional development opportunities are provided thanks to the School's active involvement with the CAAPPR (Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico, which is the local version of the AIA) as a Continued Education Provider. All Architecture faculty are required, by law, to be registered and in good standing within the Puerto Rico Board of Architectural Examiners, and said registration requires a minimum of 12 credit/hours of HSW Continuing Education per natural year for licensed architects and 6 credit/hours for non-licensed architects.

07/03/2015 Introduction to CReSO

Speaker: Luis Ramos-Lorenzo

Conference on the creation, agenda and initiatives behind the newly organized Commission for the Southwestern Region of the CAAPPR.

09/09/2015 Architect Profile: Jose Alvarez

Speaker: José Alvarez

As part of the CAAPPR Architecture Week proceeding, Arch. José Alvarez, Principal at Ezkew, Dumez & Ripple based in New Orleans, presented the firms inventory of built work and its methodology for design and project

management.



10/07/2015 Intern Development Program Orientation

Speaker: Pilarin Ferrer-Viscasillas

Presentation on the IDP Program and the latest changes to procedures to

obtain professional licensure.

11/07/2015 Architect Profile: Mark West

Speaker: Mark West, Founding Director of CAST

Presentation on structural techniques and methodology in architecture based on his academic experience as faculty at the University of Manitoba and founder of the Center for Architectural Structures and

Technology. (ARSF Experimental Unit)

02/19/2016 Architect Profile: Jose Coleman

Speaker: Jose Coleman, Coleman-Davis-Pagan Architects

Presentation on the works of Coleman, Davis & Pagan Architects, including several AIA award winning projects Puerto Rico and Florida.

04/08/2016 The design of multi-scale, linear urban spaces

Speaker: Isabel Castilla, M.L.Arch.

Conference on the process of designing urban spaces of multiple scales and levels of complexity through the presentation of three built projects

in their unique context.

04/15/2016 Now What? Step by step guide for life after graduation

Speakers: Pilarin Ferrer-Viscasillas, PCUPR IDP Coordinator & Desiree

Guzman, AIT

Presentation what to expect after graduation, as well as useful insight on

licensure, employment and professional practice.

04/22/2016 Building in Nature, Designing with Climate

Speaker: John Hix

Canadian architect John Hix shared his experiences and opportunities for sustainable projects in the Caribbean, as well as the application and inclusion of sustainable technologies, materials and construction

methods in tropical climates.

06/26/2016 ARE Review: Construction Documents & Services

Speaker: Karla Toledo, AIT

ARE review for CD & S exam candidates.



12/02/2016 Projecting into Emptiness: Three town Squares by Rafael Moneo

Speaker: Maria Belen Hermida, faculty at CEU San Pablo, Madrid

As a former Moneo collaborator, Maria Belen Hermida presented the work of the Architect in his less known aspect: public squares at the small

and intermediate urban scale.

03/03/2017 Architect Profile: The Work of Francisco Camarena

Speaker: Eduardo Sánchez, faculty PUCMM, Dominican Republic

A glimpse at the historical preservation and contemporary works of Francisco Camarena thorugh the eyes of a former student and

collaborator.

03/07/2017 Landscape as City

Speaker: Wes Michaels, Landscape Architect

Conference on how landscapes respond to a range of different urban conditions, and how these responses are leading the city's growth and

development.

03/24/2017 Architect Profile: Fernando Menis

Speaker: Fernando Menis

A chronological a typological presentation of the work of Fernando Menis, and the materiality-based foundation that drives his projects.

04/21/2017 Architect Profile: Juan Mullerat

Speaker: Juan Mullerat, partner at PlusUrbia Design, Miami

Presentation of the work of Mullerat and PlusUrbia in the areas of design and master planning through built and unbuilt projects in North and

South America, Europe, Asia and the Middle East.

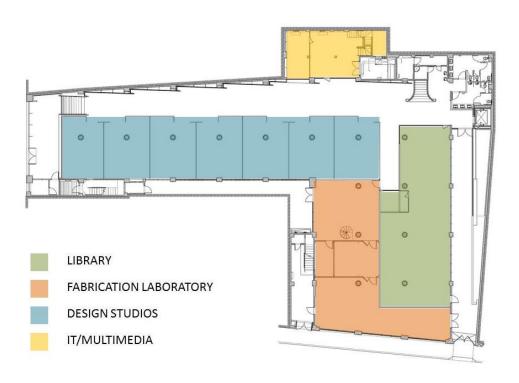
Funding for external development (not within the PCUPR School of Architecture or the Institution) is available every semester and included within each fiscal budget through Travel and Professional Advancement accounts. Every Faculty and Adjunct under contract can request travel and fees for attending conferences, seminars, continued education, conferences, collaborations and special academic projects. Requests must be submitted to the Dean with a description of the event and a breakdown of costs (registration, transportation, lodging and other expenses). The Dean shall them weigh the



Faculty Research has been one of the Institution's main objectives during the past decade. By decree of the President, an Academic Research Committee is convened with representatives off all Academic Colleges and branch campuses. A minimum of one "call for proposals" will be announced every year. Research proposals must be submitted to the College's Dean for All Faculty interested in submitting research proposals for must first submit to their College's Dean for approval. to their respective Deans, has an open door policy on research for all Colleges and DepartmentsSchool of Architecture and the PCUPR have provided SEED money for faculty with tangible research initiatives.

## I.2.2. PHYSICAL RESOURCES

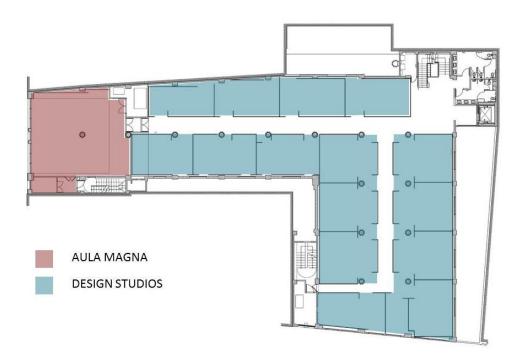
The **Forteza Building**, home to the PCUPR School of Architecture, dates to 1926 and was the original site of a Ponce's first and only local department store. Located along the east side of Ponce's central square (Plaza Las Delicias) in the Ponce Historic District, it provides a main entry on Marina Street (west) and an alternate entry on Cristina Street (south). The building has approximately 15,000 sq.ft. of interior space in each of its three (3) floors, for a total of approximately 45,000 S.F total for all three floors. Two exterior patio areas, located on the buildings east and south side, provide approximately 2,000 S.F. of additional usable space.





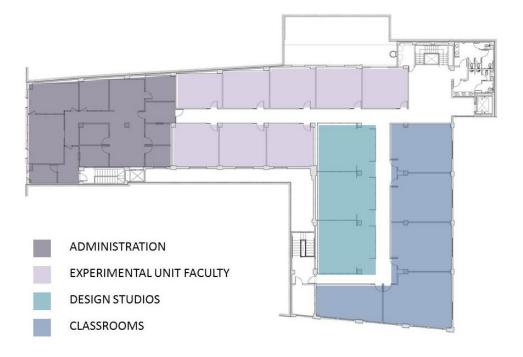
The first level of the Forteza Building, accessible from both Marina Street and Cristina Street, provides a main reception lobby, security desk, seven (7) Design Studio modules, the CARIBET Library, the IT/Multimedia Laboratory, the Fabrication Laboratory, and an open area designated for vending machines as well as tables and chairs for food consumption. This level accommodates most of the academic support services the School currently offers as well as Design Studio space exclusive to a total of 112 first and, if available, second year students.

The second level of the Forteza Building provides space for second, third and fourth year students, as well as the Aula Magna, the School's main lecture and conference area with a capacity of 120 seats. As with the first floor, all Design Studios have between 15 and 16 workstations, as well as worktables for model-making and general studio critiques.



The third floor of the Forteza Building provides office space for faculty and administration, five (5) classrooms for theory and non-studio courses equipped with audio and video capabilities, and three (3) Design Studios for Capstone Year students. Faculty and administrative offices provide all the necessary amenities and infrastructure for clerical work as well as meetings. For interactions requiring more privacy, including student advising by administration and/or faculty, the Administration Office provides two private meeting rooms. Videoconferencing and audiovisual infrastructure are in place in the larger of the two meeting rooms.





The building maintenance and repairs (minor) are provided by an external building maintenance company via renewable bi-yearly contracts. All works and scheduling are supervised by an inhouse Facilities Supervisor. Major repairs and maintenance is contracted to external companies through an institutional required "three-bid minimum" process.

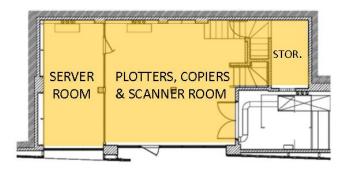
Working and teaching in the Ponce Historic District provides many amenities and conveniences, as well as several inconveniences that have been addressed through the years. First, parking availability in the area is limited to on-street metered parking and several public and private parking lots and structures. Presently, students not residing within the Historic District have several options available:

- 1. Two (2) free public parking structures within three blocks of the School.
- 2. Two (2) negotiated reduced flat-rate private parking structures within one block of the school for School of Architecture students, faculty and administrative staff.
- 3. Free on-street metered parking throughout the Historic District Monday through Friday after 4:00PM, and all-day Saturday, Sundays and Holidays.
  Another inconvenience of the Ponce Historic District is sporadic and temporary power outages in the area. The School of Architecture is affected by short interruptions once or twice a month, each occurrence usually for less than one-hour. The School, due to its size,
  - power consumption, and limited building area does not have full-building emergency power available. Still, several remedial actions have been taken to provide some degree of emergency power to some key areas and services:
    - Emergency lighting in all required hallways, offices and stairs.
    - Battery backup for partial floor illumination (alternate luminaires)



- Battery backup for individual studio workstations.
- 30kW grid-fed battery backup system for IT/Server Room (including data servers, network, internet, digital telephony, building security cameras, server room HVAC)

The **IT/ Multimedia Lab** (approx. 750 SF) is located on the first floor of the Forteza Building. It is directly responsible for the PCUPR School of Architecture's technological, communications, networking and audiovisual infrastructure. It is conceived as the central hub for all technological services and support within the School of Architecture, as well as digital printing in a variety of media and formats. It provides students, faculty and staff with the resources, hardware and software necessary for the design process and information resources.



The Data Center portion of the IT/Multimedia department manages and processes digital equipment, student data, software, documents and networking for students, faculty and administration through a state of the art 64-bit Windows platform, a 16 Terabyte Aberdeen storage server, and a 12 Terabyte Aberdeen Virtual Server, which is remotely "visible" from the Institutional IT Department (TTI) and serves as the main Operating System, network software licensing and script repository. The network is routed through three routing switches (one per floor) to distribute Ethernet cabling and Wi-Fi throughout the facility. The School has access to a dedicated DS3 internet connection that provides 45 Mbps bandwidth connection.

Every student enrolled in design studio courses and every member of the administration has access to an individual high performance Design Workstation with dual 21 inch LED monitors. Additional laptop computers are available for loan to faculty, administrators, and program guests (exchange students and visitors). The full design workstation and software inventory of the School of Architecture is provided below (items in **BLUE** were acquired posterior to 2015 NAAB Visit):



DESIGN WORKSTATIONS		SOFTWARE LICENSES	
HP Z400 Workstation	142	AutoDesk Building Design Suite 2017	142
Windows 7 64-bit		AutoDesk Entertaiment Creation Suite 2016	142
320 GB and 500GB Hard Disk		Adobe Master Collection CS4	142
8 GB RAM NVIDIA Quattro FX 1800 Video		Rhinoceros Educational Lab Kit	142
HP Z400 Workstation	115	AutoDesk Building Design Suite 2017	115
		AutoDesk Entertaiment Creation	115
Windows 7 64-bit		Suite 2016	113
500GB Hard Disk		Adobe Master Collection CS5	115
12 GB RAM		Rhinoceros Educational Lab Kit	115
ATI Firepro V4800 1GB video			
HP Z400 Workstation	78	AutoDesk Building Design Suite 2017	78
Windows 7 64-bit		AutoDesk Entertaiment Creation Suite 2016	78
320GB Hard Disk		Adobe Master Collection CS5.5	78
12 GB RAM		Rhinoceros Educational Lab Kit	78
NVIDIA Quattro 600 1GB video		V-Ray for Rhinoceros	78
		ArcGIS Archinfo Educational Lab Pack	31
HP Z420 Workstation	60	AutoDesk Building Design Suite 2017	60
		AutoDesk Entertaiment Creation	60
Windows 7 64-bit		Suite 2016	
500GB Hard Disk		Adobe Master Collection CS6	60
12 GB RAM		Rhinoceros Educational Lab Kit	60
ASUS G-Force GTX 970 4GB video		V-Ray for Rhinoceros	60
		Lumion 6.5 Educational	30

While there is no additional fee assessed for the use of the Programs technological infrastructure (i.e. Lab Fees), students pay for their individual prints through the PaperCut Print Management System. Revenue is reinvested in supply stock and material inventory. Printing costs are established once years, during the summer, after all supply invoices from the previous fiscal year



are analyzed. In this manner, the IT/Multimedia department can establish fair and competitive pricing for the different services, Below we provide a list of the available equipment within the IT/Multimedia Department at the School of Architecture:

PRINT HARDWARE	PRINT HARDWARE		SES
ecoprintQ MJP B-100 Pay Station	1	Paper Cut MF Print Manager	500
HP Z6100 Color Inkjet Plotter	3		
HP Designjet 500 Inkjet Plotter	1		
RICOH W3600 Business Color Copier	1		
RICOH MPC 8002 Business Color Copier	1		
RICOH MPW 2400 Large Format	1		
Copier/Scanner			
HP Office Jet K8600	4		
HP LaserJet P1006	10		
HP LaserJet CM1312	1		

All network activity is jointly managed by the School's IT/Multuimedia department and the TTI Department (Spanish acronym for Institutional Telecommunications and Technology). The first manages local networking, infrastructure maintenance, data structure/ backup, licensing, communications, and multimedia services (audio, video, print). The latter manages virtual servers, security, internet, telephony, access privileges and support. Items in **BLUE** were acquired posterior to 2015 NAAB Visit:

SERVER HARDWARE		SERVER SOFTWARE
HP Proliant DL380 Virtual Server	1	
Manager	± į	Windows Server 2012, VMware
HP Proliant DL380G6 Virtual Servers	2	
Aberdeen 585X 12TB Virtual Storage	1	Windows Server 2003
Server	±	Willdows Server 2003
Aberdeen 365X 16TB NAS File Server	1	Fog Sonyor 2.0 (Ubuntu 12.4)
Dell Poweredge 1950 Server	1	Fog Server 2.0 (Ubuntu 13.4)
Palo Alto Firewall Server	1	
Seagate 3TB NAS Backup Unit	1	
Enterasys Wi-Fi Access Points	7	
Cisco 3800 Router	1	
HP Virtual Storage 1450 Server	1	
Conext XW 111A 30Kw Battery Backup	1	



A wide range of Audio, Video, and other technology resources are installed within the School of Architecture or available for loan to faculty/students through the IT/Multimedia Department. Among these are:

OTHER EQUIPMENT		COMMENTS
VIZIO E50 50" LCD monitors	6	Four(4) permanent, Two(2) portable
Dell Alienware Area 51 Workstation	1	zSpace 3D Hardware & Software
InFocus IN5312a Projector	2	Fixed installation at Auditorium
InFocus IN2126x Classroom Projector	5	Fixed installation at Classrooms
InFocus IN112x Projector	8	Portable for Loan
HP Elitebook 8570w Laptop Computer	12	Portable for Loan
Logitech ConferenceCam Connect	1	Portable for videoconferencing

In an effort to provide additional security to the School's technological infrastructure, a Conext XW 111A 30kW Custom Battery Back-up System was installed to provide approximately 6 hours of uninterrupted power all data servers, networking, internet and IP Communications. While the system does not provide power for users to continue operating within administrative offices and studios (individual UPS systems are provided for that), the 30kW backup system does provide for enough time to assess the power issues within the building and, in case power outage time nears the systems operating limit, a protective shutdown off all servers and systems may be executed as to safeguard its integrity.

The **Fabrication Laboratory** (Fab Lab) at the PCUPR School of Architecture (approx. 2,540 SF) is characterized for establishing itself as the center of digital fabrication technology and computer-aided fabrication in southern Puerto Rico. It has the largest equipment inventory of any and all Fabrication Laboratories within the architecture and design schools in Puerto Rico. More than a modeling workshop, the Fab Lab is characterized by being the focus of computerized prototyping and design facilitating technologies at the service of the architectural design curriculum, providing students with modern tools to develop their creative ideas into functional and tangible works. Students are immersed in an environment where creativity and technology go hand in hand; an ideal setting for valuable experimentation and academic development at the intersection with the contemporary workforce.

The Fab Lab's mission is to present students a diverse world where technology helps them projects their ideas into tangible objects of the highest quality possible and to acquire the technical knowledge to effectively use technology in the development of innovative concepts



relevant to our current era. To develop a center of exploration focused on the development of new materials and emergent technologies, applicable to the world of art, design and architecture.

Its staff is composed of architects and experienced operators committed to educating students about new materials, technologies, means, fabrication strategies and advanced manufacturing methods. The students are part of an atmosphere where technology and creativity go hand in hand, working in a suitable space for personal development and experimentation.

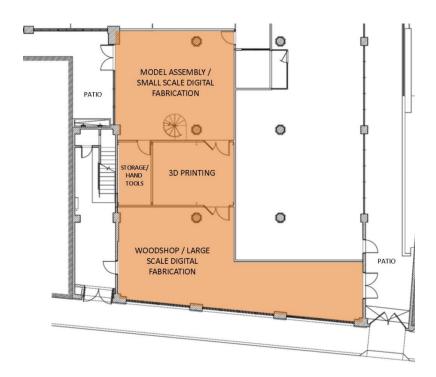
The Fab Lab is equipped with analog and computer controlled machines that will grant students the ability to create high quality prototypes and models. Among these machines are a CNC (Computer Numerical Controlled) mill, Laser Cutters, and 3D printers (Rapid Prototyping machines). These tools provide the students with a detailed exploration of formal, aesthetic, and tectonic assemblies during critical design phases and final project executions.





## The Fab Lab is divided into three distinct areas:

- 1. Model Assembly & Small Scale Digital Fabrication: worktables, cutting mats and Laser Cutters are provided in this area. While other areas of the Fab Lab are open on a fixed schedule, this area is frequently left open after hours as to allow students access to a more comfortable and ample work space.
- 2. 3D Printing: This intermediate area houses the Fab Labs 3D printing infrastructure, which includes four (4) large Dimension 3D Printers, and three (3) smaller desktop 3D printers. This area is managed by Fab Lab personnel only during business hours only.
- 3. Woodshop/Large Scale Digital Fabrication: This area is located at the southernmost part of the Fab Lab. It houses a large CNC Router and several woodworking, finishing and specialty equipment. Its location is ideal due to the sound and debris generated by the use of these machines. It also provides a glimpse into the inner workings of the Fab Lab via its vast glass storefront that faces Cristina Street. Pedestrian onlookers are a common occurrence.



A complete list of tools, digital and analog fabrication equipment, and support/safety equipment is provided below (items in **BLUE** were acquired posterior to 2015 NAAB Visit):



DIGITAL FABRICATION EQUIPMENT		WOODSHOP FABRICATION	
ShopBot PRS 4' x 8' bed CNC Router	1	Makita Slide Compound Miter Saw	2
Roland Modela MDX-40A CNC Milling	1	Ryobi 2.1 Amp. 6 in. Bench Grinder	1
Universal PLS6.75 Laser Cutter	2	Hot wire Table	1
Ultimaker 3 Extended 3D Printer	1	Milwaukee Heavy-Duty 8" Panel Saw	1
MakerBot Replicator 2 PLA 3D printer	2	Powermatic 18-inch Variable Speed Drill Press	1
Dimension SST 1200es 3D Printer	4	Powermatic 8-inch Jointer	1
Formech 508DT Vacum Forming	1	Porter Cable 18-gauge Pnumatic Brad Nailer	1
ShopBot PRS 4' x 8' bed CNC Router	1	Jet JWL-1236 Wood Lathe	1
		Delta 6" Belt/ 12" Disc Sander Center	1
		Jet EHVS-80CS Edge Horizontal/ Vertical Sander	1
		Jet 14-inch Woodworking Band Saw	1
		Jet SBR-30N / -40N Shear, Brake and Roll	1
		Powermatic 10 in. Cabinet Saw	1
		Jet 18-inch, 20-inch Band Saw	1

HANDTOOLS		SUPPORT EQUIPMENT	
Milwakee Reciprocating Saw	1	Phoenix Support Cleaning Apparatus (SCA)	4
Makita 2414NB Hand Table Saw	1	Powermatic PM1900 Dust Collectors	2
Makita HG 1100 Heat gun	1	NOTRAX AntiFatigue Mats	6
Makita LXPH01 Cordless Drill	7	Jet AFS-2000 Ceil. Mount Air Filtration Units	2
Makita B04556 Finishing Sander	2	BOFA Advantage 1000 Laser Fume Extraction	1
Makita BSS610 Hand Saw	1		
Makita DC18RA Battery Charger	2		



Use of the PCUPR School of Architecture's Fabrication Laboratory requires a clear understanding of the established rules and safety protocols. A "Fabrication Laboratory Training Seminar" is scheduled every Fall semester among all first year design studio sections, as well as Spring Semesters for new admitted students. The seminar includes an oral presentation by the Fab Lab Supervisor, an eleven (11) page manual, an Institutional Release of Liability form, and a written/practical examination on the correct use of workshop equipment. A pass evaluation on the written/practical examination is required for use of the Lab; nevertheless, direct supervision from Lab staff is always required. Safety protocols and rules are also posted at different locations throughout the Lab. Students who successfully pass the Training Seminar are provided with Certification Level Designators (novice, expert) that is applied their Institutional ID.

Woodshop tools are available and free of charge to be used within the premises of the Fab Lab. Digital fabrication equipment is available by reservation and requires a fee. The CNC Router, CNC Milling Machine, and the two (2) Laser Cutters are charged by time of use (15 minute blocks) The Dimension, Makerbot and Ultimaker 3D Printers are charged by quantity of material consumed (in³). Rates vary depending on the technology used. While the smaller printers are more commercial grade rather than professional grade, students gravitate to them due to the lower cost, flexibility and speed.

Digital fabrication equipment is available for reservation through a proprietary website dedicated for this purpose (www.Fab Labea.com). The easy to use interface is accessible from any mobile or internet ready hardware, and reservations are usually completed in three steps. Fab Lab personnel will receive email confirmation of every reservation, where a preliminary consultation is then scheduled prior to actual equipment use to ensure that the digital files have been created and constructed properly. The consultation will also yield a preliminary cost estimate which students must pay prior to their scheduled reservation.

Payment for services is manually debited by Fab Lab staff using the PaperCut Print Management System. Each transaction is entered with a specific comment nomenclature that establishes the equipment used (CNC, Lasercutter, 3D Printer) in each transaction. Every month, the IT Supervisor and the Fab Lab Supervisor generate a report showing all manual transactions pertaining to the use of the Fab Lab equipment. The report is then provided to the PCUPR Accounting Office. The revenue generated by the Fab Lab is then transferred by Accounting Staff to the Fab Lab account. All revenue accrued by the Fab Lab, as is the case with IT/Multimedia, is not fiscal year dependent; that is, unused account balances are rolled over to the next fiscal year every 30<sup>th</sup> of June. Fab Lab revenue can only be used, per the established account parameters, solely for equipment and material acquisition. Any maintenance or professional services have to be absorbed by the School's Operational Budget.



### I.2.3. FINANCIAL RESOURCES

The PCUPR School of Architecture's main revenue source is, as most undergraduate private academic institutions, through enrollment and tuition. During the 2015-2016 and 2016-2017 academic years, cost per credit for students enrolled in the Architecture Program was \$305/credit and \$310/credit, respectively. While the tuition cost for the Program is higher than that of other academic programs within the PCUPR system (except School of Law), architecture students enrolled are provided benefits way beyond those provided to students in said programs.

With the advent of an unprecedented "one computer per Studio ewnrollment" policy, state-of-the-art facilities, high-end fabrication laboratory and unprecedented access to software, the PCUPR School of Architecture could substantiate the cost increase in tuition for its students. The PCUPR School of Architecture's cost of enrollment is similar to the other private Bachelor of Architecture program in Puerto Rico (the Polytechnic University of Puerto Rico). Tuition cost at the PCUPR School of Architecture is still significantly less than other professional degree programs in mainland US and Europe.

Expenditure within the PCUPR School of Architecture are divided into Salaries and Wages and Operational Costs. Salaries and Wages are related to administrative/faculty payroll and benefits, while operational expenses comprise utilities, financing, depreciation, facilities, contracted services, professional services, equipment, travel, and security, among others. Revenues are mainly accrued through tuition and fees.

The PCUPR includes a Depreciation line item within the Operational Cost realm. It constitutes the biggest item in the yearly budget and plays an important role in calculating the solvency of the program. Depreciation costs are factored into the expenditure framework as a guarantee that the infrastructure and technological investment can self-generate after the established depreciation cycle to promote the reacquisition of technological infrastructure and facility improvement as to maintain a quality and quantity of service beyond all other PCUPR programs.

The PCUPR budgeting process is established on a yearly basis and is aligned to the Institution's Strategic Plan and the School's Operational Plan. After careful analysis, the strategic plan and the operational plans, based on the strategic priorities, are aligned to the resources needed, providing an adequate basis for the approval of resource allocation dependent on the availability of funds. The results are evaluated by units and action plans are developed which serve as the basis in the preparation of the following year's budget and operational plan. The process is facilitated by the Vice-Presidency for Institutional Development, Research, and Planning (VPIDRP).



This process has improved the effectiveness and efficiency of strategic planning by aligning the institutional strategic priorities and goals with the budgeting development processes and making it more participatory. It seeks to further develop and maintain the linking of the budget process with strategic, operational, and action plans. Planned levels of enrollment, projected tuition increases, and intended activities are factors used to develop projected yearly budgets based on strategic priorities (*PCUPR Institutional Self-Study Report – MSCHE, February 2014, p.18*).

Based on institution-wide enrollment, revenues, expenditures, and capital acquisitions projections, the PCUPR Budget Office will assign a preliminary lump-sum budget to every College or School, depending on the case, and is usually a positive or negative deviation from the previous year budget depending on the above mentioned criteria. Once preliminary communications have been established, it is required that every Department submits a broken down budget based on the acting operational plan. In this manner, funds are diverted to activities which support objectives and goals within the seven institutional priority areas (see I.1.4 Long Range Planning).

While the Budget Office provides the initial yearly budget, it also provides the Program, through the Dean and Program Director, the ability to submit documentation towards possible revision depending on special circumstances and/or needs. Budget revision requests are channeled to the Vicepresident of Finances, the Budget Office Director, and the President for consideration. In some cases, depending on the extent of the budget revision request, documentation may require final approval from the Board of Trustees through the Boards Financing Committee.



S		2	015-2016	2016-2017	2	017-2018 <sup>1</sup>
S						
	alaries and Wages (Admin + Faculty)					
6010	Faculty Salaries	\$	252,219	\$ 251,888	\$	252,30
6011	Faculty Salaries extra	\$	743,200	\$ 672,133	\$	692,66
601200	Administrative Salaries Non exempt	\$	123,645	\$ 129,912	\$	140,13
601201	Administrative Salaries Extra	\$	1,949	\$ 729	\$	67
601202	Administrative Salaries exempt	\$	170,709	\$ 195,514	\$	196,07
6015	Student Help	\$	1,754	\$ 1,088	\$	75
6016	Profesional Service - Employee	\$	10,700	\$ 2,300	\$	16,84
6019	Reimbursed expenses	\$	12,635	\$ 13,102	\$	11,69
6030	Fringe Benefits	\$	143,463	\$ 140,053	\$	145,44
	Subtotal Instructional Expendit	ure	\$1,460,274	\$1,406,719		\$1,456,59
Opera	ational Expenditure (Overhead + Capital)					
7012	Instructional & Lab Supplies	\$	_	\$ 165	\$	
7014	Office Supplies	\$	2,241	\$ 2,016	\$	2,20
7016	Postage	\$	665	\$ 49	\$	34
7017	Printing and Binding	\$	5,837	\$ 3,186	\$	6,34
7022	PC Repairs	\$	-	\$ 4,281	\$	
7030	Light and Power	\$	180,104	\$ 178,222	\$	205,06
7031	Water	\$	4,935	\$ 5,672	\$	8,76
7051	Repair Materials	\$	7,530	\$ 3,303	\$	5,97
7060	Commissions	\$	2,735	\$ -	\$	
7062	Information Services	\$	2,200	\$ 2,310	\$	2,31
7065	Professional Services	\$	10,285	\$ 700	\$	6,87
7066	Rentals	\$	2,113	\$ 486	\$	73
7067	Security Services	\$	90,670	\$ 90,286	\$	90,90
7069	Other Contracted Services	\$	77,317	\$ 66,404	\$	60,80
7071	Equipment \$500 and over	\$	71,265	\$ 6,226	\$	
7075	Library Resources	\$	10,049	\$ 10,049		
7081	Depreciation	\$	623,598	\$ 557,248	\$	557,24
7150	Accreditation Expenses	\$	2,620	\$ -	\$	33,71
7155	Donations	\$	650	\$ 639	\$	58
7156	Dues	\$	8,635	\$ 9,185	\$	9,39
7159	General Equipment	\$	1,269	\$ 256	\$	
7161	Magazine & Loose Leaf	\$	4,204	\$ 245	\$	2,14
7162	Promotion and Advertising	\$	14,125	\$ 3,000	\$	5,25
7163	Student Travel	\$	553	\$ -	\$	1,00
7165	Travel/Professional Adv.	\$	7,981	\$ 9,838	\$	9,90
7168	Miscelaneous	\$	28,119	\$ 18,336	\$	10,56
	Subtotal Operational Expendit	ure	\$1,159,700	\$972,102		\$1,020,13
	TOTAL PROGRAM EXPENDIT	LIRE	\$2,619,974	\$2,378,821		\$2,476,7

<sup>&</sup>lt;sup>1</sup> Budgeted



Due to various factors such as the latest modifications introduced by the U.S. Department of Education to the Students Grants and Loan conditions, together with the challenges that Puerto Rico's economy has been facing for the last decade our School, as the rest of the PCUPR and the huge majority of the higher educational institutions in Puerto Rico, has received the negative impact of this weakening economy reflected on the amount of new students' enrollment. In the case of architecture, we should add, that the present situation has also stalled the design and construction industry, turning all construction related professions to a less attractive academic option, thus possibly ensuing in reduced new student applications.

Aware of this situation, and also of the fact that the present adverse conditions may not change in the foreseeable future, the Program has actively engaged in the implementation of several actual implementations and future strategies:

- o Implementation #1: A 10% decrease in the number of required credits was presented by the Program, and approved by both the Institutional Curriculum Committee and the University Senate. The main objective of this implementation was to provide for a leaner program with reduced tuition cost (aprox. \$3,500) during the length of the career, or almost one semester reduction for students that extend over the regular ten-semester program completion.
- o Implementation #2: The institution provides that any course section (including studios in our School's case) must have a minimum quorum of 12 students. In the application of the policy, below minimum enrollment studios would have to be cancelled, forcing students into delayment in their path to program completion. That condition provided for negative feedback and frustration from students, as well as retention problems. The Program's solution: Vertical Studios. This course methodology has been highly successful since its implementation, but the use is not arbitrary. Every implementation of the vertical studio is thoroughly analized in terms of thematic and performance level requirements before the final implementation occurs, recognizing that not all design studios are adept to the vertical studio modality.
- o Implementation #3: As a method of increasing revenue from outside source, the Program has been providing printing and fabrication services from the Multimedia and Fabrication Laboratories to outside parties. Service requests are carefully scrutinized to ensure that said services are not contrary to University policy, or that the scope is not beyond the reach and availability of the Labs. All revenues coming from these services go directly into funding equipment and materials for both Labs.



While the above mentioned implementations have had very good results in terms of student retention and revenues from external sources, there are several other strategies that are being considered, tested and implemented at different levels:

- Strategy 1: During the month of January of 2018, the Institutional Curriculum Committee reviewed and approved the creation of an Associate Degree in Digital Graphic Design. The new academic program was proposed under the premise that the market is adequate, that the current use of facilities at the School of Architecture is approximately 80% of its capacity, and that shared facilities is both physically and operationally feasible. The new Associate Program is slated to commence in the Spring of 2019, and it may reduce the Architecture Programs budgetary commitment to the Forteza Building (facilities, utilities, equipment, maintenance and security services) significantly.
- Strategy 2: Mainland student recruitment, particularly from the Hispanic and Latino communities within United States. We are positive that our "Academic Offer" represents an attractive study abroad experience to these communities' younger generations under the premise of cultural proximity, affordable tuition and living, as well as common citizenship make our island, University, and Program a feasible and highly attractive alternative.
- Strategy 3: International experience is another strategy that we are implementing in coordination with all of the above. Presently we are engaged in academic alliances with UNICA, in Managua Nicaragua, CEU San Pablo University in Madrid, and UNIBE School of Architecture in Santo Domingo, Dominican Republic. With these alliances in Spain and the Caribbean Basin we procure our presently limited number of international students. PCUPR School of Architecture will become an appealing option for those students from the previously mentioned International Academic Institutions that might like to study under the USA standards, but in the Spanish language.
- Strategy 4: Use our Experimental Units faculty as a strong resource for both lectures and workshops open to the professional and general public. This activity, using the School's CAAPPR Continuing Education Provider Status, could become a significant source of additional external revenue.



## I.2.4. INFORMATION RESOURCES

The CARIBET Library (approx. 2,100 SF) at the PCUPR School of Architecture is a center that aims not only to collect and preserve a variety of resources in the multidisciplinary realm of the education of the architect, but to promote knowledge in a dynamic, accessible and well organized manner. The resources within the library encompasses a wide range of themes within the Experimental Unit format that the School has adopted, and does so in both physical and electronic formats as available. The CARIBET library's mission is:

- To develop a collection of resources that allows for the study and teaching of the traditional and technological aspects of the practice.
- o To create an environment that fosters research and a well-rounded creative process.
- To optimize the methodology of research through electronic databases and cataloging techniques.
- To promote the habit of use of the facility and its resources.
- To preserve and provide access to specialized resources.

## The CARIBET Library's objectives are:

- To develop a well balanced collection that promotes unbiased research and guarantees the right of information to all as established by the Declaration of Library Rights.
- To promote the creation and development of relevant and creative programs that respond to a holistic academic and professional environment.
- To utilize and promote the latest information and technological resources to the service of research, academic development, and enrichment of the cultural, social and professional formation of future architects and designers.

The creation of a well-balanced and inclusive collection of textbooks, periodicals and digital resources is achieved by the symbiotic relationship between Library personnel, the school's administrative structure, faculty, and the Experimental Unit coordinators. Each collection, created by subject matter based on the Unit Coordinators' area of expertise, is constantly being scrutinized for relevance and up datedness. Every fiscal year, each Experimental Unit Coordinators provide a list of books, journals and electronic subscriptions to be considered, and if feasible, purchased by the library.

The CARIBET Library's current inventory of catalogued titles is 5,152, with an additional 598 titles within the PCUPR main campus library (Biblioteca Encarnación Valdés) just minutes from the School of Architecture. The PCUPR School of Architecture also has ongoing yearly subscriptions to 56 periodicals related to architecture, urbanism, design, and complimentary subjects, as well as



electronic databases such as Avery Index to Architectural Periodicals Literature and Art Source. Other electronic databases within the School's inventory include:

### **EBSCO**

**Academic Search Complete** 

Applied Science and Technology Source

**Biography Reference Center** 

**Business Source Complete** 

Caribbean Search (119 full-text journals and 561 full-text books)

**CINAHL** 

**Educational Source** 

Fuente Académica Premier

GreenFILE

Library, Information Science & Technology Abstracts

**Regional Business News** 

**Teacher Reference Center** 

eBook Academic Collection

## ProQuest

Dissertations & Theses Global Full Text

ABI/INFORM Research 1971-

ebrary® e-books

Systems Link International

Global eJournal library

Latin Knowledge Consulting

E-Libro Catedra

**ERIC: Education Resources Information Center** 

Federal Government Documents Databases

www.catalog.gpo.gov

www.gpo.gov/fdsys

www.metalib.gpo.gov

www.usa.gov/gobiernousa

www.science.gov/



## I.2.5. ADMINISTRATIVE STRUCTURE AND GOVERNANCE

The University is governed by a Board of Trustees, presided by the Archbishop of San Juan. The Bishop of Ponce, as Grand Chancellor, is the executive representative of the Board of Trustees in the University. The Board of Trustees is constituted of de jure members and others named directly by the corporation (corporate legal status). There is also a faculty representative and a student representative named for a period of one academic year by de jure members.

The institution is administered by a President and other officials and organizations named by him or her. The President presides over the University Senate, the University Board, and the Administrative Board. Three officers assist the President in the administrative duties: Vice-President of Academic Affairs, Vice-President of Finances, Vice-President of Student Affairs, and Vicepresident of Development. Each college or school has an academic Dean as its chief executive; each branch campus has a Rector, each extension and department has a Director.

The University Senate is the representative body of the administration, the cloister and the university student body. It participates in the university legislative process by submitting draft legislation to the Board of Trustees. It is composed composed of four primary types of members: ex-officio senators, Faculty elected senators, senators elected by accumulation in general faculty assembly, and student senators elected by full-time students of each college or school. Within the senate there are six (6) permanent committees: Student Affairs, Curriculum and Academic Policy, Finances, Nominations, Rank and Tenure, and Academic & Faculty Affairs.

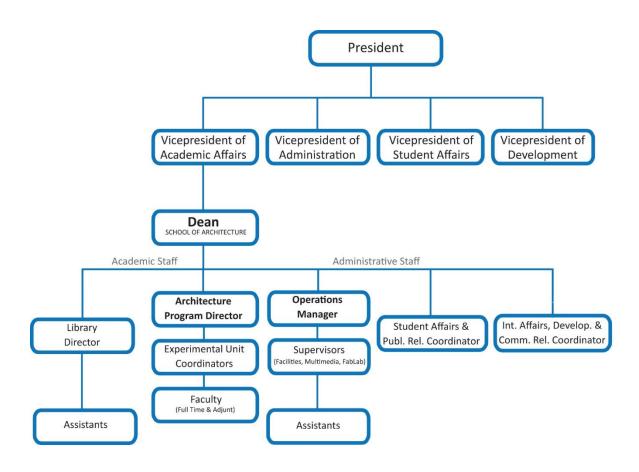
Within the greater scope of the institution, students have the liberty to express, individually or collectively, their opinions concerning institutional policy or any other matter of general interest for the student body. The Student Senate was created to promote and acknowledge student representation within the higher ranks and policy making groups in the University. A student is appointed by the de jure members of the Board of Trustees to represent the student body on the Board. Each college will elect a student senator following the norms established by the university. Student representatives with voice and vote will form part of departmental committees which deal directly with academic affairs. In order to exercise the right of free expression, whether individually or collectively, the students can elect a Student Council whose responsibilities and privileges are stated in the Code of Student Conduct.

Within the PCUPR School of Architecture, students are represented through the four official student organizations: MAS (Movimiento de Arquitectura Social), AIAS (American Institute of Architecture Students), USGBC Students, and LINEA (Liga Nacional de Estudiantes de Arquitectura). While the latter is a national organization, both groups have representation within School governance as de jure members. Both groups are also immersed in promoting and



developing the leadership, academic, social and cultural skills of the student body within the parameters of their individual mission, vision and objectives.

The PCUPR School of Architecture was developed with the same sovereignty as a College within the institutional framework of the PCUPR. It is not considered a department within another college. Its highest ranking official, the Dean, is responsible for the administration and management of the program according to institutional policy, mission and vision. The Dean responds to the Vice-President of Academic Affairs, the President of the University, and the Board of Trustees. The Baccalaureate Program Director, together with other administrative Coordinators, Assistants and Experimental Unit Coordinators serve as support structure to the Dean. The following is the administrative structure of the PCUPR School of Architecture:





With the highest rank, administratively and academically, within the Program, the **Dean** possesses the designation and responsibility to lead the administration and the faculty within the PCUPR School of Architecture. The Dean's agenda includes, but is not limited to:

- Supervising all academic, executive, administrative, institutional, and community activities generated as part of the School under his charge.
- Evaluating and promoting the progress and development towards the fulfillment of the Schools pre-established mission, vision and objectives.
- Carrying out promotional events for the School, clearly outlining the integration strategies with the community, the region and the pertinent agencies and organizations, within the social, economical, political and cultural operative framework of the Program.
- Promoting and organizing departmental participation in the process of establishing strategies for regional economic, professional, social and cultural development.
- Coordinating the processes towards the School's regional and national professional accreditation.

As the second highest ranking officer within the School's academic system, the **Baccalaureate Program Director** is responsible for:

- Supervising, implementing and maintaining the highest level of academic excellence and competitiveness within the School's curriculum and other academic affairs.
- Serving as intermediary and first contact between the Dean and the faculty members of the Academic Program.
- Implementing and maintaining the School's vision and mission within the faculty, administrative, and student bodies.
- Communicating and promoting the achievement of the goals established for the School's academic system through homogeneous strategies within a diversified faculty setting.
- Implementing and maintaining a continuous and logical curricular revision policy to ensure an academic offering of the highest quality and competitiveness at a regional, national and global scale.

With an administrative role of managing operational issues within the School, and direct support to the Dean, the **Operations Manager** is responsible for:

- Managing the School's operational framework serving the permitting and licensing issues with organizations and agencies.
- Managing the tasks performed by other administrative staff within the School's organizational structure.
- Managing and serving as a liaison between the School and the Institution regarding matters of contractual agreements and documentation for staff and consultants.



- Coordinating and supervising the allocation and use of the spatial resources of the School, according to the needs of faculty, students and guests.
- Attending operational situations brought to consideration by students, faculty or staff, referring it to the corresponding institutional Department.

With an administrative role of supporting the operations of the School, the **International Relations, Development and Community Affairs Coordinator** shall perform duties including, but not limited to:

- Coordinate and promote academic research through external funding proposal.
- o Coordinate activities such as seminars that promote innovative skills.
- Coordinate a calendar of seminars related to public policy and development for the academic community.
- Coordinate and facilitate collaborative agreements between the School and public/private sectors.
- o Promote and sell the School internationally in order to recruit international students.
- Create and supervise study abroad programs and abroad internships for students.

With an administrative role of supporting the student body of the School with retention strategies of promotions, events, and exhibitions, the **Student Affairs, Events and Promotions Coordinator** is responsible for:

- Serving as a liaison between the School of Architecture and the Vicepresidency of Student Affairs.
- Serving as liaison between student organizations and the School's administrative structure.
- Preparing marketing and informational material for recruitment, student retention, and public relations as appropriate.
- Coordinating the Lecture Series, Special Activities, and other events related to the School, including all operations regarding guest speakers and conferences.
- Coordinating the School's yearly activities calendar.
- Coordinating with other Coordinators, Supervisors, Faculty and Students to successfully manage and implement activities that promote the academic and administrative development of students, faculty, administrative staff and the community.
- Managing information and coordinating the currency of the School's web interface and pertinent internal promotion of events.



The **Library Director** shall be in charge of supervising, managing, promoting and coordinating all services provided within the library in benefit of students, faculty and the community. His or her responsibilities include:

- Keeping the CARIBET Library resources and processes current, organized and available to students and faculty at all times.
- o Coordinating and providing effective access to information and architectural resources, both physically and electronic, helping and facilitating researches.
- Managing the distribution and organization of information resources.
- Developing and managing documents directly related to curricular topics and other aspects of the study and practice of Architecture, as embodied in the School's mission and vision.
- Developing and managing internal publications and the effective diffusion of information to the benefit of students, faculty, administrative personnel, and the community.
- Providing support for activities within the School's calendar.

With an administrative role of supporting the operations of the School, the **Administrative Assistant to the Dean** shall perform duties including, but not limited to:

- Assisting the Dean in all matters of communications, calendar, reports, filing, coordinations and activities.
- Supervising and managing attendance records and payroll procedures of all personnel, reporting it to the Dean and the correspondent institutional department.
- Managing resources, supplies, invoices, requisitions, and other documentation directly related to the School's internal and external structures.
- Supervising and managing external resources like consultants, contractors, and temporary personnel as related to facilities duties and activities.
- Supervising and managing the use and disposition of utilities and other resources related to facilities operations.
- Work with the Operations Manager on the daily activities and the submittion of periodic financial reports.

With a critical administrative role in the upkeep of the School's infrastructure and the everyday functioning of utilities and services, the **Facilities Supervisor** shall be responsible for:

- Supervising, managing and coordinating the effective everyday maintenance of facilities and grounds.
- Supervising and managing the cleanliness and upkeep of facilities.
- Coordinating with other staff members to prepare facilities for special events and the ongoing use of spaces for academic purposes.



- Supervising and coordinating the upgrade and necessary reparations of facilities related to the School.
- Managing external consultants, contractors, and services in matters of facilities and grounds.

As an expert in computer networks, computer hardware, software and print media, the **IT and Multimedia Supervisor** shall provide expertise and support in the areas of networking, computer systems, communications and multimedia. The minimum academic requirements for holding this administrative position shall be Bachelor in Computer Science or Bachelor in Information Systems from a recognized and accredited College or University, and a minimum one (1) year of experience in related work. The Supervisor shall be responsible for:

- Providing a stable, efficient, and operational computer network for students, faculty, and administrative personnel.
- Updating and upgrading all software and hardware as to maintain a stable and efficient technical infrastructure.
- Providing technical support for all needs of the PCUPR School of Architecture, including students, faculty, staff and visitors.
- Establishing and managing protocols and norms for the use and disposition of computer networks and equipment.
- Managing and coordinating all print media as related to the PCUPR School of Architecture.
- Managing and coordinating the use of other digital technologies within the School, as well as counseling the administration on current and future technologies that could further facilitate user interaction and representation.
- Coordinating with the institutional IT department for update and upgrade of equipment, systems, communications, and security of the School's technological infrastructure.
- Provide administrative support to the PCUPR School of Architecture as it pertains to the communication and technological infrastructure.
- Supervise and coordinate tasks for employees and work-study participants assigned to the Multimedia Laboratory.
- Coordinating the maintenance, operation, upgrade and/or update of equipment and software as required for optimal functioning of the School's technological infrastructure.
- Coordinating the upkeep and general state of the facilities within the IT and Multimedia Laboratory.
- Coordinate periodic inventory of equipment, tools, materials and supplies.
- Coordinate the purchase of new equipment, tools, materials and supplies.



- Coordinate the protocols and processes for the payment of services and equipment use for students, faculty and possible external parties as required.
- Recommend and coordinate purchase of new equipment, materials and tools as required, as well as decommissioning of outdated or damaged equipment.
- Provide administrative support to the PCUPR School of Architecture as it pertains to the operation within the general admistrative structure.

The **IT/Multimedia Assistant** shall work under the direct supervision of the IT and Multimedia Supervisor. The minimum academic requirement for holding the position is an Associate Degree or Technical Degree in Computer Science or Information Systems from a recognized University or College, as well as basic knowledge of digital and graphic design software and three (3) or more months of related experience. The IT/Multimedia Assistant shall be responsible for:

- Providing students and faculty with technical orientation and support regarding the safe and appropriate use of technological equipment and workstations.
- o Provide support in maintaining a high level of security for users.
- Providing support in tasks related to general maintenance, inventory, upkeep, and installation of hardware and software.
- Provide support for administrative duties regarding equipment lending, movement, maintenance and decommissioning.
- o Provide support for any administrative task as required by the Laboratory Supervisor.

As an expert in design, manufacturing and fabrication, the **Fabrication Laboratory Supervisor** shall work in conjunction with the Architectural Representation Experimental Unit to supply students and faculty with full practical support for the visualization and production of 3D models and installations. The minimum academic requirement for holding the position is a degree in Architecture (B.Arch.), terminal degree in Design (M.Des.) or a terminal degree in Industrial Design (MID) from a recognized and accredited College or University, and one (1) year minimum experience of related work experience. The supervisor shall be responsible for:

- Promoting the use of the latest fabrication equipment and techniques.
- Providing orientations, technical expertise and support to enable students to present their work in the most efficient and innovative manner.
- Maintaining elevated security standards within the Laboratory.
- Coordinating the maintenance, operation, upgrade and/or update of equipment, machinery, tools and software as required for the optimal function of the Laboratory.
- Managing and coordinating the use of specialized equipment and machinery, materials and tools by students and faculty.
- Keeping fabrication techniques, material libraries and equipment current.
- o Coordinating the upkeep and general state of the facilities within the Laboratory.
- Coordinate periodic inventory of equipment, tools, materials and supplies.



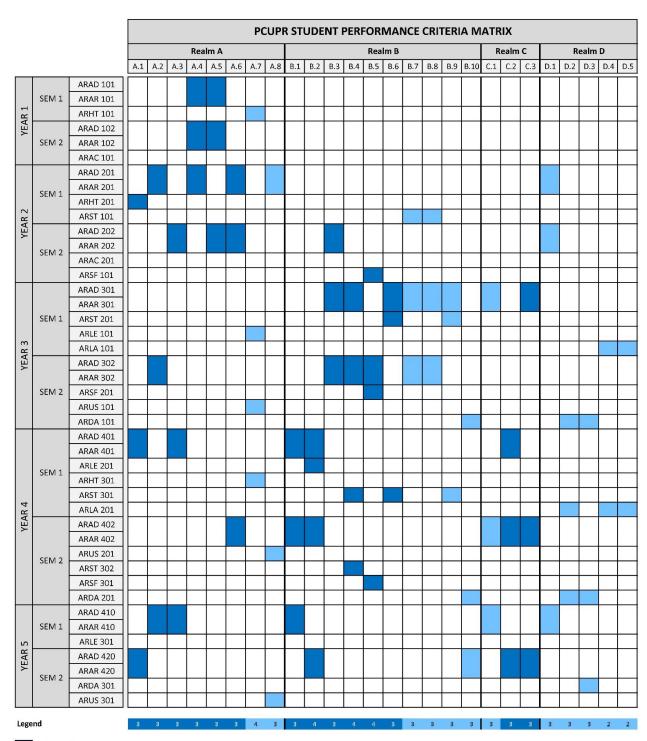
- Coordinate the purchase of new equipment, tools, materials and supplies.
- Coordinate the protocols and processes for the payment of services and equipment use for students, faculty and possible external parties as required.
- Recommend and coordinate purchase of new equipment, materials and tools as required, as well as decommissioning of outdated or damaged equipment.
- Provide administrative support to the PCUPR School of Architecture as it pertains to the operation of the Lab within the general admistrative structure.
- Supervise and coordinate tasks for employees and work-study participants assigned to the Fabrication Laboratory.

The **Fabrication Laboratory Machine Operator** shall work under the direct supervision of the Fabrication Laboratory Supervisor. The minimum academic requirement for holding the position is an Associate Degree or Technical Degree in Drafting or Engineering from a recognized and accredited College or University, as well as basic knowledge of digital and graphic design software and three (3) or more months of related experience. The Machine Operator shall be responsible for:

- Providing students and faculty with technical orientations and support regarding the safe and appropriate use and disposition of equipment in the Fabrication Laboratory.
- Provide support in maintaining a high level of security and the welfare of users.
- o Providing support in tasks related to general maintenance, inventory, upkeep and general cleanliness of the work areas.
- o Provide support for any administrative task as required by the Laboratory Supervisor.



# **II.1.1. STUDENT PERFORMANCE CRITERIA**



Understanding Ability

Note: The matrix shows criteria A.7, B.2, B.4 and B.5 with four courses. The inclusion of more than three instances of compliance is a result of newly expanded criteria definitions or the existance of courses that cover the same subject in porgressively wider and deeper manner.



The PCUPR Architecture Program addresses Realm C in three different Design Studios (ARAD 301, 402 and 420) in which we aim to provide a fundamental understanding of the design process in its full complexity. Design exercises require that our students demonstrate comprehension of building systems, and their successful integration in design, through knowledge of the spatial and programmatic requirements of the proposed solution, together with the functional and operational principles. Students' proposals should also give way to the integration of passive and active sustainable systems to enhance building efficiency and reduce long-term operational costs. Students are required to apply all of the above in complex contextual and programmatic situations with the expectation that the proposed methodology succeeds in creating design solutions that are meaningful, functional and architecturally sound.

Course exercises introduce students to, among other, Conceptual Thinking, Abstract Ideas, Theory, Precedent", Site Analysis, Building Parameters, Construction Standards, and other basic building parameters regarding Health, Safety and Welfare with the opportunity to apply all of them to an actual architectural design problem. Listed below are the Courses' Objectives that respond to Realm C:

- o Comprehend the importance of research and the application of its conclusions to inform the design process
- o Implement innovative means for creative problem solving
- o Apply theories, principles, methods and fundamentals of land use development and architectural design
- o Understand and intervene within cultural and/or urban contexts
- o Experience firsthand the coordination complexities inherent in the design process and understand how coordination itself becomes a fundamental task of any good designer
- o Understand how the design process is formed and react to a wide variety of diverse considerations, and how the technical demands of sound building systems must be taken into account simultaneously and without contradictions
- o Implement innovative means for creative problem solving
- o Further expand the students' ability in the management of specialized technical documents

In terms of the methodology to assess student work for compliance with the Student Performance Criteria (SPC) assigned to courses (all realms), the program has established evaluation guidelines. An SPC evaluated as high pass consists of a performance of superior quality intellectually, formally and technically, with clear evidence of genuine talent and architectural insight; it is reserved for work that is extremely sound and not merely flashy. An SPC evaluated as low pass consists of a performance of acceptable quality that meets the basic goals of the exercise and that is presented in a complete manner, not containing serious error of judgment or omission.



### II.2.1. REGIONAL ACCREDITATION



# CHE MIDDLE STATES COMMISSION ON HIGHER EDUCATION

3624 Market Street, Philadelphia, PA 19104-2680. Tel: 267-284-5000. Fax: 215-662-5501 www.msche.org

## STATEMENT OF ACCREDITATION STATUS

# PONTIFICAL CATHOLIC UNIVERSITY OF PUERTO RICO

2250 Boulevard Luis A. Ferre Aguayo Suite 564

Ponce, PR 00717-9997

Phone: (787) 841-2000; Fax: (787) 840-4295

www.pucpr.edu

**Chief Executive Officer:** 

Dr. Jorge Ivan Velez Arocho, President

# INSTITUTIONAL INFORMATION

Enrollment

8073 Undergraduate; 2755 Graduate

(Headcount):

Control:

Private (Non-Profit)

Affiliation:

Religious- Roman Catholic Church

Carnegie

Doctoral/Research

Classification:

Approved Degree

Associate's, Bachelor's, Postbaccalaureate Certificate, Master's, Doctor's - Professional Practice, Doctor's - Research/Scholarship;

**Distance Education** 

Not Approved

Programs:

Levels:

Accreditors Recognized by U.S. Secretary of Education: American Bar Association, Council of the Section of Legal Education and Admissions to the Bar; New York State Board of Regents, and the Commissioner of Education

Other Accreditors: Puerto Rico Council on Education (PRCE); Council on Social Work Education; National Accrediting Agency for Clinical Laboratory Sciences (NAACLS); Council on Rehabilitation Education, Inc. (CORE); Teachers Education Accreditation Council (TEAC); Accreditation Commission for Education in Nursing (ACEN)

## **Instructional Locations**

**Branch Campuses:** Pontifical Catholic University of Puerto Rico - Arecibo Campus, Arecibo, PR; Pontifical Catholic University of Puerto Rico - Mayaguez Campus, Mayaguez, PR

Additional Locations: Bayamon Central University, Bayamon, PR; Biotechnology and Agrobiotechnology Learning and Research Center (CEIBA), Ponce, PR; Franciscan Missionaries of the Eternal W, Birmingham, AL; School of Architecture, Ponce, PR; Seminario Mayor Interdiocesano, Ponce, PR; Seminario Santa Maria de los Angeles, San Juan, PR; Veterans Hospital, San Juan, PR

Other Instructional Sites: PUCPR - Coamo Extension, Coamo, PR

## ACCREDITATION INFORMATION



Status: Member since 1953 Last Reaffirmed: June 26, 2014

#### **Most Recent Commission Action:**

June 26, 2014:

To reaffirm accreditation and to commend the institution for the quality of the self-study process. The Periodic Review Report is due June 1, 2019.

#### **Brief History Since Last Comprehensive Evaluation:**

November 19, 2009:

To accept the Periodic Review Report and to reaffirm accreditation. To request a monitoring report due October 1, 2011 documenting (1) implementation of a comprehensive institutional strategic plan that links long-range planning to decision-making and budgeting processes, including the integration into the plan of all the functional units (Standard 2); and (2) evidence of direct methods of assessment of student learning at the institutional and program level(s), including evidence that assessment results are used to improve teaching and learning (Standard 14). To further request that the next self-study clarify the relationship of the Ponce campus with the Arecibo and Mayaguez campuses, including planning processes (Standard 2), budgeting, including the ability to provide separate audited financial statements for the Ponce Campus (Standard 3), and governance structures between the campuses (Standard 4). The next evaluation visit is scheduled for 2013-2014.

June 28, 2011:

To acknowledge receipt of the substantive change request and to approve the accreditation of Pontifical Catholic University of Puerto Rico as a single institution, the Pontifical Catholic University of Puerto Rico, with three campuses. The main campus is the Pontifical Catholic University of Puerto Rico, 2250 Las Americas Avenue, Suite 564, Ponce, PR 00717-9997; the other two campuses are branch campuses at Bo. Santana Carr. 662 Km. 2.03, Arecibo, PR 00614-4045 and 482 Calle Post S., Mayaguez, PR 00681. The next evaluation visit is 2013-2014.

To acknowledge receipt of notification from the institution that it has changed the name of the additional location at Carr. 3km 142.1 Gayama, PR 00785-0208 from Wyeth Pharmaceutical to Pfizer Pharmaceutical.

November 17, 2011:

To accept the monitoring report. To note that the relationship of the Ponce campus with the Arecibo and Mayaguez campuses was clarified through the Substantive Change action by the Commission on June 28, 2011. The next evaluation visit is scheduled for 2013-2014.

May 1, 2012:

July 20, 2011:

To include the additional location at the Biotechnology and Agrobiotechnology Learning and Research Center (CEIBA), Lot #25 Sabanetas Industrial Park, Ponce, PR 00717, within the scope of the institution's accreditation. The next evaluation visit is scheduled for 2013-

2014.

May 1, 2012:

To acknowledge receipt of the substantive change request, to note the institution's decision to close its additional location at the Guayama Extension, Calle Palmer 5 Sur, Guayama, PR 00784, and to remove the location from the scope of the institution's accreditation.

August 20, 2013:



To request a supplemental information report, due September 19, 2013, addressing the Accreditation Commission for Education in Nursing (ACEN) accreditation action of July 11-12, 2013. The next evaluation visit is

scheduled for 2013-2014.

October 28, 2013:

To acknowledge receipt of the substantive change request. To note that the institution has closed its additional locations at (1) Pfizer Pharmaceutical, Carr. 3, Km 142.1, Guayama, PR 00785; and (2) Baxter Pharmaceutical, Carr. 3, Km 142.5, Guayama, PR 00784. To remove these additional locations from the institution's accreditation. To note that the supplemental information report, due September 19, 2013, has been received and will be acted on by the Commission at its November meeting. The next evaluation visit is scheduled for 2013-2014.

visit is scheduled for 2013-2

November 21, 2013:

To accept the supplemental information report. The next evaluation visit is

scheduled for 2013-2014.

Next Self-Study Evaluation: 2023 - 2024

Next Periodic Review Report: 2019

Date Printed: August 25, 2014

## DEFINITIONS

Branch Campus - A location of an institution that is geographically apart and independent of the main campus of the institution. The location is independent if the location: offers courses in educational programs leading to a degree, certificate, or other recognized educational credential; has its own faculty and administrative or supervisory organization; and has its own budgetary and hiring authority.

Additional Location - A location, other than a branch campus, that is geographically apart from the main campus and at which the institution offers at least 50 percent of an educational program. ANYA ("Approved but Not Yet Active") indicates that the location is included within the scope of accreditation but has not yet begun to offer courses. This designation is removed after the Commission receives notification that courses have begun at this location.

Other Instructional Sites - A location, other than a branch campus or additional location, at which the institution offers one or more courses for credit.

Distance Education Programs - Fully Approved, Approved (one program approved) or Not Approved indicates whether or not the institution has been approved to offer diploma/certificate/degree programs via distance education (programs for which students could meet 50% or more of the requirements of the program by taking distance education courses). Per the Commission's Substantive Change policy, Commission approval of the first two Distance Education programs is required to be "Fully Approved." If only one program is approved by the Commission, the specific name of the program will be listed in parentheses after "Approved."

### EXPLANATION OF COMMISSION ACTIONS

An institution's accreditation continues unless it is explicitly withdrawn or the institution voluntarily allows its accreditation to lapse. In addition to reviewing the institution's accreditation status at least every 5 years, the Commission takes actions to approve substantive changes (such as a new degree or certificate level, opening or closing of a geographical site, or a change of ownership) or when other events occur that require review for continued compliance.

Any type of report or visit required by the Commission is reviewed and voted on by the Commission. Reports submitted for candidacy, self-study evaluation, periodic review or follow-up may be accepted, acknowledged, or rejected.



## II.2.2. PROFESSIONAL DEGREES AND CURRICULUM

The academic program of the School consists in a Bachelor of Architecture (B. Arch), a professional degree of five (5) years and one hundred and eighty-one credits (181); divided in nine (9) semesters of eighteen (18) credits each and one semester of nineteen (19) credits. The total of credits is subdivided in forty-three (43) credits of General Studies, one hundred twenty-nine (129) credits of Professional Studies and nine (9) credits of Optional Studies (mandatory selection within the Experimental Units). Non pre-requisite degree(s) or other preparatory education is required for completing the program.

The General Studies courses provide basic compulsory education to obtain a degree at any institution. These courses are standard with other Bachelor Degrees at the PCUPR.

GENERAL EDUCATION COURSES  General Studies (Required courses with other than architectural content)				
Courses	Cr.			
SPAN 141 Reading, Writing and Speech for Communication I	3			
SPAN 142 Reading, Writing and Speech for Communication II	3			
ENGL 115 Oral Communication and Listening Comprehension	3			
ENGL 201 Basic Principles of Reading and Writing	3			
ENGL 383 Business Communication	3			
MATH 143 Integrated Algebra and Trigonometry	3			
PHYS 217 Physics for Architects	3			
SOCI 102 Study of Human Coexistence	3			
PHIL 312 Philosophical Anthropology	3			
PHIL 340 Fundamental Ethics	3			
THEO 130 The Divine Revelation	3			
THEO 131 The Church of Christ	3			
THEO 132 The Christian Family	3			
ART 101, MUSI 102 or THEA 101 Art, Music of Theatre Appreciation	3			
PHED (Elective)	1			
ORIE 003 Orientation	0			
ORIE 004 Orientation	0			
Total	43			



In order to present a clear academic path, the Professional Studies part of the curriculum has been designed divided in platforms or investigative areas that require the development of the essential skills for the program to be completed successfully. The following descriptions will provide details and ideas about each one of them.

The offer from the Architectural Design Studios (ARAD), each counting five (5) credits, blends the technological platform to the actual execution of the architectural discipline. They are the foundation of the program as long as each one is tested from a particular point of view. With the studios our program is able to accomplish huge contributions to our cities development. The studios are taught by a Design Instructor whose mission is to facilitate the students' accomplishment of the goals established for each session.

ARCHITECTURAL DESIGN STUDIOS  Professional Studies (Courses with architectural content required of all students)	
Courses	Cr.
ARAD 101 Architectural Design Fundamentals I	5
ARAD 102 Architectural Design Fundamentals II	5
ARAD 201 Analytical Design Studio I: History and Theory	5
ARAD 202 Analytical Design Studio II: Adaptive Conservation and Presentation	5
ARAD 301 Experimental Design Studio I: Sustainability and Technologies	5
ARAD 302 Experimental Design Studio II: Structural Framework and Assemblages	5
ARAD 401 Contextual Design Studio I: Landscape, Ecology and Environment	5
ARAD 402 Contextual Design Studio II: Urban Scapes and Communities	5
ARAD 410 Developmental Design Studio I: Legal and Administrative Awareness	5
ARAD 420 Developmental Design Studio II: Development Assessment, Entrepreneurship and Feasibility	5
Total	50

The offer from the Architectural Representation Laboratories (ARAR), each counting one (1) credit, coexists in the program with the design studios to establish an educational podium for the creation of a new generation of Architects capable to compete in a global market. The Laboratories are taught by a Digital Design Consultant so students can develop the skills acquired in previous ones. The purpose of this Consultant is to guide to learning process about the software and/or computer programs taught as part of the curriculum.



ARCHITECTURAL REPRESENTATION LABORATORIES  Professional Studies (Courses with architectural content required of all students	)
Courses	Cr.
ARAR 101 Diagramming and Representation Techniques	1
ARAR 102 Nonlinear Diagramming and Complex Geometry	1
ARAR 201 Historical Documentation and Representation Techniques	1
ARAR 202 Dynamic Imaging and Documentation	1
ARAR 301 Parametric Modeling	1
ARAR 302 Parametric Detailing	1
ARAR 401 Scripting and Procedural Morphology	1
ARAR 402 Territorial, Urban and Infrastructural Data Analysis	1
ARAR 410 Independent Research	1
ARAR 420 Independent Research II	1
Total	10

The rest of the platform of Professional Studies is organized per Experimental Units. Each Unit provides a complete and cohesive education, interlacing the necessary disciplines in order to assure the Architect is able to operate on the highest level of competiveness and expertise. Each course counts for three (3) credits, and seven (7) of the nine Units have three courses; the first one focus on theoretical aspects, the second in providing substance and critical analysis, and the third one in discussing implementation strategies.

PROFESSIONAL CONCENTRATION COURSES  Professional Studies (Courses with architectural content required of all students)	
Courses	Cr.
ARAC 101 Fundamentals of Historic Preservation and Conservation	3
ARAC 201 Preservation Techniques, Methods and Strategies for Building Systems	3
ARDA 101 Entrepreneurship on Developmental Politics	3
ARDA 201 Economic Feasibility and Finances in Real State	3
ARDA 301 Marketing and Branding through Commercial Communication Skills	3
ARHT 101 Architectural History I: Ancient to Renaissance	3
ARHT 201 Architectural History II: Baroque to Contemporary Western Civilization	3
ARHT 301 Architectural History III: Latin America and Puerto Rico	3
ARLA 101 Introduction to Law, Contracts and Professional Liability	3
ARLA 201 Professional Practice and Contractual Procedures in Architecture	3
ARLE 101 Built Environment and Culture in the History of Landscape Architecture	3
ARLE 201 Environment Construction Processes, Materials and Techniques	3



ARLE 301 Ecological Principles of the Built Environment				
ARSF 101 Architectural Structures I: Static and Strength				
ARSF 201 Architectural Structures II: Composite Construction on Wood and Steel				
ARSF 301 Architectural Structures III:Monolithic Construction in Masonry and				
Concrete	3			
ARST 101 Tectonics on Material Applications and Methods				
ARST 201 Introduction to Mechanical and Electrical Systems				
ARST 301 Building Acoustics, Illumination, and Special Systems				
ARST 302 Technical and Construction Documents				
ARUS 101 Theory and Principles of Urban Design				
ARUS 201 Territorial and Urban Public Policy in a Global Society				
ARUS 301 Territorial Planning Strategies on Infrastructures and Communities				
Total	69			

The program requires the acquisition of a Minor Degree by completing twenty-four (24) credits or more in one of the nine Experimental Units, which in turn correspond to specific colleges within the Institution. The curriculum provides the students enrolled with at least fifteen (15) Professional Studies credits on each Unit. The Minor Degree requirement is completed by acquiring nine (9) Elective Courses credits within the curriculum on the same Unit of the student's choice, therefore, completing the criteria established earlier. This is another opportunity for the students to be involved in the interdisciplinary debates, typical of the professional ambits.

ARCHITECTURAL REPRESENTATION MINOR DEGREE (ARAR) In collaboration with College of Arts and Humanities (Department of Fine Arts)	
Selected Courses within PCUPR	Cr.
ART 104 Fundamentals of Color and Design	3
ART 240 Painting I	3
ART 241 Painting II	3
ART 272 Digital Photography	3
ART 280 Graphic Design I	3
ART 281 Graphic Design II	3
ART 312 Advanced Photography	3
ART 340 Contemporary Concepts and New Forms	3
ART 350 Advanced Drawing	3
ART 362 Sculpture I	3
ART 363 Silkscreen	3



ART 372 Sculpture II	3		
ART 383 Digital Animation	3		
ART 462 Constructive Sculpture	3		
ART 490 Advanced Projects	3		
ART 494 Advanced Projects in Digital Graphic Art	3		
Elective Courses within School of Architecture			
ARAR 403 Ways of Seeing: Dimensions of the Photographic Image	3		
ARAR 404 Cognition, Perception and Representation of Form and Space			
ARAR 405 Architectural Fabrication Studio I			
ARAR 406 Graphic Design: Concept and Techniques			
Total to be undertaken if chosen	9		

HISTORY AND THEORY MINOR DEGREE (ARHT) In collaboration with College of Arts and Humanities (Department of History)	
Selected Courses within PCUPR	Cr.
HIST 206 History of Ponce	3
HIST 263 History of Spain	3
HIST 265 History of the Church	3
HIST 303 United States History (Compendium)	3
HIST 360 Puerto Rican Society and Culture in the 20th Century	3
HIST 370 The Caribbean	3
<b>HIST 408</b> History of Russia: Origin, Formation, and Evolution of the Russian People	3
HIST 409 History of the Far East: China and Japan	3
HIST 410 XIXth Century Europe	3
HIST 415 The French Revolution and the Napoleonic Era (1789-1815)	3
Elective Courses within School of Architecture	Cr.
ARHT 401 Re-Dimensioning Architectural Theory	3
ARHT 402 Influential Practices on Recent History of Architecture	3
ARHT 403 History of Emergent Digital Philosophies	3
ARHT 404 Between Imagination and Representation: Contemporary Concepts and Architecture	3
ARHT 405 History of Furniture Design	3
Total to be undertaken if chosen	9



ADAPTIVE CONSERVATION AND PRESERVATION MINOR DEGREE (AR In collaboration with College of Arts and Humanities (Department of History)	AC)		
Selected Courses within PCUPR	Cr.		
HIST 403 Society and Culture of Contemporary Europe (Cultural Trip Abroad)	6		
HIST 417 Historiography	3		
HIST 419 Methodology and Techniques of Historical Investigation			
HIST 420 Seminar on Historical Investigation			
Elective Courses within School of Architecture	Cr.		
ARAC 301 Conservation Planning Strategies and Policies	3		
ARAC 401 The Economics and Finances of Historic Preservation			
ARAC 402 Cultural and Heritage Tourism			
ARAC 403 Preservation Research Strategies			
ARAC 430 In the Path of Lime			
Total to be undertaken if chosen	9		

SUSTAINABILITY AND TECHNOLOGIES MINOR DEGREE (ARST) In collaboration with College of Sciences (Departments of Environmental Sciences and Physics-Mathematics)			
Selected Courses within PCUPR	Cr.		
ENSC 350 Environmental Problems and Management	4		
ENSC 440 Hazardous and Non-Hazardous Solid Wastes	3		
ENSC 450 Water Treatment Systems			
ENSC 451 Air Pollution	3		
PHYS 325 Energy and Environment	3		
Elective Courses within School of Architecture	Cr.		
ARST 401 Aesthetics on Energy Conscious Architecture			
ARST 402 Sustainable Architecture and Technological Advances			
ARST 403 Leadership in Green Building Design and Construction	3		
Total to be undertaken if chosen	9		



## STRUCTURAL FRAMEWORK AND ASSEMBLAGES MINOR DEGREE (ARSF) In collaboration with College of Sciences (Department of Physics-Mathematics) Selected Courses within PCUPR Cr. MATH 271 Calculus I MATH 272 Calculus II 4 MATH 373 Calculus III MATH 391 Differential Equations 3 PHYS 221 Physics I PHYS 222 Physics II 4 Elective Courses within School of Architecture Cr. ARSF 401 Morphology of Glass and Light 3 ARSF 402 Flexibility and Malleability on Tensile Structures 3 ARSF 403 Complexities and Symbolism on High Technology Buildings 3 Total to be undertaken if chosen 9

LANDSCAPE, ECOLOGY AND ENVIRONMENT MINOR DEGREE (ARLE In collaboration with College of Sciences (Department of Biology)	:)
Selected Courses within PCUPR	Cr.
BIOL 201 Ecology for Tourism I	3
BIOL 202 Ecology for Tourism II	3
BIOL 222 Botany	4
BIOL 340 Ecology	4
BIOL 429 Ecosystems of Puerto Rico	4
BIOL 431 Marine Biology	4
Elective Courses within School of Architecture	Cr.
ARLE 401 Urban Ecology	3
ARLE 402 Planting Materials in Landscape Design	
ARLE 403 Advanced Landscape Architectural Design	3
ARLE 404 At the Plaza: 78+ Cultural Landscapes	3
Total to be undertaken if chosen	9



# **URBAN SCAPES AND COMMUNITIES MINOR DEGREE (ARUS)**

In collaboration with College of Arts and Humanities (Department of Social Sciences)

Selected Courses within PCUPR	Cr.		
PUAD 230 Municipal Government	3		
PUAD 265 Public Administration	3		
PUAD 355 Policy Analysis	3		
PUAD 373 Ethics and Public Administration	3		
PUAD 384 Fiscal Policies and Budgeting	3		
PUAD 385 Public Finance, Fiscal Policy, and Budgeting	3		
SOCI 213 Fundamental Sociology (Compendium)	3		
SOCI 218 Statistical Methods in Social Science	3		
SOCI 303 Economic Principles and Problems			
SOCI 305 Social Research	3		
SOCI 314 Social Problems	3		
SOCI 325 Cultural Anthropology	3		
SOCI 405 Demography	3		
SOCI 440 In-Learning Service	3		
Elective Courses within School of Architecture	Cr.		
ARUS 401 Studies on Emergent Urban Practices	3		
ARUS 402 Urban Economic and Financial Milieu	3		
ARUS 403 Urban Sociology and the Cultures of Cities	3		
Total to be undertaken if chosen	9		

# **LEGAL AND ADMINISTRATIVE MINOR DEGREE (ARLA)**

In collaboration with College of Arts and Humanities and the College of Business Administration

Selected Courses within PCUPR	Cr.
PUAD 390 Administrative Law	3
POSC 221 International Organizations and Politics	3
POSC 325 Public International Law	3
POSC 329 Constitutional Law	3
PRLS 207 Introduction to Pre-Law Studies	3
PRLS 300 Seminar on Academic Aptitude Test	3
PRLS 307 Legal Research	4
MGNT 313 Business Law I	3
BLAW 315 Corporations	3



BLAW 317 Consumer Law	3
BLAW 410 Environmental Law	3
Elective Courses within School of Architecture	Cr.
ARLA 401 Real Estate Development Process	3
ARLA 402 Public-Private Partnerships	3
ARLA 403 Value and Appraisal of Land	
Total to be undertaken if chosen	9

DEVELOPMENT, ENTREPRENEURSHIP AND FEASIBILITY MINOR DEGREE ( In collaboration with College of Business Administration	(ARDA)
Selected Courses within PCUPR	Cr.
ECON 201 Fundamentals and Applications of Economics I	3
ECON 202 Fundamentals and Applications of Economics II	3
ECON 304 Economic Development of Puerto Rico	3
ECON 426 International Economics	3
FINA 301 Risk and Insurance Management	3
FINA 302 Real Estate	3
FINA 405 Real Estate Appraisal	3
MGNT 202 Small Business Management	3
MGNT 210 Organizational Behavior	3
MGNT 230 Entrepreneurship	3
MGNT 250 Entrepreneurial Creativity and Innovation	3
Elective Courses within School of Architecture	Cr.
ARDA 401 Strategic Administration	3
ARDA 402 Business Plan Development	3
ARDA 403 Administrative Initiatives	3
Total to be undertaken if chosen	9

The curricular program and sequence provided by the School of Architecture have been established in a coherent method after a logical analysis of architectural and pedagogical models. It was taken into consideration both, the academic load and the practical methodology of disciplinary instruction. For these reasons, an effective and capable structure has been proposed according to the real necessities of the social and civic characters of our metropolis in the South and West Regions of Puerto Rico. By providing these parameters, students are able to obtain



continuity on their learning process for an easier adaptation/integration to the professional realm. The following is an illustration of the curricular sequence structured in our offer for an innovative architectural academic program. The listed courses have been organized in an ideal semester suggestion. They are shown in a descriptive pattern beginning with the denomination, number, title, prerequisites (between parenthesis), and amount of credits.

FIRST YEAR CURRICULUM			
First Semester	Cr.	Second Semester	Cr.
ARAD 101	5	ARAD 102	5
Architectural Design Fundamentals I		Architectural Design Fundamentals II	
(Preqs.: None)		(Pregs.: ARAD 101, ARAR 101)	
ARAR 101 (Laboratory)	1	ARAR 102 (Laboratory)	1
Diagramming and Representation		Nonlinear Diagramming and Complex	
Techniques		Geometry	
(Preqs.: None)		(Pregs.: ARAR 101)	
ARHT 101	3	ARAC 101	3
Architectural History I:		Fundamentals of Historic Preservation	
Ancient to Baroque		and Conservation	
(Preqs.: None)		(Preqs.: None)	
SPAN 141	3	SPAN 142	3
Reading, Writing and Speech for		Reading, Writing and Speech for	
Communication I		Communication II	
(Preqs.: CEEB 450-699)		(Preqs.: SPAN 141)	
ENGL 115	3	ENGL 201	3
Oral Communication and		Basic Principles of Reading and Writing	
Listening Comprehension		(Preqs.: ENGL 115)	
(Preqs.: CEEB 441-499)			
MATH 143	3	PHYS 217	3
Integrated Algebra and Trigonometry		Physics for Architects	
(Preqs.: CEEB 500+)		(Preqs.: MATH 143)	
ORIE 003 or ORIE 005	0	ORIE 004	0
Orientation or		Orientation	
Orientation for Transfer Students		(Not applicable for transfer students)	
(Preqs.: None)		(Preqs.: ORIE 003)	
Total	18	Total	18



SECOND YEAR CURRICULUM			
First Semester	Cr.	Second Semester	Cr.
ARAD 201 Analytical Design Studio I: History and Theory (Preqs.: ARAD 102, ARAR 102, ARHT 101) ARAR 201 (Laboratory) Historical Documentation and Representation Techniques (Preqs.: ARAR 102)	5	ARAD 202 Analytical Design Studio II: Adaptive Conservation and Preservation (Preqs.: ARAD 201, ARAR 201, ARAC 101) ARAR 202 (Laboratory) Dynamic Imaging and Documentation (Preqs.: ARAR 201)	5
ARHT 201 Architectural History II: Neoclassicism to Contemporary Western Civilization (Preqs.: ARHT 101)	3	ARAC 201 Preservation Techniques, Methods and Strategies for Building Systems (Preqs.: ARAC 101)	3
ARST 101 Tectonics on Material Applications and Methods (Preqs.: ARAD 101, ARAR 101)	3	ARSF 101 Architectural Structures I: Static and Strengths (Preqs.: PHYS 217)	3
ENGL 383 Business Communication (Preqs.: ENGL 201 or higher)	3	ART 101 or MUSI 102 or THEA 101 Art, Music or Theatre Appreciation (Preqs.: None)	3
THEO 130 The Divine Revelation (Preqs.: None)	3	SOCI 102 Study on Human Coexistence (Preqs.: None)	3
PHED Elective Course in Physical Education (Preqs.: None)	1	Total	18



THIRD YEAR CURRICULUM			
First Semester	Cr.	Second Semester	Cr.
ARAD 301		ARAD 302	
Experimental Design Studio I:	5	Experimental Design Studio II: Structural	5
Sustainability and Technologies		Framework and Assemblage	
(Preqs.: ARAD 202 ARAR 202, ARST 101)		(Preqs.: ARAD 301, ARAR 301, ARSF 101)	
ARAR 301 (Laboratory)		ARAR 302 (Laboratory)	
Parametric Modeling	1	Parametric Detailing	1
(Preqs.: ARAR 202)		(Preqs.: ARAR 301)	
ARST 201		ARSF 201	
Introduction to Mechanical and	3	Architectural Structures II: Composite	3
Electrical Systems	3	Construction on Wood and Steel	3
(Preqs.: ARST 101)		(Preqs.: ARSF 101)	
ARLE 101		ARUS 101	
Built Environment and Culture in the	3	Theory and Principles of Urban Design	3
History of Landscape Architecture	3	(Pregs.: ARHT 201)	3
(Preqs.: ARHT 201)		(Freys.: ANTT 201)	
ARLA 101		ARDA 101	
Introduction to Law, Contracts and	3	Entrepreneurship on Developmental	3
Professional Liability	3	Politics	)
(Preqs.: ARHT 101)		(Preqs.: ARLA 101)	
THEO 131		PHIL 312	
The Church of Christ	3	Philosophical Anthropology	3
(Preqs.: None)		(Preqs.: None)	
Total	18	Total	18



FOURTH YEAR CURRICULUM			
First Semester	Cr.	Second Semester	Cr.
ARAD 401 Contextual Design Studio I: Landscape, Ecology and Environment (Preqs.: ARAD 302, ARAR 302, ARLE 101) ARAR 401 (Laboratory) Scripting and Procedural Morphology (Preqs.: ARAR 302)	5	ARAD 402 Contextual Design Studio II: Urban Scapes and Communities (Preqs.: ARAD 401, ARAR 401, ARUS 101) ARAR 402 (Laboratory) Territorial, Urban and Infrastructural Data Analysis (Pregs.: ARAR 401)	5
ARLE 201 Environment Construction Processes, Materials and Techniques (Preqs.: ARLE 101)	3	ARUS 201 Territorial and Urban Public Policy in a Global Society (Pregs.: ARUS 101)	3
ARHT 301 Architectural History III: Latin America and Puerto Rico (Preqs.: ARHT 201)	3	ARSF 301 Architectural Structures III: Monolithic Construction on Masonry and Concrete (Pregs.: ARSF 201)	3
ARST 301 Building Acoustics, Illumination, and Special Systems (Preqs.: ARST 201)	3	ARST 302 Technical and Construction Documents (Pregs.: ARAD 301, ARAR 301)	3
ARLA 201 Ethics, Professional Practice and Contractual Procedures in Architecture (Preqs.: ARLA 101)	3	ARDA 201 Economic Feasibility and Finances in Real Estate (Pregs.: ARDA 101)	3
Total	18	Total	18



FIFTH YEAR CURRICULUM			
First Semester	Cr.	Second Semester	Cr.
ARAD 410 Developmental Design Studio I: Legal and Administrative Awareness (Preqs.: ARAD 402, ARAR 402, ARLA 101) ARAR 410 (Laboratory) Independent Research (Preqs.: ARAR 402)	5	ARAD 420 Developmental Design Studio II: Development Assessment, Entrepreneurship and Feasibility (Pregs.: ARAD 410, ARAR 410, ARDA 101) ARAR 420 (Laboratory) Independent Research II (Pregs.: ARAR 410)	5
ARLE 301 Ecological Principles in the Built Environment (Preqs.: ARLE 201)	3	ARDA 301  Marketing and Branding through  Commercial Communication Skills  (Pregs.: ARDA 201, ENGL 383)	3
Elective Course Experimental Unit or Selected PCUPR Course (Preqs.: Varies)	3	ARUS 301 Territorial Planning Strategies on Infrastructures and Communities (Pregs.: ARUS 201)	3
Elective Course Experimental Unit or Selected PCUPR Course (Preqs.: Varies)	3	Elective Course Experimental Unit or Selected PCUPR Course (Pregs.: Varies)	3
THEO 132 The Christian Family (Preqs.: None)	3	PHIL 340 Fundamental Ethics (Pregs.: PHIL 312)	3
Total	18	Total	18



## II.3. EVALUATION OF PREPARATORY EDUCATION

Admission to the PCUPR Architecture Program starts at the institutional level. General admission requirements are scrutinized by the Admissions Office and relayed to the School of Architecture once the basic requirements have been met. The School receives referrals and coordinates orientations for the prospective students. The orientation process includes an interview and other requirements such as an essay and letters of recommendation; although portfolios are not required, students are encouraged to bring any material they may deem proper to better expose their skills and interests. Once the requirements are met, all scoring yielding from the interview and other academic background data is collected and a rubric is applied. Final decisions regarding entrance into the Program relies on the Admissions Committee, constituted by the Dean, Program Director and Administrative and Academic personnel.

Admission and placement within the Architecture Program is also dependent on the type of applicant being reviewed. Any student who has obtained a high school diploma and has not attempted credits at a higher education accredited institution is considered a New Student. Applicants who have attempted at least one credit at an accredited higher education institution are considered Transfer Students. Applicants who have obtained a university degree (bachelor or higher) from a duly accredited institution are considered Postgraduate students. Applicants who have previously attended the PCUPR School of Architecture are considered Re-admission students. Students applying for a change of major within our institution are considered Change of Concentration students. Students who have already attempted and/or completed a degree and wish to pursue studies with a new degree are considered Re-admission students with a Change of Concentration.

The Program Director and the Dean of the School of Architecture will evaluate all transfer applications with approved university credits to determine the courses that can be accredited. All general courses and major related courses approved with a grade of C or greater, which the Program Director and the Dean understands are equivalent or could or that could substitute one or several of the requisites of our institution, are applicable for review. Courses will not be eligible for accreditation if more than ten years have passed since they were taken.

The PCUPR requires all students to undertake at least 25% of the total credits within our institution. At the same time, all students are required to undertake at least 50% of the total amount of major credits to be a candidate for graduation in our institution. Nonetheless, the last thirty-six (36) credits required for the completion of the degree shall be undertaken at the PCUPR. The Program Director and the Dean will determine which of those shall be requisites from the program or the specialty. Some courses taken at other institutions that do not have an equivalent at the PCUPR could be accounted for as electives, subject to the Program Director and the Dean's



approval. Any student could, before enrollment, submit a written appeal at the Vice-presidency of Academic Affairs to reconsider any accreditation of transfer credits

### II.4. PUBLIC INFORMATION

## II.4.1 Statement on NAAB Accredited Degrees

All institutions offering an accredited degree program must include the exact language found in the NAAB's 2014 Conditions for Accreditation, Appendix 1, in catalogs and promotional media. The Architecture Department includes this language in the following locations:

- On the "PCUPR School of Architecture" main webpage under the "NAAB" tab: http://www.pucpr.edu/arquitectura/?page\_id=1907
- On the "PCUPR School of Architecture Catalog" print and digital versions (under the "Program" tab):

http://www.pucpr.edu/arquitectura/wp-content/uploads/2016/03/PCUPR-School-of-Architecture-Catalog-2015.pdf

#### II.4.2 Access to NAAB Conditions and Procedures

The PCUPR School of Architecture makes the following documents available to all students, faculty, and the public within the CARIBET Library (print) and School of Architecture Website under the "NAAB" tab: http://www.pucpr.edu/arquitectura/?page\_id=1907

- o 2014 NAAB Conditions for Accreditiation
- o 2015 NAAB Procedures for Accreditation

### **II.4.3** Access to Career Development Information

The School of Architecture offers Career Development Information for students and faculty through various links included within the School of Architecture website under the "NAAB" tab: (http://www.pucpr.edu/arquitectura/?page id=1907)

- National Architecture Accrediting Board
- ARCHCareers.org
- National Council of Architecture Registration Boards
- American Institute of Architects
- American Institute of Architecture Students
- Association of Collegiate School's of Architecture
- Emerging Professionals Companion
- Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico



Junta Examinadora de Arquitectos y Arquitectos Paisajistas de Puerto Rico

Institutionally, the Pontifical Catholic University of Puerto Rico has an office within its administrative body dedicated to providing information for careers, job opportunities and internships for students, faculty and staff. The

#### II.4.4 Public Access to APRs and VTRs

To promote transparency in the process of accreditation in architecture education, the PCUPR School of Architecture makes the following documents electronically available to the public under the "NAAB" tab: (http://www.pucpr.edu/arquitectura/?page\_id=1907)

:

- NAAB decision letter awarding INITIAL ACCREDITATION
- NAAB 2011 Visiting Team Report for Initial Candidacy (VTR-IC)
- NAAB 2013 Visiting Team Report for Continued Candidacy (VTR-CC)
- NAAB 2015 Visiting Team Report for Initial Accreditation (VTR-IA)
- NAAB 2009 Plan for Acheiving Initial Accreditation (PAIA)
- o NAAB 2011 Architecture Program Report (APR-IC)
- NAAB 2013 Architecture Program Report (APR-CC)
- NAAB 2015 Architecture Program Report for Initial Accreditation (APR-IA)
- 2015 PCUPR Architecture Report Submission (ARS)
- 2016 PCUPR Architecture Report Submission (ARS)

#### II.4.5 ARE Pass Rates and Other Resources

NCARB publishes pass rates by division for all candidates who took theArchitectural Registration Examination (ARE) during each of the last five years. NCARB also publishes pass rates by school from 2007 to 2015. The rates include all candidates testing during a certain year. This information is considered useful to prospective students as part of their planning for higher/postsecondary education in architecture. Therefore, the PCUPR School of Architecture makes the following documents electronically available to the public under the "NAAB" tab: (http://www.pucpr.edu/arquitectura/?page\_id=1907)

- AIAS Toward an Evolution of Studio Culture 2008
- o NCARB 2013 Education Report
- NCARB 2015 IDP Guidelines
- NCARB By The Numbers
- NCARB ARE 4.0 Pass Rates
- NCARB ARE 5.0 Pass Rates



## II.4.6 Admissions and Advising

According to the NAAB Conditions, the Architecture Department must publicly document all the policies and procedures that govern how all BARCH applicants — first-time freshmen (FTF), new transfer (NTR), and change of major (COM) — are evaluated for admission. The School of Architecture compiles all information regarding admissions both to the Pontifical Catholic University of Puerto Rico and the Architecture program within the "Admissions" tab on the School's main page: http://www.pucpr.edu/arquitectura/?page\_id=389

#### II.4.7 Student Financial Information

The Architecture Department must demonstrate that students in the BARCH program have access to information and advice for making decisions regarding financial aid. The PCUPR Financial Aid Office has a webpage within the PCUPR website (see http://www.pucpr.edu/?page\_id=143) that provides access to financial aid information, forms, policies, as well as information about student costs, aid applications, types of aid, legal and financial responsibilities, and sound financial decisions regarding education. Financial aid counselors are available Monday to Friday from 8 a.m. to 4 p.m. to assist students.

The cost of attendance for the PCUPR School of Architecture for the 2017-2018 academic year (14 credit/semester) is provided within the PCUPR Financial Aid Office webpage under "Presupuesto Educacional 2017-2018", which is Spanish for 2017-2018 Educational Budget (http://www.pucpr.edu/?page\_id=2372). Students entering the Architecture Program in the current academic year can expect expenses in the following manner:

EXPECTED EXPENSES / COST OF ATTENDANCE				
		НОМЕ	ON-CAMPUS	OFF-CAMPUS
Tuition		\$ 8,820.00	\$ 8,820.00	\$ 8,820.00
Fees		\$ 1,070.00	\$ 1,070.00	\$ 1,070.00
Housing		\$ 0.00	\$ 1,374.00	\$ 2,925.00
Food		\$ 2,171.00	\$ 3,545.00	\$ 3,545.00
Books/Materials		\$ 2,065.00	\$ 2,065.00	\$ 2,065.00
Computer Materials		\$ 645.00	\$ 645.00	\$ 645.00
Other Expenses		\$ 677.00	\$ 677.00	\$ 677.00
Personal Expenses		\$ 1,174.00	\$ 1,174.00	\$ 1,174.00
Transportation		\$ 3,109.00	\$ 2,806.00	\$ 3,109.00
	TOTAL	\$ 19,731.00	\$ 22,176.00	\$ 24,030.00



## **III.1.1.** Annual Statistical Reports



www.pucpr.edu

VICEPRESIDENCIA DESARROLLO UNIVERSITARIO, INVESTIGACION Y PLANIFICACION

February 27, 2018

The National Architectural Accrediting Board (NAAB), Inc 1735 New York Avenue NW Washington, DC 200006

Dear Sir:

As the Vice President for Institutional Development, Research and Planning at the Pontifical Catholic University of Puerto Rico I certify that all data submitted to the NAAB through the Annual Report Submission system since the last site visit is accurate and consistent with no significant difference from reports sent to other national and regional agencies, including the National Center for Educational Statistics.

Sincerely

Félix M. Cortés Morales

TEL. 787-651-2000 EXT. 1033 | FAX. 787.651-4030 | 2250 Blvd. Luis A. Ferré Aguayo, Suite 608, Ponce, Puerto Rico 00717-065;

## III.1.2. Interim Program Reports

Not required during the reporting period for this APR-CA.



## **SECTION FOUR: SUPPLEMENTAL INFORMATION**

All supplemental material category below is linked to non-public, hidden files residing within the PCUPR School of Architecture website and are only accessible by clicking on the LINKS below. No user or password is required to access and view the supplemental material. The documents can be viewed or downloaded, and will be accessible from the moment of submission of Architecture Program Report until NAAB and the Visiting Team inform the Program it no longer requires access to the posted material listed below.

IV.1	Course Descrptions	<ul> <li>Course Descriptions</li> </ul>
IV.2	Studio Culture	<ul><li>Studio Culture Policy 2017</li><li>Studio Culture Policy 2017 (approved)</li></ul>
IV.3	Assessment	<ul> <li>PCUPR Manual for Evaluation of Academic Programs (english)</li> <li>PCUPR 2014 Self Study Report submitted to MSCHE</li> </ul>
IV.4	Academic Integrity (see Article VI of the Student Handbook)	<ul> <li>PCUPR Student Handbook (spanish)</li> <li>International Students (english)</li> <li>PCUPR Grade Revision Policy (spanish)</li> </ul>
IV.5	Information Resources Policies	<ul> <li>Library Collection Development Plan 2015-2020 (spanish)</li> <li>Library Collection Access Policy (spanish)</li> <li>Interlibrary Access Policy (spanish)</li> <li>Information Technology Resources Access Policy (spanish)</li> </ul>
IV.6	EEO/AA Policy	<ul><li>PCUPR EEO/AA Policy (spanish)</li><li>PCUPR EEO/AA Policy (english)</li></ul>
IV.7	Human Resource Development Policies	PCUPR Administrative Employee Manual (1999)
IV.8	Faculty	<ul> <li>2016-2018 Faculty Matrix</li> <li>2016-2018 Faculty CV</li> </ul>



IV.9	Faculty Appointment and Promotion Policies (see Part IV of the Manual)	PCUPR Faculty Manual (spanish)
IV.10	Faculty Professional Development	Tuition waiver for Doctoral Studies (spanish)
IV.11	Institutional Research	<ul> <li>PCUPR External Funding Policy (spanish)</li> <li>PCUPR Academic Research Policy (spanish)</li> <li>PCUPR Research Publication Policy (spanish)</li> <li>Policy and Procedures Statement on the Integrity of Research (english)</li> <li>Human Subject Research (spanish)</li> </ul>
IV.12	SPC Student Performance Criteria	PCUPR SPC Matrix
IV.13	Institutional Strategic Planning	PCUPR Strategic Plan 2013-2020 (spanish)